ANNUAL COMPREHENSIVE FINANCIAL REPORT

for the Fiscal Year Ended June 30, 2023

Designed by architect Louis S. Kaplan, and located in Trenton, NJ, the Trenton War Memorial was built in 1930 and opened its doors on January 19, 1932. This 1,807-seat theater for performing arts was dedicated to the memory of those Trentonians who bravely fought and perished in World War 1. On January 2, 1999, the building was rededicated to honor all soldiers from the state of New Jersey who served with dignity, courage, and patriotism in the armed forces of the United States of America. As you walk past the four stone columns of this Italian-style Renaissance building, you will encounter a passage toward the lobby called Memorial Court which was built as a dual shrine to soldiery and the arts. There you will find a set of four bronze tablets with the names inscribed of every Trentonian who died in the World War with the inscription "We shall never war except for peace." Today, also known as Patriots Theater, the Trenton War Memorial's grand auditorium hosts several world-class artists and entertainers.

NJDPB
Pensions & Benefits
Explore Your Benefits

State of New Jersey

Department of the Treasury

Division of Pensions & Benefits

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OUR MISSION. . .

To provide benefits and services that meet the needs of our clients and others we are committed to serve, through our efficient and responsive workforce

OUR VISION . . .

WE will achieve satisfaction through equitable, effective responsive service, and clear and accessible communications that meet the needs of our clients.

WE will encourage and support an accomplished workforce that is knowledgeable, flexible, technically proficient, and committed to excellence.

WE will be committed to working with executive and legislative agencies and governing boards to improve the design and implementation of the benefit programs.

WE will support technologies that simplify procedures and improve services, manage our resources in a responsible and creative manner, and hold contracted service providers to high standards.

WE will work with participating employers to enhance their role in the administration of benefits for their employees through integrated technology that allows them to access and process benefit information directly.

OUR VALUES . . .

WE are customer-focused, recognizing each client individually.

WE acknowledge as our greatest asset our knowledgeable, hardworking, dedicated, and caring staff.

WE are financially responsible in the administration, oversight, and delivery of our benefit programs.

WE are committed to providing quality, timely, accurate, efficient, and cost-effective services.

WE are committed to creating and developing a quality work environment using state-of-the-art technologies, and processes that foster improvement of our organization through teamwork, motivation, and communication among staff.

OUR GOALS . . .

Customer Service —

TO create and maintain a customer-focused work environment that anticipates and meets client needs.

Staff —

TO have a full complement of staff that is well trained, undergoes continual development, and is motivated to provide benefit services effectively and efficiently in a customer friendly manner.

Technology —

TO have an integrated, easily maintained and modified, information processing system that supports the efficient and effective delivery of services.

Planning —

TO have an effective planning system that facilitates improvement, anticipates change, and properly focuses resources on priorities.

Benefits Processing —

TO provide benefits to clients in a timely and efficient manner.

Advocacy—

TO help structure a well-funded system of benefits that meets the needs of public employees and employers.

Oversight and Compliance—

TO administer programs with clear and consistent policies and procedures and provide oversight to safeguard fund assets and ensure benefit entitlement.

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NEW JERSEY
DIVISION OF PENSIONS & BENEFITS

68th
ANNUAL COMPREHENSIVE FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED JUNE 30, 2023

PHILIP D. MURPHY
Governor

ELIZABETH MAHER MUOIO
State Treasurer

JOHN MEGARIOTIS
Acting Director

State of New Jersey | Department of the Treasury
Division of Pensions & Benefits
P.O. Box 295
Trenton, NJ 08625-0295
(609) 292- 7524

PROGRAMS ADMINISTERED BY THE DIVISION OF PENSIONS & BENEFITS

PERS	Public Employees' Retirement System
TPAF	Teachers' Pension and Annuity Fund
PFRS	Police and Firemen's Retirement System
SPRS	State Police Retirement System
JRS	Judicial Retirement System
DCRP[1]	Defined Contribution Retirement Program
ABP[1]	Alternate Benefit Program
POPF	Prison Officers' Pension Fund
CPFPF	Consolidated Police and Firemen's Pension Fund
NJSEDCP	New Jersey State Employees Deferred Compensation Plan
SACT	Supplemental Annuity Collective Trust
ACTS[2]	Additional Contributions Tax-Sheltered Program
CPF	Central Pension Fund
UCTDSE[2]	Unemployment Compensation and Temporary Disability for State Employees
SHBP	State Health Benefits Program
SEHBP[1]	School Employees' Health Benefits Program
PDP	Prescription Drug Plans
EDP	Employee Dental Plans
Tax$ave[2]	New Jersey State Employees' Tax Savings Program: Premium Option Plan, Unreimbursed Medical Flexible Spending Account, and Dependent Care Flexible Spending Account
Commuter Tax$ave[2]	New Jersey State Employees' Commuter Tax Savings Program
LTC[2]	Long Term Care Insurance Plan

[1] Programs moved to the State (OMB) financial statement, including SHBP/PDP-State and EDP-State.
[2] Third-party programs.

INDEPENDENT AUDITOR	KPMG LLP — Suite 4000, 150 John F. Kennedy Parkway, Short Hills, NJ 07078-2702
ACTUARIAL REPORTS	Cheiron — 701 East Gate Drive, Suite 330, Mount Laurel, NJ 08054
	Segal — 333 West 34th Street, New York, NY 10001-2402
	AON Hewitt — 400 Atrium Drive, Somerset, NJ 08873

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Philip D. Murphy
Governor

Elizabeth Maher Muoio
State Treasurer

John Megariotis
Acting Director
Division of Pensions & Benefits

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Trenton, New Jersey

State of New Jersey
Department of the Treasury
Division of Pensions & Benefits
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Letter of Transmittal

June 2024

To the Honorable
Philip D. Murphy, Governor
Elizabeth Maher Muoio, State Treasurer
Members of the Legislature
Members of the Boards of Trustees

On behalf of the New Jersey Division of Pensions & Benefits (NJDPB), I am pleased to submit the 68th Annual Comprehensive Financial Report (Annual Report) of the New Jersey State-administered retirement systems and related benefit programs for the fiscal year ended June 30, 2023. The management of the NJDPB is responsible for the accuracy of the data and the completeness and fairness of the presentation. To the best of my knowledge and belief, the enclosed information is accurate in all material respects and reported in a manner that fairly represents the financial position and results of the NJDPB's operations.

The Reporting Entity

The NJDPB was established in 1955 as the Division of Pensions to provide all administration of the State pension funds except investments. The NJDPB changed its name to the Division of Pensions & Benefits in 1992 to more accurately reflect its roles and responsibilities beyond the realm of pensions. Currently, the NJDPB administers one of the largest non-federal public benefits programs in the nation, consisting of 10 separate retirement systems, three supplemental retirement savings programs, three health benefits programs for employees, retirees, and family members, and several other employee benefits programs.

Major Initiatives

Pension Operations: The NJDPB continues to identify workflow and automation initiatives to improve service, reduce costs, and eliminate paper processing wherever possible. Recent enhancements include a pilot program with Prudential to offer Electronic Fund Transfer (EFT) for Group Life Insurance (GLI) payments, which has paid several hundred claims to beneficiaries via EFT with shorter wait times and reduced paper and check printing costs. In addition, the Disability Retirement section successfully transitioned to paperless processing with improvements in turnaround times and savings on paper use and related costs.

Modifications and programming updates made to the Retired Payroll, Withdrawals, Death Benefits, and SACT systems accommodate changes to the *Form W-4P* and a new *Form W-4R,* required by the Internal Revenue Service for the 2023 tax year.

Technology upgrades transitioned all staff from desk phones to Voice over IP (VoIP). This platform, in conjunction with laptop and VPN access, enables staff to take and make calls and continue operation of NJDPB critical services whether employees are working in the office or remotely.

The NJDPB call center maintained improved wait times and call response rates during FY 2023. Use of the live web chat portal continued to grow and has become a popular tool for member questions and other benefit-related information.

The NJDPB continues work with our partners at the myNJ Portal and DORES to prevent online fraud and now requires use of Multi-Factor Authentication (MFA) for all access to Member Benefits Online System (MBOS) and Employer Pensions and Benefits Connection (EPIC) accounts.

Effective January 2023, the TPAF, PERS and SPRS Boards of Trustees resumed in-person meetings in the Taxation building while the NJDPB explores upgrades to our on-site conference space.

Health Benefits: The Division has engaged our online partner, Benefitsolver, to process Medicare Part B and Part D Income-Related Medicare Adjustment Amount (IRMAA) reimbursements for eligible retirees. This includes initial notification, claim receipt and processing, check disbursement, and customer service for IRMAA-related questions.

The Division worked with Benefitsolver to have enrollment files sent directly to the Health and Dental carriers. This shortens the time needed to implement enrollment changes by the carriers.

The SHBP/SEHBP covers colorectal cancer screenings as recommended by the United States Preventive Services Task Force (USPSTF) and has no cost share for colonoscopies performed following a positive result on a non-colonoscopy, colorectal cancer screening test. This existing coverage conforms to the provisions of P.L. 2023, c.8, enacted on February 3, 2023.

Through its vendors, the SHBP/SEHBP continues to ensure no cost-share for medically appropriate testing related to COVID-19. Members also continue to receive the COVID vaccine in accordance with appropriate State and federal guidelines with no cost share.

Financial Information

The Financial reports of the Fiduciary Funds of the NJDPB have been prepared in conformity with generally accepted accounting principles as applied to governmental units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for governmental accounting and financial reporting. The specific accounting policies are in the "Notes to Financial Statements" found in the Financial Section.

The Fiduciary Funds include 10 separate pension trust funds, one OPEB (Other Post-Employment Benefit) plan, and one custodial fund. A summary of the condition of the funds administered by the NJDPB is located in the "Management Discussion and Analysis" section that begins on page 39 of the Annual Report. Management is responsible for establishing and maintaining the accounting systems complete with internal controls so that the data presented is complete and fairly presents the financial position of the NJDPB as of June 30, 2023. KPMG LLP independently audited the funds.

Investments

The Division of Investment has the responsibility for investing the assets of the programs administered by the NJDPB. This is done under the jurisdiction of the State Investment Council. Investments are guided by the "prudent person rule." During FY 2023, investment returns on pension funds were +9.06 percent. When combined with the returns for previous years, the annualized returns over the past three- and five-year periods were +8.92 percent and +6.80 percent, respectively.

Funding

Fully funding the State's pension liabilities and offering sustainable public employee benefits are a major objective. The State fully funded its employer contributions with a $6.8 billion payment in FY 2023. The NJDPB has and will continue to devote its resources to support this important objective.

Professional Services

The NJDPB contracts with several professional organizations for advice and assistance in administering the programs for which it is responsible. The list of these organizations is found on page 104 of the Annual Report. The Office of the Attorney General provides all legal services required by the NJDPB, the retirement systems' Boards of Trustees, and the Health Benefits Commissions and Committees.

Acknowledgments

The preparation of the Annual Report required the combined efforts of many employees from different operational units within the NJDPB. The Annual Report is intended to provide extensive and reliable information to facilitate informed decisions, determine compliance with legal requirements, and demonstrate responsible stewardship for the assets contributed by the systems' members, participating employers, and the taxpayers of the State. I would like to take this opportunity to express my gratitude to the Governor, the Legislature, the Treasurer, the Boards of Trustees, the individuals providing professional services, participating employer benefits administrators, and to the outstanding employees of the Division for all their efforts and support. Such concerted effort has resulted in making New Jersey's public benefits system one of the largest and best administered in the nation.

Respectfully submitted,

John Megariotis, Acting Director

All in a Year's Work...

- There are **547,905 active members** in the defined benefit and defined contribution retirement systems.
- A total of **367,288 retirees and beneficiaries** received monthly pensions totaling in excess of **$12 billion** annually.
- There are **2,138 participating employers** in the combined retirement systems; **2 new employers** began participating this year.
- **21,555 beneficiary claims** were processed. Premiums in excess of **$210 million** were paid to the insurance carrier on behalf of active and retired members.
- **680,926 inbound calls** were received by the Division. **531,745 callers** selected a phone representative.
- **10,353 interviews** were conducted by pension counselors. **7,224** were video-based, and **3,080** were in-person.
- **38,543 inbound web-based chats** were received by the Division. **5,094 incoming emails** were answered by counselors
- **357 seminars and webinars** were conducted for **25,282 members**.
- **15,804 service purchase requests** were processed.
- **47,486 new enrollments or transfers** were processed in our retirement systems.
- There were **9,905 paid withdrawals** from the retirement systems.
- **16,455** members retired.
- **61,171 pension loans** totaling **$545 million** were processed.
- State and local membership in the State Health Benefits Program and School Employees' Health Benefits Program was **390,350** members with **780,958 lives** covered.
- A total of over **$7.1 billion in premiums** was collected from State and local State Health Benefits Program employers, School Employees' Health Benefits Program employers, and combined employees. **1,052 local employers** elected to participate in the SHBP or SEHBP this year.

State of New Jersey • Department of the Treasury

Division of Pensions & Benefits

JOHN MEGARIOTIS
Acting Director

SONIA RIVERA-PEREZ
Deputy Director

DANIELLE SCHIMMEL
Assistant Director
Professional Services & Board of Trustees

DAVID PRESTON
Assistant Director
Finance

JOYCE MALERBA
Assistant Director
Health Benefits & Policy & Planning

ROBERT KRENCICKI
Assistant Director
MIS Administration

STEVEN STOKLEY
Assistant Director
Client Services & Communications

TIMOTHY MYHRE
Assistant Director
Operations

Director

The Director is responsible for the coordination of the functions of the NJDPB, the development of the NJDPB budget, and communication with other branches of State government, local government, and the public. The Director serves as the Secretary to the Supplemental Annuity Collective Trust Council, the State Health Benefits Commission and School Employees' Health Benefits Commission, and the State House Commission in its capacity as the Board of Trustees for the Judicial Retirement System. The Director also is responsible for legal and legislative matters and Board of Trustees administration. In addition, the Treasurer has delegated the responsibility of maintaining the Federal-State Agreement for Social Security to the Director of the NJDPB.

The Division of Pensions & Benefits falls under the jurisdiction of the New Jersey Department of the Treasury. The Director of the NJDPB reports directly to the State Treasurer.

Office of Health Benefits

This office, overseen by an Assistant Director, consists of two elements: the Health Benefits Bureau and the Office of Policy and Planning. The Health Benefits Bureau processes all enrollments, changes, and terminations for active and retired members of the State Health Benefits Program (SHBP) and School Employees' Health Benefits Program (SEHBP). In addition, this bureau is responsible for the administration of benefits under the federal COBRA law, and enrollments, changes, and terminations for members of the Prescription Drug Plans and Employee and Retiree Dental Plans. The Office of Policy and Planning analyzes and makes recommendations concerning current and proposed health benefits programs to provide the highest quality programs at the least possible cost. It manages contract renewals and requests for proposals. Policy and Planning is responsible for health benefit program review and development. This office also provides administrative support to the State Health Benefits Commission and School Employees' Health Benefits Commission as well as the SHBP and SEHBP Plan Design Committees.

Office of Financial Services

The work of this office, overseen by an Assistant Director, is divided among three bureaus: Financial Reporting, Payment, and Collections; Budget and Compliance; and Defined Benefit and Contribution Plans Reporting.

The Office of Financial Services is charged with the custodianship of pension and health benefits assets. These assets are in excess of $105.9 billion. The office is responsible for the accounting and budget functions necessary for the successful operations of the various pension funds, health benefits and agency funds, as well as the administration of the Pension Adjustment Program, the Supplemental Annuity Collective Trust, and Deferred Compensation Plan.

Office of Client Services & Communications

This office, overseen by an Assistant Director, consists of two elements: the Office of Client Services and the Office of Communications. Each office disseminates all plan and program information to employees, retirees, and employers covered by the various New Jersey State-administered retirement systems and benefit programs.

The Office of Client Services consists of the Call Center and Interview Units which provide counseling services to employees, retirees, and employers; the Education Unit which conducts seminars/webinars, employer training and various presentations concerning pension, life insurance, and health benefits; the Email and Correspondence Unit which responds to all written requests and emails; and the Support Unit which provides receptionist services for the entire Division. The Office of Communications consists of the Print and Internet Units, which are responsible for creating, editing, and updating the NJDPB's informational materials, including manuals, reports, forms, benefits statements, and guide booklets, and for the distribution of these items in printed form or online through the NJDPB's Internet site.

Office of Operations

This office, overseen by an Assistant Director, consists of two bureaus: the Enrollment, Purchase, Adjustment, Loan, and Withdrawal Bureau along with the Retirement Bureau, and Beneficiary Services.

The Office of Operations is responsible for the following: Retirement Processing Section (calculation and payment of retirement benefits); Disability Retirement Section (processing of Ordinary and Accidental Disability applications); Beneficiary Services Section (processing beneficiary designations, calculation and payment of active and retired death benefits); Quality Control Section (plan all activities related to the Judicial Retirement System, process Workers' Compensation offsets and Court Orders for Support and Qualified Domestic Relations Orders, audit and adjustments to retired member accounts); Enrollment Section (process new enrollment application into the Defined Benefits (DB) Plans including interfund and intrafund transfers); Purchase Section (quote and calculate the cost for members to purchase additional eligible service credit in the DB plans); Adjustment Section (analyze data and prepare adjustments of active member accounts); and Loans and Withdrawal Section (administer payments to members for pension loans and withdrawal from the DB Plans).

Office of Management Information and Support Services

The work of this office, overseen by an Assistant Director, is responsible for the development and maintenance of all processing and management information systems for the NJDPB. This office also has responsibility for the training, usage, and maintenance of all automated office and telephone equipment.

This office consists of four sections: Image Processing and Records Management; Computer Scheduling and Production Control; Systems Development; and Support Services.

Office of Professional Services

The Office of Professional Services is located within the Director's Office and operates under the direction of an Assistant Director. It is responsible for providing a structured and consistent planning function for the NJDPB, assists in analyzing proposed legislation, providing the regulatory function for the NJDPB, managing the development of contracts with external service providers, conducting research in support of NJDPB activities, reviewing all Court Orders including subpoenas and ensuring implementation, assuring compliance with the Open Public Records Act, and oversight of the Office of Board of Trustees Administration.

The Office of Board of Trustees Administration, provides administrative services for the various defined benefit plans' Boards and Commissions. The Boards and Commissions have the general responsibility for the proper operation of their respective employee benefits program. The Boards adopt rules in compliance with statute and advice of the Attorney General. The Boards may grant hearings in disputes concerning issues of law or fact. Hearings are held by the Office of Administrative Law.

The Boards maintain a record of all proceedings and hold regular meetings and special meetings when necessary.

Actuarial Advisors

The actuaries establish actuarial tables for the operation of the retirement systems, determine the annual appropriation required of participating employers, and conduct annual examinations of the systems' actuarial position.

Contracts for actuarial services for the retirement systems are awarded at specified intervals through the regulations governing the procurement of goods and services for the State of New Jersey and its constituent departments and agencies

Legal Advisor

The State Attorney General is the legal advisor for all pension funds and other employee benefit programs.

Medical Advisors

All retirement systems are served by a medical board consisting of three physicians who review claims for disability as submitted by the Disability Review Section of the Retirement Bureau for the Division of Pensions & Benefits.

(Reflects Board Members who served as of June 30, 2023)

Public Employees' Retirement System

Thomas Bruno, *Chairperson*
William O'Brien, *Vice Chairperson*
Carey Brown, *State Representative*
Tracy Smith, *County Representative*
Benjamin "Max" Hurst, *Municipal Representative*
Vacancy, *Municipal Representative*
Vacancy, *Gubernatorial Appointee*
Vacancy, *Gubernatorial Appointee*
Danielle Schimmel, *Treasurer's Representative*
Robert Kelly, *Deputy Attorney General*
Jeff Ignatowitz, *Board Secretary*
William Tedder, *Assistant Board Secretary*

Teachers' Pension and Annuity Fund

Howard Lipoff, *Chairperson*
Irene Savicky, *Vice Chairperson*
Edward Yurusinsky, *Retired Teacher*
Sarah Favinger, *Elected by the Board*
Glenn Kitley, *Governor's Appointment*
Vacancy, *Governor's Appointment*
Danielle Schimmel, *Treasurer's Representative*
Jeffrey Padgett, *Deputy Attorney General*
Saretta Dudley, *Board Secretary*
William Tedder, *Assistant Board Secretary*

Police and Firemen's Retirement System

Ed Donnelly, *Chairperson*
James Kompany, *Vice-Chairperson*
Timothy Colacci, *PFANJ Appointment*
Marc Morgan, *FOP Appointment*
Raymond Heck, *Police Representative*
Matthew Lubin, *Fire Representative*
Stephen Trowbridge, *Retiree Representative*
Edward T. Oatman, *Governor's Appointment*
Vacant, *Governor's Appointment*
John C. Glidden, Jr., *Governor's Appointment*
Susan Jacobucci, *Governor's Appointment*
John Megariotis, *Governor's Appointment*
Nels Lauritzen, *Deputy Director of Legal Affairs*
Lisa Pointer, *Board Secretary*
Susan Barrett, *Assistant Board Secretary*

State Police Retirement System

Sherrie Schuster, *Chairperson*
John McGourty, *Vice Chairperson*
Vacant, *Governor's Appointment*
Edmond Brady, *Governor's Apppointment*
Porter Strickler, *Deputy Attorney General*
Danielle Schimmel, *Treasurer's Representative*
William Tedder, *Board Secretary*
Saretta Dudley, *Assistant Board Secretary*

Supplemental Annuity Collective Trust

David Preston, *Chairperson, Representing John Megariotis, Acting Director, Division of Pensions & Benefits*
Leslie Notor, *Representing Lynn Azarchi, Acting Director, Office of Management & Budget*
Manuel Paulino, *Representing Marlene Caride, Commissioner, Department of Banking & Insurance*

ORGANIZATION — BOARDS OF TRUSTEES

Deferred Compensation Board

Steven Harris, *Chairperson, Representing Elizabeth Maher-Muoio,Treasurer, State of New Jersey*
Leslie Notor, *Representing Lynn Azarchi, Acting Director, Office of Management & Budget*
Manuel Paulino, *Representing Marlene Caride, Commissioner, Department of Banking & Insurance*

Defined Contribution Retirement Program Board

David Preston, *Chairperson, Representing John Megariotis Acting Director, Division of Pensions & Benefits*
Carisa Marone, *Representing Lynn Azarchi, Acting Director, Office of Management & Budget*
Manuel Paulino, *Representing Marlene Caride, Commissioner, Department of Banking & Insurance*
Lisa Walker, *Representing Shoaib Khan, Acting Director, Division of Investment*

State Health Benefits Commission

Danielle Schimmel, *Chairperson, Representing State Treasurer Elizabeth Maher Muoio*
Philip Gennance, *Representing Acting Commissioner*
Allison Chris Myers, *Civil Service Commission*
Dudley Burge, *Local Employees' Representative of the AFL-CIO*
Jennifer Higgins, *State Employees' Representative of the AFL-CIO*
Kelly Fields, *Secretary*

School Employees' Health Benefits Commission

Vacancy, Chairperson
Sonia Rivera-Perez, *Representing State Treasurer Elizabeth Maher Muoio*
Philip Gennance, *Representing Acting Commissioner Marlene Caride, Dept. of Banking and Insurance*
Sarah Favinger, *Representing the NJEA*
Denise Graff Policastro, *Representing the NJEA*
Julie Giordano Plotkin, *Associate Director, NJEA*
Carl Tanksley, *Representing the N.J. School Boards Association*
Michael Maillaro, *Commissioner, AFL-CIO Representative*
Vacancy, *Governor's Appointee*
Kelly Fields, *Secretary*

Chapter 77, P.L. 2022

Effective Date: July 29, 2022

NJDPB Section(s) Affected by this Law: SPRS

This law provides that a member of the State Police Retirement System (SPRS) may be eligible for Accidental Disability retirement if the member becomes totally disabled because of a preexisting and asymptomatic condition that is later rendered symptomatic as a direct result of a traumatic event occurring during and as a result of the performance of regular or assigned duties. The law also permits retirees who were denied an accidental disability retirement solely on the basis of an asymptomatic pre-existing condition between 2012 and 2019 to apply for reconsideration within 30 days of enactment.

Chapter 94, P.L. 2022

Effective Date: August 5, 2022

NJDPB Section(s) Affected by this Law: JRS

This law removes restriction on the receipt of retirement annuities by certain members of the Judicial Retirement System who file for deferred retirement. The law is retroactive to November 1, 2020.

Chapter 109, P.L. 2022

Effective Date: January 1, 2023

NJDPB Section(s) Affected by this Law: PFRS/PERS

This law mandates access to periodic cancer screening examinations for full-time paid firefighters not enrolled in the State Health Benefits Program, amending P.L. 2021, c.478, and making an appropriation.

Chapter 8, P.L. 2023

Effective Date: June 1, 2023

NJDPB Section(s) Affected by this Law: SHBP/SEHBP

This law requires health insurance coverage of colorectal cancer screenings recommended by the United States Preventive Services Task Force (USPSTF) and eliminates cost-sharing requirements for colonoscopies performed following a positive result on a non-colonoscopy, colorectal cancer screening test.

Chapter 31, P.L. 2023

Effective Date: April 3, 2023

NJDPB Section(s) Affected by this Law: JRS

This law permits a judge who was collecting an annuity from a State-administered retirement system while serving as a judge and deferred retirement to become County Prosecutor or Administrative Director of the Courts between November 1, 2020 and April 3, 2023, to continue to collect that annuity while serving in that position. The law is effective immediately and retroactive to November 1, 2020.

Public Employees' Retirement System (PERS)

This system was established by Chapter 84, P.L. 1954, after the repeal of the law creating the former State Employees' Retirement System. The retirement benefits of this system are coordinated, but not integrated, with Social Security. This system is maintained on an actuarial reserve basis. Under the terms of Chapter 71, P.L. 1966, most public employees in New Jersey not required to become members of another contributory retirement program are required to enroll.

Statutes can be found in the New Jersey Statutes Annotated, Title 43, Chapter 15A. Rules governing the operation and administration of the fund may be found in Title 17, Chapter 2, of the New Jersey Administrative Code.

Teachers' Pension and Annuity Fund (TPAF)

This fund was reorganized by Chapter 37, P.L. 1955. The retirement benefits of this system are coordinated, but not integrated, with Social Security. This fund is maintained on an actuarial reserve basis. Membership is mandatory for 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.

Statutes can be found in the New Jersey Statutes Annotated, Title 18A, Chapter 66. Rules governing the operation and administration of the system may be found in Title 17, Chapter 3, of the New Jersey Administrative Code.

Police and Firemen's Retirement System (PFRS)

This system was established by Chapter 255, P.L. 1944. All police officers and firefighters, appointed after June 1944, in municipalities where local police and fire pension funds existed or where this system was adopted by referendum or resolution are required to become members of this system. Certain State and county employees also are covered. Employer obligations are paid by the local employers and the State. This system is maintained on an actuarial reserve basis.

Statutes can be found in the New Jersey Statutes Annotated, Title 43, Chapter 16A. Rules governing the operation and administration of the system may be found in Title 17, Chapter 4, of the New Jersey Administrative Code.

State Police Retirement System (SPRS)

This system was created by Chapter 89, P.L. 1965, as a successor to the State Police Retirement and Benevolent Fund. All uniformed officers and troopers of the Division of State Police in the New Jersey Department of Law and Public Safety are required to enroll. This system is maintained on an actuarial reserve basis.

Statutes can be found in the New Jersey Statutes Annotated, Title 53, Chapter 5A. Rules governing the operation and administration of the system may be found in Title 17, Chapter 5, of the New Jersey Administrative Code.

Judicial Retirement System (JRS)

This system was established by Chapter 140, P.L. 1973, after the repeal of the laws providing pension benefits to members of the State judiciary and their eligible survivors. All members of the State judiciary are required to enroll. The system is maintained on an actuarial reserve basis. Statutes can be found in the New Jersey Statutes Annotated, Title 43, Chapter 6A. Rules governing the operation and administration of the system may be found in Title 17, Chapter 10, of the New Jersey Administrative Code.

Defined Contribution Retirement Program (DCRP)

This program was established July 1, 2007, under the provisions of Chapter 92, P.L. 2007, and Chapter 103, P.L. 2007, and expanded under the provisions of Chapter 89, P.L. 2008, and Chapter 1, P.L. 2010.

The program is a tax-qualified defined contribution money purchase pension plan under Internal Revenue Code (IRC) §401(a) et seq., and is a "governmental plan" within the meaning of IRC §414(d). Eligible members are provided with a tax-sheltered, defined contribution retirement benefit, along with life insurance and disability coverage. Individuals eligible for membership include State or local officials who are elected or appointed on or after July 1, 2007; employees enrolled in the PERS or TPAF on or after July 1, 2007, who earn salary in excess of established "maximum compensation" limits; employees enrolled in the PFRS or SPRS after May 21, 2010, who earn salary in excess of established "maximum compensation" limits; and employees otherwise eligible to enroll in the PERS or TPAF on or after November 2, 2008, who do not earn the minimum annual salary required for PERS or TPAF Tier 3 enrollment or do not work the minimum hours per week required for PERS or TPAF Tier 4 or Tier 5 enrollment.

Statutes can be found in the New Jersey Statutes Annotated, Title 43, Chapter 15C, Article 1 et seq.

Alternate Benefit Program (ABP)

This program was established by several pieces of legislation between 1965 and 1968 for full-time faculty members of public institutions of higher education. It was later expanded to include certain administrative and professional titles.

Chapter 385, P.L. 1993, increased the number of investment carriers to seven. The investment carriers underwriting annuities are as follows: AXA Financial (Equitable); Mass Mutual Retirement Services; MetLife (formerly Travelers/CitiStreet); Prudential; Teachers Insurance and Annuity Association (TIAA); VALIC; and VOYA Financial Services. The ABP is a “defined contribution” plan as distinguished from “defined benefits” payable by the other State retirement systems. Immediate vesting after the first year of participation offers the mobility of pension credit among the private and public institutions of higher education in the United States and Canada. Group life insurance and long-term disability insurance are underwritten by the Prudential Insurance Company of America, Inc. Statutes can be found in the New Jersey Statutes Annotated, Title 18A, Chapter 66. Rules governing the operation and administration of this program may be found in Title 17, Chapter 7, of the New Jersey Administrative Code.

Prison Officers’ Pension Fund (POPF)

This fund was established under Chapter 220, P.L. 1941. It was closed to new employees as of January 1960. New employees are enrolled in the Police and Firemen’s Retirement System. This system is not maintained on an actuarial reserve basis.

Statutes can be found in the New Jersey Statutes Annotated, Title 43, Chapter 7.

Consolidated Police and Firemen’s Pension Fund (CPFPF)

This fund was established by Chapter 358, P.L. 1952, to place 212 local police and fire pension funds on an actuarial reserve basis. The membership consists of police and firefighters appointed prior to July 1, 1944. The liabilities of these local funds were shared: two-thirds by the participating municipalities and one-third by the State.

Statutes can be found in the New Jersey Statutes Annotated, Title 43, Chapter 16. Rules governing the operation and administration of this fund may be found in Title 17, Chapter 6, of the New Jersey Administrative Code.

New Jersey State Employees Deferred Compensation Plan (NJSEDCP)

This plan was established by Chapter 39, P.L. 1978, and is available to any State employee who is a member of a State-administered retirement system. This plan is a voluntary investment program that provides retirement income separate from and in addition to the basic pension benefit.

Statutes can be found in the New Jersey Statutes Annotated, Title 52, Chapter 18A.

Prudential Retirement was selected as the NJSEDCP’s third-party administrator on August 26, 2005. The Division of Pensions & Benefits maintains its administrative oversight functions.

Supplemental Annuity Collective Trust (SACT)

This trust was established by Chapter 123, P.L. 1963. This program includes active members of several State-administered retirement systems. Members make voluntary additional contributions through their pension funds to purchase variable retirement annuities in order to supplement the benefits provided by their basic system. Some employers agree to purchase tax-sheltered annuities for the same purpose for certain eligible employees.

Statutes can be found in the New Jersey Statutes Annotated, Title 52, Chapter 18A. Rules governing the operation and administration of the trust may be found in Title 17, Chapter 8 of the New Jersey Administrative Code.

Additional Contributions Tax-Sheltered Program (ACTS)

This program was established in 1996. ACTS is a tax-sheltered, supplemental, retirement program pursuant to Internal Revenue Code (IRC) §403(b) offered to employees of institutions of higher education, the Commission of Higher Education, the Department of Education, and the Office of Student Assistance. The eligible employees are able to obtain tax-deferred annuities with a variety of investment carriers through a salary reduction agreement. The annuities are available from the same investment carriers who service the ABP.

Statutes can be found in the New Jersey Statutes Annotated, Title 52, Chapter 18A, Section 113.

Central Pension Fund (CPF)

This fund consists of the administration of a series of noncontributory pension acts. No reserves are established for the payment of retirement benefits. These benefits are administered by the NJDPB in accordance with the governing statute and the rules and regulations of the State House Commission.

Unemployment Compensation and Temporary Disability Insurance for State Employees (UC/TDI)

The Division of Pensions & Benefits coordinates work related to the payment of unemployment compensation and temporary disability insurance benefits for State employees eligible for coverage under federal law. It is responsible for contracting with a service agency to review all questionable claims for unemployment compensation.

State Health Benefits Program (SHBP)

The program provides medical coverage to employees, retirees, and their dependents. Chapter 125, P.L. 1964, extended the program to include employees of local government. The program includes preferred provider organizations, HMO plans and High Deductible Health Plans offered through Aetna and Horizon BCBSNJ.

Statutes can be found in the New Jersey Statutes Annotated, Title 52, Chapter 14, Article 17.25 et seq. Rules governing the operation and administration of the program can be found in Title 17, Chapter 9, of the New Jersey Administrative Code

School Employees' Health Benefits Program (SEHBP)

The program provides medical coverage to local education employees, retirees, and their dependents. Chapter 103, P.L. 2007, established the program which includes preferred provider organizations, HMO plans, and High Deductible Health Plans offered through Aetna and Horizon BCBSNJ.

Statutes can be found in the New Jersey Statutes Annotated, Title 52, Chapter 14, Article 17.46 et seq. Rules governing the operation and administration of the program can be found in Title 17, Chapter 9, of the New Jersey Administrative Code.

Prescription Drug Plans (PDP)

This plan was initiated by the State effective December 1, 1974. The passage of Chapter 41, P.L. 1976, extended coverage to all eligible State employees. The State Health Benefits Commission offered the plan to local employers on July 1, 1993. Employees and their eligible dependents are covered by the plan in the same manner as the State Health Benefits Program. The Division of Pensions & Benefits became responsible for plan administration in November 1976.

Statutes can be found in the New Jersey Statutes Annotated, Title 52, Chapter 14, Section 17.29(H). Rules governing the operation and administration of the program can be found in Title 17, Chapter 9, of the New Jersey Administrative Code.

Employee Dental Plans (EDP)

This program was initially established February 1, 1978, and further expanded in June 1984. Eligible State and certain local employees may enroll themselves and their eligible dependents by paying the premium calculated to meet half the cost of the plan. Plans offered include the Dental Expense Plan, which is a traditional indemnity plan, and a selection of Dental Plan Organizations. Retirees were permitted to enroll in the plans in 2005. Retirees are required to pay full cost of the plan.

Statutes can be found in the New Jersey Statutes Annotated, Title 52, Chapter 14, Section 17.29(H). Rules governing the operation and administration of the program may be found in Title 17, Chapter 9, of the New Jersey Administrative Code.

Tax$ave

The State Employees Tax Savings Program (Tax$ave) was initially established for State employees in July 1996 and authorized under Internal Revenue Code (IRC)§125. The benefit consists of three components: the Premium Option Plan that allows employees to use pre-tax dollars deducted from their pay for health or dental benefit premiums they may be required to pay for coverage; the Flexible Spending Account for Unreimbursed Medical Expenses that allows employees to use up to $2,500 pre-tax dollars annually deducted from their pay for medical expenses not reimbursed by their medical or dental insurance; and the Dependent Care Spending Account that allows employees to use up to $5,000 pre-tax dollars annually deducted from their pay for dependent care expenses required to permit the employee and spouse to work.

Statutes can be found in the New Jersey Statutes Annotated, Title 52, Chapter 14, Article 15.1a. Rules governing Tax$ave can be found in Title 17, Chapter 1, Sub-chapter 13, of the New Jersey Administrative Code.

Commuter Tax$ave

This program, authorized by Chapter 162, P.L. 2001, and available under Internal Revenue Code (IRC) §132(f), allows eligible State employees to use pre-tax dollars to pay for qualified commuter expenses. Under the program, eligible employees may execute salary reduction agreements to have up to $255 per month ($3,060 per year) deducted from salary to pay for mass transit commutation costs and $255 per month ($3,060 per year) to pay for parking at work or at park and ride sites. The program was implemented in February 2004.

Statutes can be found in the New Jersey Statutes Annotated, Title 52, Chapter 14, Article 17.33. Rules governing Commuter Tax$ave can be found in Title 17, Chapter 1, Sub-chapter 14, of the New Jersey Administrative Code.

Long Term Care Insurance Plan

This plan is a participant-pay-all benefit available to State and certain local employees, retirees, and family members. The Prudential Insurance Company administers the insurance plan under contract with the State. The initial offering of the benefit was effective July 1, 2003, and benefits were offered to local employees effective February 1, 2006. The plan was closed to new enrollees as of June 30, 2013.

Statutes can be found in the New Jersey Statutes Annotated, Title 52, Chapter 14, Article 15.9a, and Chapter 18, Article 11.2, and Title 34, Chapter 11, Article 4.4b(10).

MEMBERSHIP

Active Membership

Retirement System	2023	2022
Public Employees' Retirement System	250,454	247,019
Teachers' Pension and Annuity Fund	160,111	160,106
Police and Firemen's Retirement System	42,363	42,875
State Police Retirement System	3,235	3,232
Judicial Retirement System	408	396
Alternate Benefit Program	28,841	27,685
Defined Contribution Retirement Program	62,493	59,691
Prison Officers' Pension Fund	0	0
Consolidated Police and Firemen's Pension Fund	0	0
Central Pension Fund	NA	NA
Total	547,905	541,004

* Both the 2022 and 2023 figures represent the total number of Active and Inactive accounts. The 2023 Inactive (noncontributing) accounts are as follows: PERS Inactive — 54,982, TPAF Inactive — 14,718, PFRS Inactive — 2,634, SPRS Inactive — 68.

Retired Membership & Beneficiaries

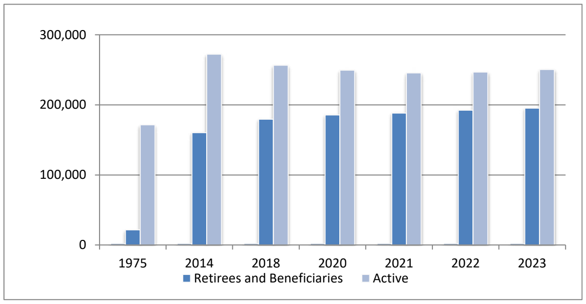
Retirement System	2023	2022
Public Employees' Retirement System	195,335	192,413
Teachers' Pension and Annuity Fund	113,978	112,538
Police and Firemen's Retirement System	53,200	51,766
State Police Retirement System	3,948	3,880
Judicial Retirement System	762	747
Alternate Benefit Program	NA	NA
Prison Officers' Pension Fund	33	38
Consolidated Police and Firemen's Pension Fund	17	23
Central Pension Fund	15	14
Total	367,288	361,419

* The number of retirees varies slightly from those reported in the Notes to Financial Statements due to differences in the effective dates of said tabulations.

Participation in Health Benefits Program

	2023	2022
State Health Benefits Program and School Employees' Health Benefits Program	390,350	404,642
Prescription Drug Plans	364,744	369,073
Dental Expense Program	214,286	213,754

Public Employees' Retirement System



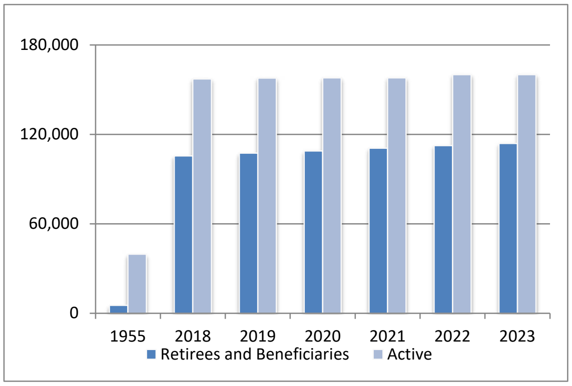
As of June 30, 2023, the active membership of the system totaled 250,454. There were 195,335 retirees and beneficiaries receiving annual pensions totaling $4,511,211,847.

Beneficiaries of deceased active and retired members received lump sum death benefits in the amount of $109,678,977.

The system's assets totaled $36,088,460,231 at the close of fiscal year 2023.

* *Includes cost-of-living adjustments paid under the provisions of the Pension Adjustment Act.*

Teachers' Pension and Annuity Fund



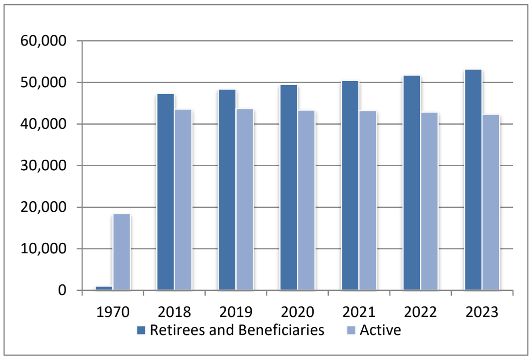
As of June 30, 2023, the active membership of the fund totaled 160,111. There were 113,978 retirees and beneficiaries receiving annual pensions totaling $4,782,278,137.

Beneficiaries of deceased active and retired members received lump sum death benefits in the amount of $55,182,358.

The fund's assets totaled $28,230,283,174 at the close of fiscal year 2023.

* *Includes cost-of-living adjustments paid under the provisions of the Pension Adjustment Act.*

Police and Firemen's Retirement System



As of June 30, 2023, the active membership of the system totaled 42,363. There were 53,200 retirees and beneficiaries receiving annual pensions totaling $2,990,411,812.

Beneficiaries of deceased active and retired members received lump sum death benefits in the amount of $42,265,825.

The system's assets totaled $33,413,705,225 at the close of fiscal year 2023.

* *Includes cost-of-living adjustments paid under the provisions of the Pension Adjustment Act.*

MEMBERSHIP

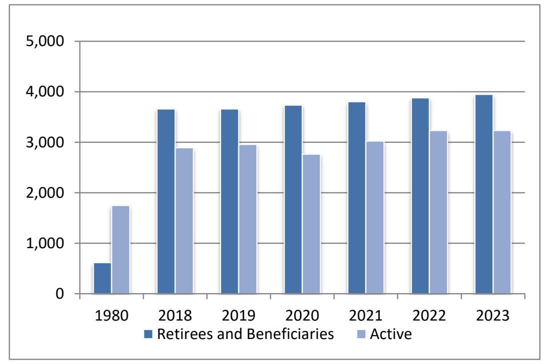
State Police Retirement System

As of June 30, 2023, the active membership of the system totaled 3,235. There were 3,948 retirees and beneficiaries receiving annual pensions totaling $252,067,625.

Beneficiaries of deceased active and retired members received lump sum death benefits in the amount of $1,554,454.

The system's assets totaled $2,174,659,390 at the close of fiscal year 2023.

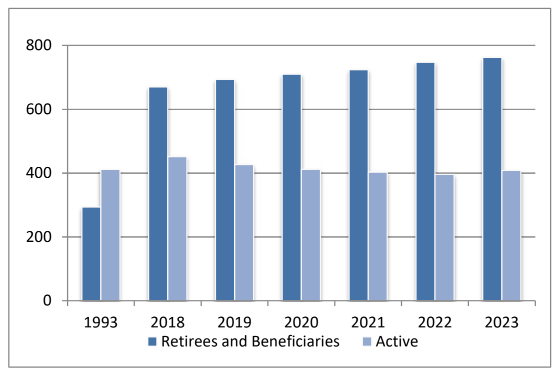
* *Includes cost-of-living adjustments paid under the provisions of the Pension Adjustment Act.*



Judicial Retirement System

As of June 30, 2023, the active membership of the system totaled 408. There were 762 retirees and beneficiaries receiving annual pensions totaling $66,295,316.

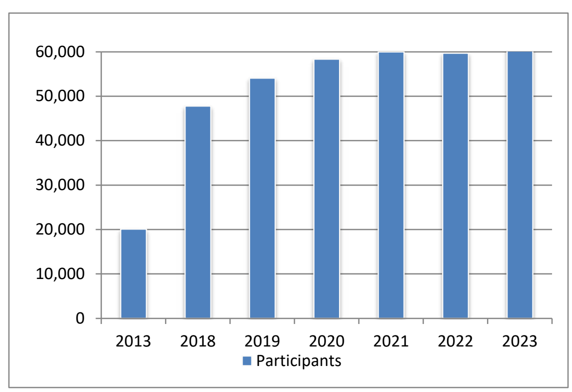
The system's assets totaled $222,465,842 at the close of fiscal year 2023.



Defined Contribution Retirement Plan

As of June 30, 2023, the active membership of the Defined Contribution Retirement Plan totaled 62,493.

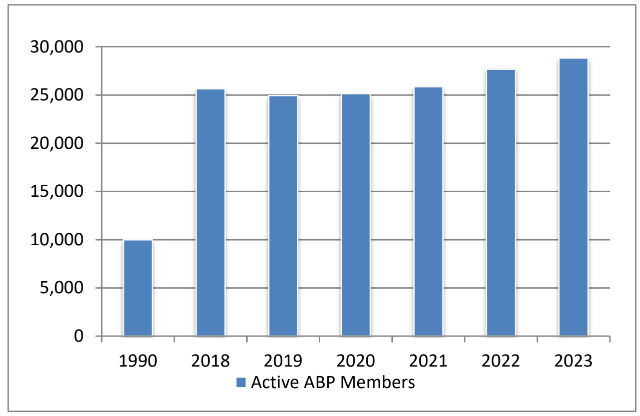
The plan's net position (participants' balances) was $39,497,874 at the close of fiscal year 2023.



Alternate Benefit Program

As of June 30, 2023, the State paid $207,087,525 on behalf of 28,841 participants to the carriers underwriting this program.

Beneficiaries of deceased active and retired members received $24,029,357 in lump sum death benefits.



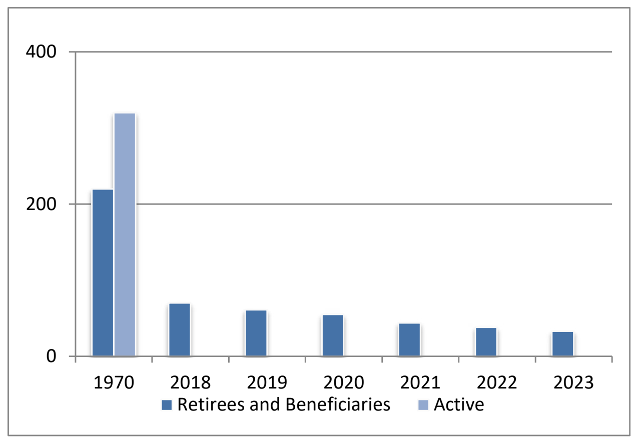
Prison Officers' Pension Fund

The activity shown to the right is consistent with a closed pension fund.

The fund was closed to new membership in January 1960.

As of June 30, 2023, the active membership of the fund totaled zero. There were 33 retirees and beneficiaries receiving annual pensions totaling $455,371.

The fund's assets totaled $4,727,967 at the close of fiscal year 2023.



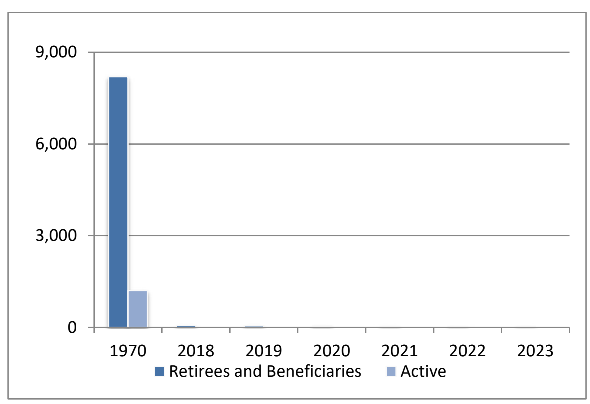
Consolidated Police and Firemen's Pension Fund

The activity shown to the right is consistent with a closed pension fund.

The fund was closed to new membership in 1944.

As of June 30, 2023, the active membership of the fund totaled zero. There were 17 retirees and beneficiaries receiving annual pensions totaling $328,373.

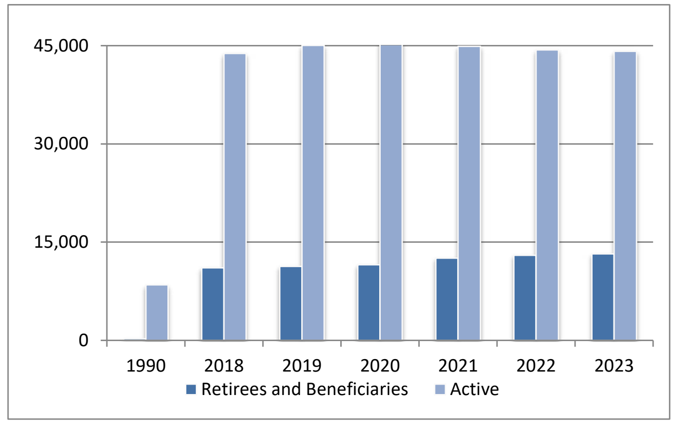
The fund's assets totaled $2,217,502 at the close of fiscal year 2023.



N.J. State Employees' Deferred Compensation Plan

As of June 30, 2023, the active membership of the New Jersey State Employees' Deferred Compensation Plan totaled 44,112. There were 13,025 members receiving monthly installment payments.

The plan's net position (participants' balances) were $5,428,733,561 at the close of fiscal year 2023.

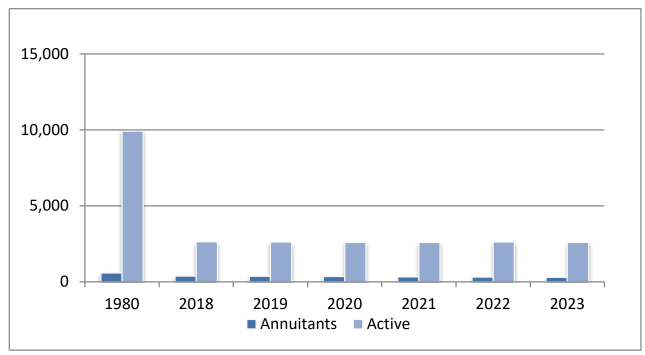


Supplemental Annuity Collective Trust

As of June 30, 2023, the active membership of the trust totaled 2,593. The unit value was $158.5263, an increase of $20.9193 from the June 30, 2022, value of $137.6070.

There were 296 annuitants.

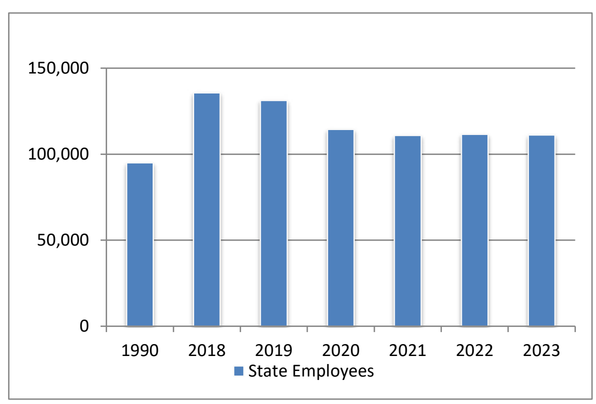
The trust's assets totaled $289,888,573 at the close of fiscal year 2023.



Unemployment Compensation and Temporary Disability Insurance

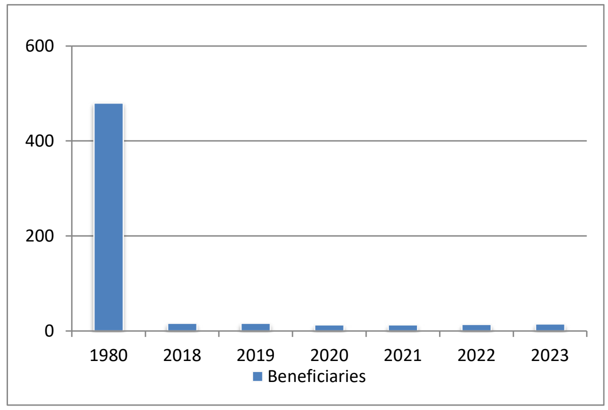
As of June 30, 2023, the Unemployment Compensation Program for State employees covered as many as 111,197 persons, and the Division remitted $6,385,471 on behalf of the State. There were 3,767 requests for unemployment benefits filed, and $18,171,749 was paid to the employees found eligible.

During the same time period, the Temporary Disability Insurance Program covered 124,873 employees, and the Division remitted $83,553,340 on behalf of the State. Claims paid totaled $31,358,552.



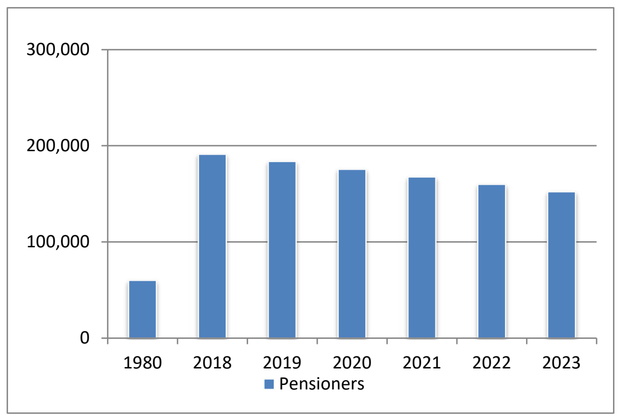
Central Pension Fund

As of June 30, 2023, there were 15 beneficiaries receiving annual pensions totaling $248,435.



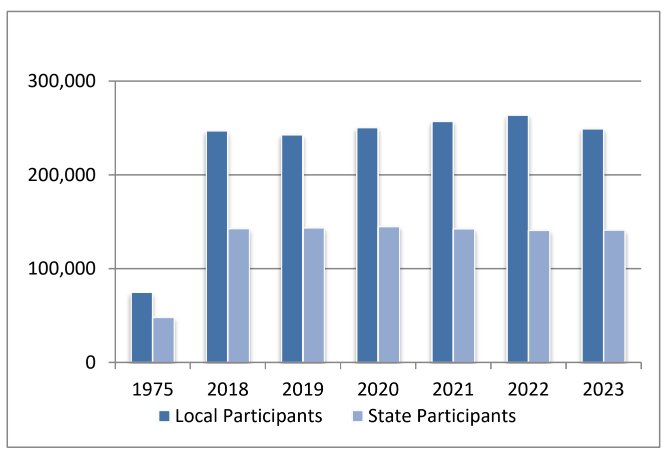
Pension Adjustment Expense

There were 152,273 pensioners who were paid $555,325,201 during fiscal year 2023.



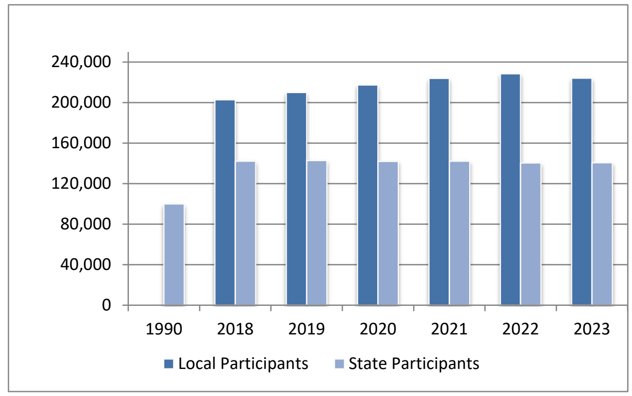
State Health Benefits and School Employees' Health Benefits Program

As of June 30, 2023, there were 390,350 participants (active and retired) consisting of 141,105 State participants and 249,245 participants of 1,052 local participating employers.



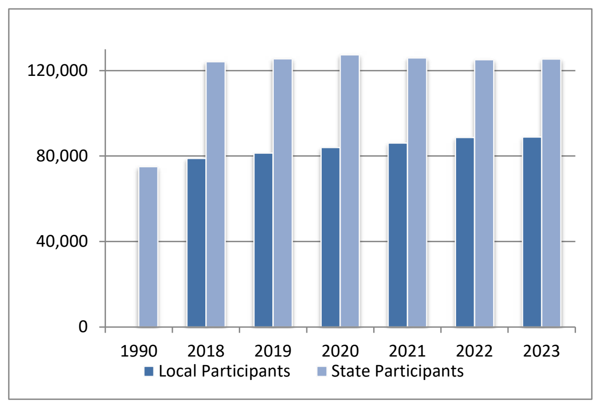
Prescription Drug Plans

The Prescription Drug plan covered as many as 140,698 State participants and 224,046 local participants during the fiscal year 2023.



Dental Expense Program

The Dental Expense Program covered as many as 125,347 eligible State participants and 88,939 local participants during fiscal year 2023. The State of New Jersey as the employer expended $33,111,383 for active participants while payment made by local (including education) employers was $5,329,474.



FINANCIAL SECTION

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Index

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KPMG LLP
Suite 4000
150 John F. Kennedy Parkway
Short Hills, NJ 07078-2702

Independent Auditors' Report

The Treasurer
State of New Jersey:

Opinion

We have audited the financial statements of the State of New Jersey, Division of Pensions and Benefits (the Division), as of and for the year ended June 30, 2023, and the related notes to the financial statements, which collectively comprise the Division's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Division as of June 30, 2023, and the changes in its fiduciary net position for the year then ended in accordance with U.S. generally accepted accounting principles.

Basis for Opinion

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

Emphasis of Matter

As discussed in Note 2(a), the financial statements of the Division are intended to present the financial position and the changes in financial position of only that portion of the aggregate remaining fund information of the State of New Jersey that is attributable to the transactions of the Division. They do not purport to, and do not, present fairly the financial position of the State of New Jersey, as of June 30, 2023, the changes in its financial position for the year then ended in accordance with U.S. generally accepted accounting principles. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

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

Auditors' Responsibilities for the Audit of the Financial Statements

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

KPMG

In performing an audit in accordance with GAAS, we:

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

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

Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis and the schedules listed under Required Supplementary Information in the accompanying table of contents be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Division's basic financial statements. The schedules listed under Supplementary Information in the accompanying table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

KPMG LLP

Short Hills, New Jersey
March 22, 2024

Management's Discussion and Analysis (Unaudited) June 30, 2023

Our discussion and analysis of the financial performance of the fiduciary funds (the Funds) administered by the Division of Pensions & Benefits (the Division) provides an overview of the Funds' financial activities for the State of the State of New Jersey (the State) fiscal year ended June 30, 2023. Please read it in conjunction with the basic financial statements which follow this discussion.

Financial Highlights

Fiduciary Funds – Pension and Other Employee Benefit Trust Funds

- Fiduciary net position increased by $7.2 billion as a result of this year's operations from $95.3 billion to $102.5 billion.
- Additions for the year are $21.3 billion, which are comprised of member, employer, nonemployer, and employer specific and other pension contributions (including transfer) of $12.9 billion and net investment gain of $8.4 billion.
- Deductions for the year are $14.1 billion, which are comprised of benefits, refund payments, and transfers of $14.1 billion and administrative expenses of $58.2 million.

Overview of the Financial Statements

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

Fund Financial Statements

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

Fiduciary Funds

Fiduciary funds are used to account for the assets that the Division holds on behalf of others as their agent. The Division administers twelve fiduciary funds: eight pension trust funds, two other employee benefit trust funds, one other postemployment benefit (OPEB) trust fund, and one custodial fund.

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

Notes to the Financial Statements

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

Other Information

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

Management's Discussion and Analysis (Unaudited) — June 30, 2023, *continued*

Financial Analysis

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

		2023	2022	Increase/ (Decrease)
Assets:				
Cash and cash equivalents	$	1,070,688,521	18,597,254	1,052,091,267
Receivables		3,183,226,751	3,134,583,247	48,643,504
Investments		96,999,673,567	91,290,770,896	5,708,902,671
Securities lending collateral		1,760,458,605	1,518,870,669	241,587,936
Members' loans and mortgages		2,876,163,927	2,485,715,798	390,448,129
Total assets		105,890,211,371	98,448,537,864	7,441,673,507
Liabilities:				
Accounts payable and accrued expenses		483,499,246	477,462,250	6,036,996
Retirement benefits payable		1,110,548,540	1,073,200,823	37,347,717
Noncontributory group life insurance premiums payable		27,844,826	29,857,336	(2,012,510)
Administrative expense payable		50,202,205	43,877,214	6,324,991
Securities lending collateral and rebates payable		1,759,813,560	1,517,772,881	242,040,679
Total liabilities		3,431,908,377	3,142,170,504	289,737,873
Net position	$	102,458,302,994	95,306,367,360	7,151,935,634

Assets of the pension, other employee benefit, and OPEB trust funds 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 2022 and 2023, total assets increased by $7.4 billion or 7.6%. This is primarily attributable to an increase of $5.7 billion in investments in the strong equity markets. Besides, there was an increase of $1.491 billion in various receivables, cash & equivalents, and members' loans & mortgages, and an increase of $241.6 million in securities lending collateral.

Liabilities of the pension funds, other employee benefit, and OPEB trust funds consist of retirement benefits payable to retirees and beneficiaries, noncontributory group life insurance (NCGI) premiums payable to the Funds' insurance provider, securities lending collateral and rebates payable, administrative expense payable, and, classified under accounts payable and accrued expenses, outstanding medical claims payable to the medical providers under the OPEB plan. Also included within accounts payable and accrued expenses are liabilities of the pension trust funds for unclaimed member accounts and checks issued to members that have not been negotiated by the members, but remain due and payable. Total liabilities increased by $289.7 million or 9.2%. This is due to an increase of $37.4 million in retirement benefits payable, an increase in securities lending collateral and rebates payable of $242.0 million plus an increase in other payables of $10.3 million.

Net position restricted for pension, other employee benefits, and OPEB increased by $7.2 billion or 7.5%.

Management's Discussion and Analysis (Unaudited) — June 30, 2023, *continued*

Summary of Fiduciary Net Position
Custodial Fund

		2023	2022	Increase/ (Decrease)
Assets:				
Cash and cash equivalents	$	187,477	49,598	137,879
Receivables		735,960	541,635	194,325
Investments		20,238,592	26,342,273	(6,103,681)
Total assets		21,162,029	26,933,506	(5,771,477)
Liabilities:				
Accounts payable and accrued expenses		8,918,659	8,043,093	875,566
Total liabilities		8,918,659	8,043,093	875,566
Net position	$	12,243,370	18,890,413	(6,647,043)

The custodial fund is the State's Dental Expense Program Fund (DEP) – Local, for which the Division holds the funds on behalf of local employers for dental benefits.

Assets of the custodial fund consists of cash and cash equivalents, receivables, and investments. Between State fiscal years 2022 and 2023, total assets decreased by $5.8 million or 21.4%. This is primarily attributable to the decreased amount invested in the Cash Management Fund (CMF) of $6.1 million.

Liabilities in the custodial fund are accounts payable and accrued expenses including claims payable. Between State fiscal years 2022 and 2023, total liabilities increased by $0.9 million or 10.9% primarily due to the increased number of claims.

Management's Discussion and Analysis (Unaudited) — June 30, 2023, *continued*

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

		2023	2022	Increase/ (Decrease)
Additions:				
Member contributions	$	2,678,765,671	2,602,978,281	75,787,390
Employer contributions		5,638,594,401	5,488,135,668	150,458,733
Nonemployer contributions		4,519,326,544	4,536,291,840	(16,965,296)
Employer specific and other contributions		22,653,597	18,160,310	4,493,287
Net investment income/(loss)		8,398,365,117	(7,870,152,157)	16,268,517,274
Transfers		39,242,659	36,162,705	3,079,954
Total additions		21,296,947,989	4,811,576,647	16,485,371,342
Deductions:				
Benefits		13,790,397,906	13,395,107,646	395,290,260
Refunds of contributions		255,162,050	253,146,654	2,015,396
Transfers		41,264,007	37,480,801	3,783,206
Administrative expenses		58,188,392	60,953,183	(2,764,791)
Total deductions		14,145,012,355	13,746,688,284	398,324,071
Change in net position	$	7,151,935,634	(8,935,111,637)	16,087,047,271

Additions to the pension, other employee benefit, and OPEB trust funds consist of member, employer, nonemployer, employer specific and other contributions, transfers, and earnings from investment activities. There was an increase of $16.5 billion or 342.6% in total additions mainly attributable to an increase in net investment income of $16.3 billion.

Member contributions increased by $75.8 million mainly due to increases in membership and members' salary.

The State contributed $6,891.9 million to the pension trust funds in State fiscal year 2023. It was composed of $1,000.4 million of normal cost and $5,891.5 million of accrued liability. The contributions were as follows: $4,117.7 million to TPAF, $1,876.6 million to PERS, $624.2 million to the Police & Firemen's Retirement System (PFRS), $76.0 thousand to Consolidated Police and Fire Pension Fund (CPFPF), $68.3 million to JRS, and $204.9 million to the State Police Retirement System (SPRS). Between State fiscal year 2022 and 2023, the State decreased its contribution to the pension trust funds by $17.5 million from $6,909.3 million to $6,891.8 million. In State fiscal year 2022, the contribution for State fiscal year 2023 was approximately 100% of the full actuarially recommended contribution.

State NCGI contributions for the State fiscal year totaling $110.2 million were as follows: $55.2 million for TPAF, $45.6 million for PERS, $6.4 million for PFRS, $1.4 million for JRS, and $1.6 million for SPRS. Between State fiscal years 2022 and 2023, the State's contribution toward NCGI decreased by $6.9 million from $117.1 million to $110.2 million due to lower claims activity. State NCGI benefits are funded on a pay-as-you-go basis. The local contributions for PERS and PFRS are included in the annual billings to local employers.

The annual local employer pension appropriation billings increased per the actuarial valuation as of July 1, 2021. For PERS, the amount accrued in State fiscal year 2022 for normal contributions, accrued liability, and NCGI was $1,261.0 million and was due on April 1, 2023. For State fiscal year 2023, the total amount accrued was $1,336.5 million and is due April 1, 2024. For PFRS, the total amount accrued in State fiscal year 2022 for normal contributions, accrued liability, and NCGI was $1,301.3 million and was due April 1, 2023. For State fiscal year 2023, the total amount accrued was $1,332.1 million and is due April 1, 2024.

Management's Discussion and Analysis (Unaudited) — June 30, 2023, *continued*

Despite geopolitical headwinds, stubborn high inflation levels and central banks around the globe adapting monetary policies to a changing landscape, equity markets in many key regions of the world remained strong. In the United States, strong employment numbers and resilient consumer demand provided a backdrop for the U.S. equity market to end State fiscal year 2023 with a strong finish. That being said, investor concerns were apparent especially in emerging markets and particularly in China as the post COVID-19 economic recovery there seems to be taking longer than initially anticipated.

JRS, Prison Officers' Pension Fund (POPF), SPRS, CPFPF, TPAF, PFRS and PERS (collectively the Pension Funds) returned 9.06% during State fiscal year 2023, outperforming both its benchmark and long-term objectives. Pension Fund returns were positively impacted by constructive performance from both public and private markets. The Pension Fund's U.S. Equity portfolio returned 19.10% while Non-U.S. Developed Market Equity returned 16.89% and Emerging Market Equity returned 6.75% during State fiscal year 2023.

Additionally, public fixed income markets delivered divergent performance with Investment Grade Credit delivering 0.44%, High Yield returning 9.04% and U.S. Treasuries delivering -1.90% in State fiscal year 2023. The disperse performance was evident in the private market asset classes as well. Private Credit led the charge, generating 9.01% during State fiscal year 2023, with Private Equity coming in at 5.00%. Risk Mitigation Strategies and Real Assets provided a 3.30% and 2.65% return, respectively. Real Estate returns were the laggard with a -3.58% return for the State fiscal year.

In reference to Schedule of Investment Returns – Annual Money-Weighted Rate of Return, Net of Investment Expense (see Required Supplementary Information Schedule 3), the State fiscal year 2023 rate was 9.12% compared to -7.66% in the prior year for JRS, SPRS, TPAF, PFRS, and PERS.

Deductions to the pension, other employee benefit, and OPEB trust funds are mainly comprised of pension benefit payments to retirees and beneficiaries, refunds of contributions to former members, transfers, and administrative costs incurred by the Funds to operate the pension trust funds and the OPEB plan. Also included are claim charges for the self-insured health and prescription drug benefit programs and premiums paid to the health insurance carriers for the insured plans. Between State fiscal years 2022 and 2023, benefit payments increased by $395.3 million or 3.0% due to an increase in the number of retirees receiving retirement and other benefits.

The change in net position of $16.1 billion was mainly attributable to the increase in net investment income of $16.3 billion and the increase in benefit and other expenses of $398.3 million offset by the net increase of $216.9 million in member, employer and nonemployer contributions and other contributions.

For the OPEB plan, total expenses incurred exceeded total revenues recognized by $58.3 million, increasing the deficit at the beginning of the year from $58.7 million to $117.0 million at year-end. There was a 46.5% increase in Net Change in Plan Fiduciary Net Position from July 1, 2022 to June 30, 2023 due to a $62.7 million increase in member, employer and nonemployer contributions plus investment income offset just by $12.1 million increase in benefit payments plus administrative expenses for the same period.

Management's Discussion and Analysis (Unaudited) — June 30, 2023, *continued*

Summary of Changes in Fiduciary Net Position
Custodial Fund

		2023	2022	Increase/ (Decrease)
Additions:				
Other contributions	$	64,841,854	64,125,310	716,544
Net investment income		779,130	59,433	719,697
Total additions		65,620,984	64,184,743	1,436,241
Deductions:				
Payments on behalf of local governments		72,268,027	63,545,785	8,722,242
Total deductions		72,268,027	63,545,785	8,722,242
Change in net position	$	(6,647,043)	638,958	(7,286,001)

Additions to the custodial fund consists of funds collected for local government employees' and retirees' dental benefits, which are not administered through a trust, and earnings from investment activities. There was an increase of $1.4 million or 2.2% in total additions partly attributable to an increase in the investment income.

Deductions to the custodial fund is mainly comprised of amounts paid on behalf of local government employees and retirees related to the premiums for dental insurance. Between State fiscal years 2022 and 2023, the amounts disbursed increased by $8.7 million or 13.7% due to an increase in the number of claims.

Management's Discussion and Analysis (Unaudited) — June 30, 2023, *continued*

Investment Performance

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

	Year ended June 30, 2023
U.S. Equity	19.10
Custom US Policy Benchmark	19.20
Non-U.S. Developed Markets Equity	16.89
Custom EAFE + Canada Benchmark	17.16
Emerging Markets Equity	6.75
Custom EM Benchmark	1.61
Private Equity	5.00
Custom Cambridge Blend	(1.42)
Global Growth	**14.27**
Global Growth Benchmark	13.22
Real Estate	(3.58)
Real Estate Index	(3.91)
Real Assets	2.65
Custom Commodities and Real Asset Benchmark	7.75
Real Return	**(1.76)**
Real Return Benchmark	(0.45)
High Yield	9.04
Custom High Yield Benchmark	9.07

	Year ended June 30, 2023
Private Credit	9.01
Bloomberg US Corp HY 1 Month lag +100bps	1.05
Investment Grade Credit	0.44
Custom Investment Grade Credit Benchmark	0.40
Income	**5.47**
Income Benchmark	1.83
Cash Equivalents	3.88
ICE BofA US 3-Month Treasury Bill	3.59
U.S. Treasuries	(1.91)
Custom Government Benchmark	(2.13)
Risk Mitigation Strategies	3.30
T-Bill + 300 BP	6.73
Defensive	**2.13**
Liquidity Benchmark	2.12
Total Pension Funds	**9.06**
Pension Fund Policy Index	8.43

Overall Financial Condition of the Funds

Based on Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans* (GASB 67) and actuaries' GASB 67 disclosures for State fiscal year 2023, 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 47.1% and the net pension liability as a percentage of covered payroll was 376.6%. For the prior year, the combined state and local ratios of plan fiduciary net position as a percentage of the total pension liability was 45.0% and the net pension liability as a percentage of covered payroll was 392.2%.

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.nj.gov/treasury/pensions. If you have any questions about this report or need additional financial information, contact the Division of Pensions and Benefits, P.O. Box 295, Trenton, NJ 08625-0295.

Statement of Fiduciary Net Position — Fiduciary Funds
June 30, 2023

		Pension, Other Employee Benefit, and Other Postemployment Benefit Trust Funds	Custodial Fund
Assets:			
Cash and cash equivalents	$	1,070,688,521	187,477
Receivables:			
Contributions:			
Members		216,422,337	–
Employers and nonemployer		2,892,748,944	38,946
Accrued interest and dividends		5,338,275	–
Other		68,717,195	697,014
Total receivables		3,183,226,751	735,960
Investments, at fair value:			
Cash Management Fund		2,552,933,916	20,238,592
Common Pension Fund A		1,721,272,358	–
Common Pension Fund D		58,524,876,919	–
Common Pension Fund E		28,485,801,575	–
Domestic equities		1,012,667,143	–
Fixed income mutual funds		534,097,624	–
Equity mutual funds		4,168,024,032	–
Total investments		96,999,673,567	20,238,592
Securities lending collateral		1,760,458,605	–
Members' loans and mortgages		2,876,163,927	–
Total assets		105,890,211,371	21,162,029
Liabilities:			
Accounts payable and accrued expenses		483,499,246	8,918,659
Retirement benefits payable		1,110,548,540	–
Noncontributory group life insurance premiums payable		27,844,826	–
Administrative expense payable		50,202,205	–
Securities lending collateral and rebates payable		1,759,813,560	–
Total liabilities		3,431,908,377	8,918,659
Net position:			
Restricted for pension, other employee benefits, and other postemployment benefits	$	102,458,302,994	–
Restricted for individuals, organizations, and other governments		–	12,243,370

See accompanying notes to financial statements.

Combining Statement of Fiduciary Net Position
Fiduciary Funds — Pension, Other Employee Benefit, and Other Postemployment Benefit Trust Funds
June 30, 2023

	Defined Benefit Pension Plans								Other Employee Benefit Plans		Other Postemployment Benefit Plan	
	Judicial Retirement System	Prison Officers' Pension Fund	State Police Retirement System	Consolidated Police and Firemen's Pension Fund	Teachers' Pension and Annuity Fund	Police and Firemen's Retirement System	Public Employees' Retirement System	Central Pension Fund	New Jersey State Employees Deferred Compensation Plan	Supplemental Annuity Collective Trust	State Health Benefits Local Government Retired Employees Plan	Total
Assets:												
Cash and cash equivalents	$ 5,196,110	106,729	21,134,589	412,746	408,320,703	251,031,721	383,839,905	41,420	10,909	515,055	78,634	1,070,688,521
Receivables:												
Contributions:												
Members	375,614	—	1,289,970	—	94,258,915	55,871,258	62,905,922	—	—	548,680	1,171,978	216,422,337
Employers and nonemployer	—	—	—	140,102	110,706,886	1,364,692,473	1,409,522,790	—	—	—	7,686,693	2,892,748,944
Accrued interest and dividends	4,416	57	17,538	44	353,359	4,382,152	332,946	32	—	247,731	—	5,338,275
Other	—	—	56,410	8,777	1,723,218	35,534,127	5,710,289	—	—	—	25,684,374	68,717,195
Total receivables	380,030	57	1,363,918	148,923	207,042,378	1,460,480,010	1,478,471,947	32	—	796,411	34,543,045	3,183,226,751
Investments, at fair value:												
Cash Management Fund	26,360,535	4,621,181	47,897,596	1,655,833	819,150,356	728,522,878	921,807,802	151,493	244,373	2,521,869	—	2,552,933,916
Common Pension Fund A	4,647,435	—	59,039,642	—	722,590,136	—	934,995,145	—	—	—	—	1,721,272,358
Common Pension Fund D	130,654,929	—	1,340,183,039	—	17,254,338,386	18,982,222,823	20,817,477,742	—	—	—	—	58,524,876,919
Common Pension Fund E	51,274,443	—	655,173,436	—	8,024,450,304	9,374,677,298	10,380,226,094	—	—	—	—	28,485,801,575
Domestic equities	—	—	—	—	—	—	—	—	726,611,905	286,055,238	—	1,012,667,143
Fixed income mutual funds	—	—	—	—	—	—	—	—	534,097,624	—	—	534,097,624
Equity mutual funds	—	—	—	—	—	—	—	—	4,168,024,032	—	—	4,168,024,032
Total investments	212,937,342	4,621,181	2,102,293,713	1,655,833	26,820,529,182	29,085,422,999	33,054,506,783	151,493	5,428,977,934	288,577,107	—	96,999,673,567
Securities lending collateral	3,930,168	—	40,313,400	—	519,019,434	570,995,092	626,200,511	—	—	—	—	1,760,458,605
Members' loans and mortgages	22,192	—	9,553,770	—	275,371,477	2,045,775,403	545,441,085	—	—	—	—	2,876,163,927
Total assets	222,465,842	4,727,967	2,174,659,390	2,217,502	28,230,283,174	33,413,705,225	36,088,460,231	192,945	5,428,988,843	289,888,573	34,621,679	105,890,211,371
Liabilities:												
Accounts payable and accrued expenses	22,405	—	112,159	—	143,067,906	9,359,498	181,317,503	167,739	255,282	237,028	148,959,726	483,499,246
Retirement benefits payable	5,660,013	62,933	21,377,967	42,143	411,638,560	260,987,056	410,445,121	25,206	—	309,541	—	1,110,548,540
Noncontributory group life insurance premiums payable	—	—	2,921,331	—	7,204,050	5,338,509	12,380,936	—	—	—	—	27,844,826
Administrative expense payable	220,281	3,832	1,295,569	3,081	19,362,129	—	26,692,669	—	—	—	2,624,644	50,202,205
Securities lending collateral and rebates payable	3,928,728	—	40,298,629	—	518,829,261	570,785,876	625,971,066	—	—	—	—	1,759,813,560
Total liabilities	9,831,427	66,765	66,005,655	45,224	1,100,101,906	846,470,939	1,256,807,295	192,945	255,282	546,569	151,584,370	3,431,908,377
Net position (deficit):												
Restricted for pension, other employee benefits, and other postemployment benefits	$ 212,634,415	4,661,202	2,108,653,735	2,172,278	27,130,181,268	32,567,234,286	34,831,652,936	—	5,428,733,561	289,342,004	(116,962,691)	102,458,302,994

See accompanying notes to financial statements.

Statement of Changes in Fiduciary Net Position — Fiduciary Funds
Year ended June 30, 2023

		Pension, Other Employee Benefit, and Other Postemployment Benefit Trust Funds	Custodial Fund
Additions:			
Contributions:			
Members	$	2,678,765,671	–
Employers		5,638,594,401	–
Nonemployer		4,519,326,544	–
Employer specific and other		22,653,597	64,841,854
Total contributions		12,859,340,213	64,841,854
Investment income:			
Net increase in fair value of investments		6,218,224,506	–
Interest and dividends		2,199,260,676	779,130
		8,417,485,182	779,130
Less investment expense		19,120,065	–
Net investment income		8,398,365,117	779,130
Transfers		39,242,659	–
Total additions		21,296,947,989	65,620,984
Deductions:			
Benefits		13,790,397,906	–
Refunds of contributions		255,162,050	–
Transfer		41,264,007	–
Administrative and miscellaneous expenses		58,188,392	–
Payments on behalf of local governments		–	72,268,027
Total deductions		14,145,012,355	72,268,027
Change in net position		7,151,935,634	(6,647,043)
Net position:			
Beginning of year		95,306,367,360	18,890,413
End of year	$	102,458,302,994	12,243,370

See accompanying notes to financial statements.

Combining Statement of Changes in Fiduciary Net Position
Fiduciary Funds — Pension, Other Employee Benefit, and Other Postemployment Benefit Trust Funds
Year ended June 30, 2023

	Defined Benefit Pension Plans								Other Employee Benefit Plans		Other Postemployment Benefit Plan	
	Judicial Retirement System	Prison Officers' Pension Fund	State Police Retirement System	Consolidated Police and Firemen's Pension Fund	Teachers' Pension and Annuity Fund	Police and Firemen's Retirement System	Public Employees' Retirement System	Central Pension Fund	New Jersey State Employees Deferred Compensation Plan	Supplemental Annuity Collective Trust	State Health Benefits Local Government Retired Employees Plan	Total
Additions:												
Contributions:												
Members	$ 9,799,479	—	30,727,554	—	933,033,324	439,236,770	961,919,241	—	233,923,776	7,710,911	62,414,616	2,678,765,671
Employers	69,711,704	—	206,428,454	—	3,494,558	1,729,861,608	3,197,442,898	269,000	—	—	431,386,179	5,638,594,401
Nonemployer	—	—	—	76,000	4,169,444,800	232,824,730	61,366,036	—	—	—	55,614,978	4,519,326,544
Employer specific and other	—	—	—	202,530	449,590	10,619,873	11,381,604	—	—	—	—	22,653,597
Total contributions	79,511,183	—	237,156,008	278,530	5,106,422,272	2,412,542,981	4,232,109,779	269,000	233,923,776	7,710,911	549,415,773	12,859,340,213
Investment income:												
Net increase in fair value of investments	12,558,985	—	131,621,220	—	1,679,286,570	1,789,708,385	2,074,116,477	—	487,520,523	43,412,346	—	6,218,224,506
Interest and dividends	4,775,811	169,991	47,235,218	65,674	626,772,212	714,507,518	787,749,293	9,392	11,424,500	4,549,153	2,001,914	2,199,260,676
	17,334,796	169,991	178,856,438	65,674	2,306,058,782	2,504,215,903	2,861,865,770	9,392	498,945,023	47,961,499	2,001,914	8,417,485,182
Less investment expense	42,655	720	429,558	262	5,452,057	6,239,100	6,725,782	—	229,931	—	—	19,120,065
Net investment income	17,292,141	169,271	178,426,880	65,412	2,300,606,725	2,497,976,803	2,855,139,988	9,392	498,715,092	47,961,499	2,001,914	8,398,365,117
Transfers	1,284,248	—	387,576	—	19,745,418	3,318,920	14,506,497	—	—	—	—	39,242,659
Total additions	98,087,572	169,271	415,970,464	343,942	7,426,774,415	4,913,838,704	7,101,756,264	278,392	732,638,868	55,672,410	551,417,687	21,296,947,989
Deductions:												
Benefits	67,681,020	455,371	253,622,079	328,373	4,837,460,495	3,032,677,637	4,620,890,824	248,435	355,631,822	24,308,550	597,093,300	13,790,397,906
Refunds of contributions	511,215	—	145,718	—	71,304,446	10,774,061	172,396,653	29,957	—	—	—	255,162,050
Transfers	100,036	—	23,087	—	14,776,834	566,478	25,797,572	—	—	—	—	41,264,007
Administrative and miscellaneous expenses	177,626	3,112	861,652	2,819	13,581,904	11,239,652	19,140,588	—	564,295	—	12,616,744	58,188,392
Total deductions	68,469,897	458,483	254,652,536	331,192	4,937,123,679	3,055,257,828	4,838,225,637	278,392	356,196,117	24,308,550	609,710,044	14,145,012,355
Change in net position	29,617,675	(289,212)	161,317,928	12,750	2,489,650,736	1,858,580,876	2,263,530,627	—	376,442,751	31,363,860	(58,292,357)	7,151,935,634
Net position (deficit) restricted for pension, other employee benefit, and other postemployment benefits:												
Beginning of year	183,016,740	4,950,414	1,947,335,807	2,159,528	24,640,530,532	30,708,653,410	32,568,122,309	—	5,052,290,810	257,978,144	(58,670,334)	95,306,367,360
End of year	$ 212,634,415	4,661,202	2,108,653,735	2,172,278	27,130,181,268	32,567,234,286	34,831,652,936	—	5,428,733,561	289,342,004	(116,962,691)	102,458,302,994

See accompanying notes to financial statements.

Notes to Financial Statements
June 30, 2023

(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, other employee benefit, and the other postemployment benefit (OPEB) trust funds sponsored by the State of New Jersey (the State). The following is a list of the benefit plans, which have been included in the basic financial statements of the Division, collectively referred to as the Plans:

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

** Includes the respective Prescription Drug Program (PDP) of the Local State Health Benefit Plan (SHBP).*

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

Notes to Financial Statements — June 30, 2023, *continued*

(b) Defined Benefit Pension Plans

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

Plan	Established as of	Legislation	Membership
JRS	June 1, 1973	N.J.S.A. 43:6A	All members of the State Judiciary.
POPF*	January 1, 1941	N.J.S.A. 43:7	Various employees in the state penal institutions appointed prior to January 1, 1960.
SPRS	July 1, 1965	N.J.S.A. 53:5A	All uniformed officers and troopers of the Division of State Police.
CPFPF*	January 1, 1952	N.J.S.A. 43:16	County and municipal police and firemen appointed prior to July 1, 1944.
TPAF	January 1, 1955	N.J.S.A. 18A:66	Substantially all teachers or members of the professional staff certified by the State Board of Examiners and employees of the Department of Education, who have titles that are unclassified, professional and certified.
PFRS	July 1, 1944	N.J.S.A. 43:16A	Substantially all full-time county and municipal police or firemen and state firemen or officer employees with police powers appointed after June 30, 1944.
PERS	January 1, 1955	N.J.S.A. 43:15A	Substantially all full-time employees of the State of New Jersey or any county, municipality, school district or public agency, provided the employee is not required to be a member of another state-administered retirement system or other state pension fund or local jurisdiction's pension fund.
CPF	Various	Various	The CPF is a "pay-as-you-go" benefit plan. The CPF's designated purpose is to provide retirement 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 legislation passed by the State. Pension reforms enacted pursuant to P.L. 2011, C. 78 included provisions creating special Pension Plan Design Committees for JRS, SPRS, TPAF, and PERS, once a Target Funded Ratio (TFR) is met. These Pension Plan Design Committees will have the discretionary authority to modify certain plan design features, including member contribution rate; formula for calculation of final compensation or final salary; fraction used to calculate a retirement allowance; age at which a member may be eligible and the benefits for service or early retirement; and benefits provided for disability retirement. The committees will also have the authority to reactivate the cost-of-living adjustment (COLA) on pensions. However, modifications can only be made to the extent that the resulting impact does not cause the funded ratio to drop below the TFR in any one year of a 30-year projection period.

The State Legislature adopted P.L. 2018, C. 55 in July 2018, which transferred management of PFRS from the Division to a newly constituted twelve-member PFRS Board of Trustees (PFRSNJ). The PFRSNJ was established in February 2019 per the legislation. In addition to overseeing the management of PFRS, the PFRSNJ has the authority to direct investment decisions, to adjust current benefit levels, and to

Notes to Financial Statements — June 30, 2023, *continued*

change member and employer contribution rates. With regard to changes to current benefit provisions, such changes can only be made with the approval of a supermajority of eight (8) of the twelve (12) members of the PFRSNJ. Also, benefit enhancement can only be made if an independent actuary certifies that the benefit enhancements will not jeopardize the long-term viability of PFRS.

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

Plan Membership and Contributing Employers

Membership and contributing employers of the defined benefit pension plans consisted of the following at June 30, 2023:

	JRS	POPF	SPRS	CPFPF	TPAF*	PFRS	PERS	CPF
Inactive plan members or beneficiaries currently receiving benefits	678	42	3,612	24	111,420	48,753	191,041	15
Inactive plan members entitled to but not yet receiving benefits	9	–	–	–	316	60	658	–
Active plan members	394	–	3,059	–	158,156	41,816	241,151	–
Total	1,081	42	6,671	24	269,892	90,629	432,850	15
Contributing employers	1	1	1	14	4	574	1,672	1
Contributing nonemployers	–	–	–	1	1	1	1	–

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

The Defined Benefit Pension Plans' Boards and Composition

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

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

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

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

Notes to Financial Statements — June 30, 2023, *continued*

Contribution Requirements and Benefit Provisions

Significant Legislation

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

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

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

During State fiscal year 2023, the TPAF, PFRS, and PERS recognized $1.17 billion in net lottery proceeds, which has been included as employer contributions in TPAF, PFRS, and PERS in the accompanying financial statements.

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

JRS

The contribution policy is set by N.J.S.A. 43:6A and requires contributions by active members and the State. Members enrolled on January 1, 1996 or after, contribute on their entire base salary. Contributions by active members enrolled prior to January 1, 1996 are based on the difference between their current salary and the salary of the position on January 18, 1982. Pursuant to the provisions of P.L. 2011, C. 78, the member contribution rate was 12% in State fiscal year 2023. The State's contribution is based on an actuarially determined amount, which includes the normal cost and unfunded accrued liability.

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

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

POPF

There are no active members in POPF. Additionally, based on the recent actuarial valuation, there was no normal cost or unfunded accrued liability contribution required by the State for the State fiscal year ended June 30, 2023. The vesting and benefit provisions were set by N.J.S.A. 43:7.

Notes to Financial Statements — June 30, 2023, *continued*

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

SPRS

The contribution policy is set by N.J.S.A. 53:5A and requires contributions by active members and the State. Pursuant to the provisions of P.L. 2011, C. 78, the active member contribution rate was 9% in State fiscal year 2023. The State's contribution is based on an actuarially determined amount, which includes the normal cost and unfunded accrued liability.

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

CPFPF

There are no active members in CPFPF. Additionally, based on the recent actuarial valuation, the State made a contribution of $76.0 thousand towards the normal cost or unfunded accrued liability during the State fiscal year ended June 30, 2023. The vesting and benefit provisions were set by N.J.S.A. 43:16.

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

TPAF

The contribution policy is set by N.J.S.A. 18A:66 and requires contributions by active members and contributing employers. Pursuant to the provisions of P.L. 2011, C. 78, the member contribution rate was 7.5% in State fiscal year 2023. The State's contribution is based on an actuarially determined amount, which includes the normal cost and unfunded accrued liability.

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

The following represents the membership tiers for TPAF:

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

Service retirement benefits of 1/55th of final average salary for each year of service credit is available to tiers 1 and 2 members upon reaching age 60 and to tier 3 members upon reaching age 62. Service retirement benefits of 1/60th of final average salary for each year of service credit is available to tier 4 members upon reaching age 62 and tier 5 members upon reaching age 65. Early retirement benefits are available to tiers 1 and 2 members with 25 years or more of service credit 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

Notes to Financial Statements — June 30, 2023, *continued*

a fraction of a percent for each month that a member retires prior to the retirement age for his/her respective tier. Deferred retirement is available to members who have at least 10 years of service credit and have not reached the service retirement age for the respective tier.

PFRS

The contribution policy is set by N.J.S.A. 43:16A and requires contributions by active members and contributing employers. Pursuant to the provisions of P.L. 2011, C. 78, the active member contribution rate was 10% in State fiscal year 2023. Employers' contributions are based on an actuarially determined amount, which includes the normal cost and unfunded accrued liability.

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

The following represents the membership tiers for PFRS:

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

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

PERS

The contribution policy is set by N.J.S.A. 43:15A and requires contributions by active members and contributing employers. Pursuant to the provisions of P.L. 2011, C. 78, the member contribution rate was 7.5% in State fiscal year 2023. The rate for members who are eligible for the Prosecutors Part of PERS (P.L. 2001, C. 366) was 10% in State fiscal year 2023 Employers' contributions are based on an actuarially determined amount, which includes the normal cost and unfunded accrued liability.

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

The following represents the membership tiers for PERS:

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

Service retirement benefits of 1/55th of final average salary for each year of service credit is available to tiers 1 and 2 members upon reaching age 60 and to tier 3 members upon reaching age 62. Service retirement benefits of 1/60th of final average salary for each year of service credit is is available to tier 4 members upon reaching age 62 and tier 5 members upon reaching age 65. Early retirement

Notes to Financial Statements — June 30, 2023, *continued*

benefits are available to tiers 1 and 2 members with 25 years or more of service credit 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 makes an annual appropriation payment to CPF to pay current year benefits. The contribution requirements were established by the statutes mentioned in the previous table and are not actuarially determined.

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

(c) Other Employee Benefit Plans

The Division administers the following other employee benefit 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, 2023, membership in the other employee benefit plans consisted of the following:

Plan	Members
NJSEDCP	57,137
SACT	2,889

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 $22,500 annually. Under the limited "catch-up" provision, a participant may be eligible to defer up to a maximum of twice the annual maximum in the three years immediately preceding the retirement age at which no reduction in benefits would be applicable.

Notes to Financial Statements — June 30, 2023, *continued*

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

Assets in the plan are held in trust for the exclusive benefit of plan members and their beneficiaries in accordance with Governmental Accounting Standards Board (GASB) Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans—an amendment of GASB Statements No. 14 and No. 84, and a supersession of GASB Statement No. 32* (GASB 97). This Statement (1) requires that a Section 457 plan be classified as either a pension plan or an other employee benefit plan depending on whether the plan meets the definition of a pension plan and (2) clarifies that Statement 84, as amended, should be applied to all arrangements organized under IRC Section 457 to determine whether those arrangements should be reported as fiduciary activities. 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.

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) Defined Benefit Other Postemployment Benefit Plan

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

Plan Membership and Contributing Employers

Membership and contributing employers/nonemployers of the defined benefit OPEB plan consisted of the following at June 30, 2023:

Inactive plan members or beneficiaries currently receiving benefits	34,771
Inactive plan members entitled to but not yet receiving benefits	—
Active plan members	65,613
Total	100,384
Contributing employers	574
Contributing nonemployers	1

Notes to Financial Statements — June 30, 2023, *continued*

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 can be a minimal amount of net position available to cover benefits in future years. Contributions to pay for the health benefit premiums of participating employees in the OPEB plan are collected from the State, participating local employers, and retired members. The State makes contributions to cover those employees eligible under P.L. 1997, C. 330 as disclosed below. Local employers remit employer contributions on a monthly basis. Retired member contributions are generally received on a monthly basis.

The employers participating in the OPEB plan made a contribution of $431.4 million and the State, as the nonemployer contributing entity, contributed $55.6 million for State fiscal year 2023.

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

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

(2) Summary of Significant Accounting Policies

(a) Reporting Entity

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

(b) Measurement Focus and Basis of Accounting

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

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

Fiduciary Funds

The Division reports the following types of funds:

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

Custodial fund – Custodial fund is used to account for the assets that the Division holds on behalf of others as their agent.

Notes to Financial Statements — June 30, 2023, *continued*

(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.

(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 other employee benefit plans (SACT and certain accounts in NJSEDCP). Accounts managed by the Division of Investment included in the accompanying statement of fiduciary net position are: Common Pension Fund A, Common Pension Fund D and Common Pension Fund E (collectively known as the Common Pension Funds), SACT and certain accounts in NJSEDCP. Common Pension Fund D invests primarily in global equity and fixed income securities. Common Pension Fund A and 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 Cash Management Fund (CMF), which is available on a voluntary basis for investment by State and certain non-State participants. CMF is considered to be an investment trust fund as defined in GASB Statement No. 31, *Certain Investments and External Investment Pools.* Units of ownership in CMF may be purchased or redeemed on any given business day (excluding State holidays) at the unit cost or value of $1.00. Participant shares are valued on a fair value basis. For additional information about CMF, refer to the audited financial statements, which can be obtained at https://www.nj.gov/treasury/doinvest/cmf/CMF%20Financial%20Statements%20FY 23.pdf

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

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

(f) Members' Loans

Members of JRS, SPRS, TPAF, PFRS, and PERS who have at least three years of service in these plans may borrow up to 50% of their accumulated member contributions. Repayment of loan balances is deducted from payroll checks and bears a commercially reasonable interest rate as set by the State Treasurer. For State fiscal year 2023, the interest rate was 10%. 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's 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.

Notes to Financial Statements — June 30, 2023, *continued*

(h) Income Tax Status

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

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

(i) Commitments

Common Pension Funds A and E are 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, 2023, Common Pension Fund A and E had unfunded commitments totaling approximately $10.9 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.

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

Components of Net Pension Liability (Asset)

The components of the net pension liability (asset) of the participating employers for the defined benefit plans at June 30, 2023 are as follows:

		JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS
Total pension liability	$	923,451,423	2,438,346	4,373,113,800	1,509,353	78,240,143,092	50,075,831,421	71,896,189,555
Plan fiduciary net position		212,634,415	4,661,202	2,108,653,735	2,172,278	27,130,181,268	32,567,234,286	34,831,652,936
Net pension liability (asset)	$	710,817,008	(2,222,856)	2,264,460,065	(662,925)	51,109,961,824	17,508,597,135	37,064,536,619
Plan fiduciary net position as a percentage of the total pension liability		23.03%	191.16%	48.22%	143.92%	34.68%	65.04%	48.45%

Notes to Financial Statements — June 30, 2023, *continued*

The total pension liability was determined by actuarial valuations as of July 1, 2022, which was rolled forward to June 30, 2023, using the following actuarial assumptions, applied to all periods in the measurement:

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS
Inflation rate:							
Price	2.75%	N/A	2.75%	N/A	2.75%	2.75%	2.75%
Wage	3.25%	N/A	3.25%	N/A	3.25%	3.25%	3.25%
Salary increases:							
Initial fiscal year applied through	2025	N/A	All future years	N/A	All future years	All future years	All future years
Rate	2.00%	N/A	2.75 - 6.75% based on years of service	N/A	2.75 - 4.25% based on years of service	3.25 - 16.25% based on years of service	2.75 - 6.55% based on years of service
Thereafter	2.75%	N/A	Not Applicable	N/A	Not Applicable	Not Applicable	Not Applicable
Long-term expected rate of return	7.00%	3.65%	7.00%	3.65%	7.00%	7.00%	7.00%
Period of actuarial experience study upon which actuarial assumptions were based	July 1, 2018 - June 30, 2021	N/A	July 1, 2018 - June 30, 2021	N/A	July 1, 2018- June 30, 2021	July 1, 2018 - June 30, 2021	July 1, 2018 - June 30, 2021

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

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

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

Notes to Financial Statements — June 30, 2023, *continued*

Plan	Pre-retirement mortality	Post-retirement mortality	Disability
TPAF	The Pub-2010 Teachers Above-Median Income Employee mortality table with a 93.9% adjustment for males and 85.3% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 Teachers Above-Median Income Healthy Retiree mortality table with a 114.7% adjustment for males and 99.6% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 Non-Safety Disabled Retiree mortality table with a 106.3% adjustment for males and 100.3% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.
PFRS	The PubS-2010 amount-weighted mortality table (sex-specific) with MP-2021 mortality projection.	The PubS-2010 amount-weighted mortality table (sex-specific) with MP-2021 mortality projection.	144% of the PubS-2010 amount-weighted mortality table for males and 100% of the PubS-2010 amount-weighted mortality table for females, with MP-2021 mortality projection.
PERS	The Pub-2010 General Below-Median Income Employee mortality table with a 82.2% adjustment for males and 101.4% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 General Below-Median Income Healthy Retiree mortality table with a 91.4% adjustment for males and 99.7% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.	The Pub-2010 Non-Safety Disabled Retiree mortality table with a 127.7% adjustment for males and 117.2% adjustment for females, with future improvement from the base year of 2010 on a generational basis. Mortality improvement is based on Scale MP-2021.

Long-Term Expected Rate of Return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension trust funds' investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension trust funds' target asset allocation as of June 30, 2023 are summarized in the following table:

Notes to Financial Statements — June 30, 2023, *continued*

Asset Class	JRS, SPRS, TPAF, PFRS and PERS	POPF & CPFPF
U.S. Equity	8.98%	–
Int'l Developed Markets Equity	9.22%	–
Int'l Small Cap Equity	9.22%	–
Emerging Market Equity	11.13%	–
Private Equity	12.50%	–
Real Estate	8.58%	–
Real Assets	8.40%	–
High Yield	6.97%	–
Private Credit	9.20%	–
Investment Grade Credit	5.19%	–
Cash Equivalents	3.31%	3.31%
U.S. Treasuries	3.31%	–
Risk Mitigation Strategies	6.21%	–

Discount Rate

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

Plan	Discount Rate
JRS	7.00%
POPF	3.65%
SPRS	7.00%
CPFPF	3.65%
TPAF	7.00%
PFRS	7.00%
PERS	7.00%

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

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

* *The municipal bond return rate used is 3.65%. 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.*

Notes to Financial Statements — June 30, 2023, *continued*

Sensitivity of Net Pension Liability (Asset)

The following presents the net pension liability (asset) of each plan calculated using the discount rates as disclosed above as well as what each plan's net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

Pension Plan (rates used)			At 1% decrease	At current discount rate	At 1% increase
JRS	(6.00%, 7.00%, 8.00%)	$	795,552,119	710,817,008	637,609,978
POPF	(2.65%, 3.65%, 4.65%)		(2,113,022)	(2,222,856)	(2,322,741)
SPRS	(6.00%, 7.00%, 8.00%)		2,798,737,145	2,264,460,065	1,822,048,168
CPFPF	(2.65%, 3.65%, 4.65%)		(596,411)	(662,925)	(723,147)
TPAF	(6.00%, 7.00%, 8.00%)		60,267,919,597	51,109,961,824	43,396,784,734
PFRS	(6.00%, 7.00%, 8.00%)		23,394,344,969	17,508,597,135	12,606,933,180
PERS	(6.00%, 7.00%, 8.00%)		44,694,311,893	37,064,536,619	30,577,634,097

(4) Employers' Net Pension Liability – Defined Benefit OPEB Plan

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, 2023 are as follows:

Total OPEB liability	$	14,889,576,786
Plan fiduciary net position (deficit)		(116,962,691)
Net OPEB liability	$	15,006,539,477
Plan fiduciary net position (deficit) as a percentage of the total OPEB liability		-0.79%

The total OPEB liability was determined by an actuarial valuation as of July 1, 2022, which was rolled forward to June 30, 2023 using the following actuarial assumptions, applied to all periods in the measurement:

Salary increases*	
PERS	2.75% to 6.55% based on years of service
PFRS	3.25% to 16.25% based on years of service
Mortality	
PERS	Pub-2010 General classification headcount-weighted mortality table with fully generation mortality improvement projections from the central year using Scale MP-2021
PFRS	Pub-2010 Safety classification headcount-weighted mortality table with fully generation mortality improvement projections from the central year using Scale MP-2021
Long-term rate of return	3.65%

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

Notes to Financial Statements — June 30, 2023, *continued*

Actuarial assumptions used in the July 1, 2022 valuation were based on the results of the PFRS and PERS experience studies prepared for July 1, 2018 to June 30, 2021.

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

The discount rate for the OPEB plan was 3.65%. This represents the municipal bond return rate as chosen by the Division. The source is the Bond Buyer Go 20-Bond Municipal Bond Index, which includes tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher. As the long-term rate of return is less than the municipal bond rate, it is not considered in the calculation of the discount rate, rather the discount rate is set at the municipal bond rate.

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

At 1% decrease (2.65%)	At current discount rate (3.65%)	At 1% increase (4.65%)
$ 17,382,355,978	15,006,539,477	13,095,561,553

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

1% Decrease	Healthcare Cost Trend Rate	1% Increase
$ 12,753,792,805	15,006,539,477	17,890,743,651

Notes to Financial Statements — June 30, 2023, *continued*

(5) Investments

Investments (including investments held directly by the Common Pension Funds) as of June 30, 2023 are as follows:

Common Pension Fund A:		
Cash Management Fund	$	33,930,073
Private credit funds		1,083,074,056
Real assets		266,963,263
Private equity funds		266,856,046
Real estate funds		70,448,920
		1,721,272,358
Common Pension Fund D:		
Cash	$	209,905,675
Cash Management Fund		1,840,326,958
Domestic equities		25,858,081,656
International equities		17,437,180,841
Domestic fixed income		11,694,718,256
International fixed income		1,247,600,297
Other(1)		237,063,236
		58,524,876,919
Common Pension Fund E:		
Cash	$	31,376,527
Cash Management Fund		3,428,500,257
Private equity funds		10,858,217,604
Private credit funds		4,939,717,573
Real estate funds		3,994,484,885
Absolute return strategy funds		2,888,650,643
Real assets		1,969,926,671
Domestic equities		367,067,956
Other(1)		7,859,459
		28,485,801,575
All Other Investments:		
Cash Management Fund		2,573,172,508
Domestic equities		1,012,667,143
Fixed income mutual funds		534,097,624
Equity mutual funds		4,168,024,032
		8,287,961,307
Total	$	97,019,912,159

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

New Jersey State statute provides for a State Investment Council (the Council) and a Director. Investment authority is vested in the Director of the Division of Investment, and the role of the Council is to formulate investment policies. The Council issues regulations, which establish guidelines for permissible investments for the Common Pension Funds managed by the Division of Investment, which include global equity investments, non-convertible preferred stocks, covered call options, put options, futures contracts, obligations of the U.S. Treasury, government agencies,

Notes to Financial Statements — June 30, 2023, *continued*

corporations, international governments and agencies, private credit investments, swap transactions, state and municipal general obligations, public authority revenue obligations, collateralized notes and mortgages, commercial paper, certificates of deposit, repurchase agreements, money market funds, private equity funds, real estate funds, other real assets, absolute return strategy funds, and the CMF.

The Council approves an investment plan that includes a targeted asset allocation, as well as long-term targeted ranges for asset classes. The asset allocation targets approved on July 26, 2023, effective October 1, 2023 by the Council for the Pension Fund, are as follows:

Asset Class	Target
U.S. equity	28.00%
Non-U.S. developed markets equity	12.75%
International Small Cap Equity	1.25%
Emerging markets equity	5.50%
Private equity	13.00%
Global Growth	60.50%
Real Estate	8.00%
Real Assets	3.00%
Real Return	11.00%
High yield	4.50%
Private Credit	8.00%
Investment grade credit	7.00%
Income	19.50%
Cash equivalents	2.00%
U.S. Treasuries	4.00%
Risk mitigation strategies	3.00%
Defensive	9.00%
Total	100.00%

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

Rate of Return

The annual money-weighted rates of return were 9.12% for JRS, SPRS, TPAF, PFRS, and PERS and 3.66% for POPF, CPFPF, and the OPEB Plan. The money-weighted rate of return considers the changing amounts actually invested during a period and weights the amounts of pension plan investments by the proportion of time they are available to earn a return during that period. External cash flows are determined on a monthly basis and are assumed to occur at the end of each month. External cash inflows are netted with external cash outflows, resulting in a net external cash flow in each month. The money-weighted rate of return is calculated net of investment expenses.

Deposit and Investment Risk Disclosure

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

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

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

Notes to Financial Statements — June 30, 2023, *continued*

The credit ratings and limits for the Pension Funds as of June 30, 2023 are as follows:

Category	Minimum rating			Limitation of issuer's outstanding debt/stock	Limitation of issue	Other limitations
	Moody's	S&P	Fitch			
Certificates of deposit						Split rating allowable. Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Domestic	P-1	A-1	F-1	10%	–	
International	P-1	A-1	F-1	10%	–	
Collateralized notes and mortgages	Baa3	BBB-	BBB-	–	25%	Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Commercial paper	P-1	A-1	F-1	–	–	Split rating allowable. Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Global debt obligations	Baa3	BBB-	BBB-	10%	–	Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Private credit investments						Not more than 13% 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	–	–	–	10%	–	
International government and agency obligations	Baa3	BBB-	BBB-	25%	25%	Not more than 5% of pension fund assets can be invested in this category.

Notes to Financial Statements — June 30, 2023, *continued*

Category	Minimum rating			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						Not more than 10% of pension fund assets can be invested in mortgage-backed securities.
Pass-through securities	A3	A-	A-	–	–	
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						
Broker	P-1	A-1	F-1	–	–	–
State, municipal, and public authority obligations	A3	A-	A-	–	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.

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

Notes to Financial Statements — June 30, 2023, *continued*

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

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

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

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

The following tables disclose aggregate fair value, by major credit quality rating category as of June 30, 2023, for the fixed income securities held directly by the Common Pension Funds. The first table includes fixed income securities rated by Moody's. The second table discloses S&P's and Fitch's ratings for fixed income securities not rated by Moody's (in thousands).

	Moody's rating									
	Aaa	Aa	A	Baa	Ba	B	Caa	Ca	C	Totals
Corporate obligations	$ 403,585	677,823	3,473,322	531,773	783,364	746,910	146,555	66	198	6,763,596
U.S. Treasury bonds	3,357,934	–	–	–	–	–	–	–	–	3,357,934
Foreign government obligations	166,609	416,654	26,062	–	–	–	–	–	–	609,325
International corporate obligations	9,988	62,431	126,327	38,276	122,143	179,955	18,067	3,577	–	560,764
Federal agency obligations	317,059	–	–	–	–	–	–	–	–	317,059
Mortgages (FHLMC/FNMA/GNMA)	4,025	–	–	–	–	–	–	–	–	4,025
	$ 4,259,200	1,156,908	3,625,711	570,049	905,507	926,865	164,622	3,643	198	11,612,703

Notes to Financial Statements — June 30, 2023, *continued*

	Standard and Poor's rating					Fitch's rating		Totals
	A	BBB	BB	B	CCC	CCC	C	
Corporate obligations	$ 146,010	23,239	298,980	84,821	7,174	0	458	560,682
International corporate obligations	417	4,407	58,373	12,218	0	1,031	0	76,446
	$ 146,427	27,646	357,353	97,039	7,174	1,031	458	637,128

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 approximately $1,226,585,624 and do not have a Moody's, S&P, or Fitch rating. The above tables also do not include investment in the Cash Management Fund totaling $7,875,929,796, which is not rated.

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

The following table summarizes the maturities (or, in the case of Remics and mortgage-backed securities, the expected average life) of the Common Pension Funds' fixed income portfolio as of June 30, 2023 (in thousands):

	Maturities in years				
Fixed income investment type	Less than 1	1 - 5	6 - 10	More than 10	Total fair value
Corporate obligations	$ 432,543	2,852,517	1,914,110	2,127,058	7,326,228
U.S. Treasury bonds	229,050	1,725,152	720,737	682,995	3,357,934
Foreign government obligations	109,059	233,504	266,762	–	609,325
International corporate obligations	41,410	343,751	159,657	93,457	638,275
Federal agency obligations	171,528	75,980	40,823	28,728	317,059
Mortgages (FHLMC/FNMA/GNMA)	8	778	3,239	–	4,025
Bank loans	–	416	–	–	416
	$ 983,598	5,232,098	3,105,328	2,932,238	12,253,262

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, 2023 were $689,055,963 and $534,097,624, respectively. These funds have a weighted average duration of 3.54 and 6.28 years, respectively.

Notes to Financial Statements — June 30, 2023, *continued*

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, 2023 (expressed in thousands of U.S. dollars):

Currency	Equities	Fixed income	Alternative investments	Total fair value
Australian dollar	$ 791,098	–	–	791,098
Brazilian real	339,940	–	–	339,940
Canadian dollar	1,232,193	53,752	–	1,285,945
Chilean peso	8,795	–	–	8,795
Czech koruna	2,685	–	–	2,685
Danish krone	296,245	–	–	296,245
Euro	3,226,793	58,110	1,156,927	4,441,830
Hong Kong dollar	1,365,313	–	–	1,365,313
Hungarian forint	44,825	–	–	44,825
Indonesian rupiah	137,684	–	–	137,684
Japanese yen	2,330,781	–	–	2,330,781
Malaysian ringgit	25,785	–	–	25,785
Mexican peso	120,153	–	–	120,153
New Israeli sheqel	44,682	–	–	44,682
New Taiwan dollar	376,869	–	–	376,869
New Zealand dollar	18,834	–	–	18,834
Norwegian krone	52,316	–	–	52,316
Philippine peso	11,977	–	–	11,977
Polish zloty	24,938	–	–	24,938
Pound sterling (U.K.)	1,441,452	4,943	2,031	1,448,426
Qatari rial	17,582	–	–	17,582
Russian ruble	1,929	–	–	1,929
Singapore dollar	160,515	–	–	160,515
South African rand	181,593	–	–	181,593
South Korean won	544,844	–	–	544,844
Swedish krona	328,956	–	–	328,956
Swiss franc	944,761	–	–	944,761
Thailand baht	80,390	–	–	80,390
Turkish lira	14,582	–	–	14,582
UAE dirham	43,096	–	–	43,096
	$ 14,211,606	116,805	1,158,958	15,487,369

Notes to Financial Statements — June 30, 2023, *continued*

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 45% of the market value of the Pension Funds can be invested in alternative investments, with limits on the individual investment categories of real estate (13%), real assets (7%), private equity (18%), private credit (13%), and absolute return strategy (10%).

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

As of June 30, 2023, the net position of Common Pension Fund E includes receivables of $347 thousand related to the redemption of hedge funds.

(6) Securities Lending Collateral

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

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

For loans of all other types of securities, in the event that the fair value of the collateral falls below the collateral requirement of either 102% or 105% (depending on whether the securities are denominated in U.S. dollars or a foreign currency, respectively) of the fair value of the outstanding loaned securities to an individual borrower, additional collateral shall be transferred in an amount that will increase the aggregate of the borrower's collateral to meet the collateral requirements. As of June 30, 2023, 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.

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.

Notes to Financial Statements — June 30, 2023, *continued*

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, 2023 (in thousands):

	Rating		
	Aaa/AAA	Not rated	Totals
Repurchase agreements	$ 1,594,427	—	1,594,427
State Street Navigator Securities Lending Money Market Portfolio	—	164,850	164,850
Cash	—	—	—
	$ 1,594,427	164,850	1,759,277

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

As of June 30, 2023, the Pension Funds had outstanding loaned investment securities with an aggregate fair value of $1,725,475,778 and did not hold any noncash collateral. There were no borrowers or lending agent default losses, and no recoveries or prior period losses during the year.

(7) Derivatives

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

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

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

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

The Common Pension Funds utilize covered call and put options in an effort to add value to or reduce the risk level in the portfolio. Options

Notes to Financial Statements — June 30, 2023, *continued*

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

As of June 30, 2023, the Common Pension Fund's derivative investments included foreign currency forward contracts:

	Notional value (local currency)	Receivable	Payable	Change in fair value
Foreign currency forward contracts:				
Buy:				
Euro	795,577	$ 869,077	862,149	6,928
Sell:				
Euro	54,328,420	$ 59,466,642	59,347,619	119,023
Pound sterling	4,124,519	5,224,523	5,244,581	(20,058)
Total forward contracts		$ 65,560,242	65,454,349	105,893

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 or published prices are available in active markets for identical investments as of the reporting date.

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

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

Notes to Financial Statements — June 30, 2023, *continued*

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 Empower and are included as Level 1 in the chart below.
- Foreign and domestic government, agency and corporate obligations, municipal bonds, mortgages, bank loans and asset-backed securities are valued using an evaluated price, which is based on a compilation of primarily observable market information or broker quotes in a non-active market. These are included as Level 2 in the chart below.
- Foreign exchange contracts are valued using industry recognized market-based models to calculate the value that a holder or counterparty would receive within the bid-ask spread, in an orderly transaction under current market conditions. These securities are included as Level 2 in the chart below.
- Distributions from alternative investment vehicles are received as the underlying investments are liquidated. The Plan's ownership interest in partners' capital can never be redeemed, but could be sold subject to approval by the fund's management. As of June 30, 2023, 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.

Notes to Financial Statements — June 30, 2023, *continued*

The following table summarizes the fair value hierarchy of the investment portfolio as of June 30, 2023 (in thousands):

		Total		Level 1	Level 2
Investments at fair value					
Equity securities					
Domestic equities	$	27,237,818		27,237,818	–
International equities		15,736,842		15,736,842	–
Equity mutual funds		4,168,024		4,168,024	–
Exchange traded funds		1,700,338		1,700,338	–
Total equity securities		48,843,022		48,843,022	–
Debt securities					
Corporate obligations		7,326,228		–	7,326,228
U. S. Treasury bonds		3,357,934		–	3,357,934
Foreign government obligations		609,325		–	609,325
International corporate obligations		638,275		–	638,275
Federal agency obligations		317,059		–	317,059
Fixed income mutual funds		534,098		534,098	–
Mortgages (FHLMC/FNMA/GNMA)		4,025		–	4,025
Exchange traded funds		689,056		689,056	–
Bank loans		416		–	416
Total debt securities		13,476,416		1,223,154	12,253,262
Total investments by fair value level		62,319,438	$	50,066,176	12,253,262
Investments measured at the net asset value (NAV)					
Buyout private equity funds		8,959,577			
Private credit funds		6,022,792			
Real estate funds - equity		3,836,288			
Real assets		2,236,890			
Multi-strategy hedge funds		1,841,258			
Debt related private equity funds		1,182,429			
General partner equity stake private equity funds		664,503			
Opportunistic hedge funds		564,407			
Venture capital private equity funds		314,586			

Notes to Financial Statements — June 30, 2023, *continued*

		Total	Level 1	Level 2
Credit oriented hedge funds		256,155		
Real estate funds - debt		228,646		
Equity oriented hedge funds		226,830		
Secondary private equity funds		3,979		
Total investments measured at NAV		26,338,340		
Local Government Investment Pool				
Cash Management Fund		7,875,929		
Total investments	$	96,533,707		
Investment derivative instruments				
Foreign currency forward contracts (assets)	$	65,560	–	65,560
Foreign currency forward contracts (liabilities)		(65,454)	–	(65,454)
Total investment derivative instruments	$	106	–	106

The following table represents the unfunded commitments, redemptions frequency and redemption notice period for investments measured at NAV as of June 30, 2023 (in thousands):

	Fair Value	Unfunded Commitments*	Redemption Frequency (if currently eligible)	Redemption Notice Period
Buyout private equity funds [1]	$ 8,959,577	2,419,203	None	N/A
Private credit funds [2]	6,022,792	3,087,980	None	N/A
Real estate funds - equity [3]	3,836,288	1,901,136	Quarterly	15 and 90 days
Real assets [4]	2,236,890	1,458,463	None	None
Multi-strategy hedge funds [5]	1,841,258	268,791	Quarterly, Semi-annual	45 and 90 days
Debt related private equity funds [6]	1,182,429	767,070	None	N/A
General partner equity stake private equity fund[7]	664,503	327,813	None	N/A
Opportunistic hedge funds[8]	564,407	25,000	Monthly, quarterly	2 - 90 days
Venture capital private equity funds [9]	314,586	431,628	None	N/A
Credit oriented hedge funds [10]	256,155	–	None	N/A
Real estate funds - debt [11]	228,646	217,971	None	N/A
Equity oriented hedge funds [12]	226,830	–	Quarterly	65 days
Secondary private equity funds [13]	3,979	12,352	None	N/A
Total investments measured at NAV	$ 26,338,340	10,917,407		

**The unfunded commitments are comprised of funds at various points in their investment terms. Certain funds are outside of their investment period or within their dissolution period. Per the contractual fund agreements, these funds can no longer draw capital for new investments and thus are highly unlikely to utilize all of the remaining unfunded balances. In addition, the Division of Investment has contractual rights to veto further capital draws of certain funds on behalf of the Common Pension Fund A and E, limiting the ability to draw down these unfunded balances.*

Notes to Financial Statements — June 30, 2023, *continued*

1. Buyout private equity funds include investments in 86 partnerships and 8 co-investment vehicles, which invest primarily in the equity of established operating companies in order to restructure the target company's reserve capital, management and/or organizational structure or facilitate ongoing growth of the firm. Return on investment is typically realized through an initial public offering, sale or merger of the company, or a recapitalization. All of the investments provide for transfer or sale of limited partnership interest with the prior written approval of the General Partner and seven investments further require the right of first refusal by the other partners in the investment. It is expected that the underlying assets will be liquidated over the next 6 months to 11 years.
2. Private credit funds include investments in 25 funds and separate account investments that make investment in mezzanine debt, direct lending, credit structured products, commercial and residential mortgage-backed securities, commercial and residential whole loans, and other similar strategies. Two of these funds are evergreen investments. Twenty-four of these investments cannot be redeemed because the investments include restrictions. As of June 30, 2023, these remaining redemption restriction periods range from 1 year to 9 years. It is expected that the underlying assets will be liquidated over the next 1 to 9 years.
3. 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 80% of real estate equity investments can never be redeemed. Two funds contain a provision that will trigger conversion into an open-ended fund. Thirty-nine of the investments provide for the transfer or sale of the limited partnership interest with the prior written approval of the General Partner and nine investments further require the right of first refusal by the other partners in the investment. Distributions from each fund and separate account will be received as the underlying investments are liquidated. It is expected that the underlying assets will be liquidated over the next 6 months to 12 years.
4. Real asset funds include investments in 20 fund or separate account strategies, which invest in the equity or debt of infrastructure, energy, utilities, water, timber, agriculture, metals, mining, and commodity-related and commodity-linked investments. Real asset investments include investments in products, services and technology related to the above. No real asset investments can be redeemed. All of the investments provide for transfer or sale of limited partnership interest with the prior written approval of the General Partner and one investment further requires the right of first refusal by the other partners in the investment. Distributions from each fund and separate account will be received as the underlying investments are liquidated. It is expected that the underlying assets will be liquidated over the next 1 to 14 years.
5. Multi-strategy hedge funds include investments in 9 hedge funds that pursue multiple strategies to diversify risks and reduce volatility. Investments representing approximately 75% of the value of the investments cannot be redeemed because the investment includes restrictions that do not allow for redemptions. As of June 30, 2023, the remaining redemption restriction periods range from 1 to 2 years. Three of the investments are being liquidated as part of the redemption process.
6. Debt related private equity funds include investments in 22 funds and 1 co-investment vehicle employing distressed, turnaround and mezzanine debt strategies. Distressed debt involves purchasing debt securities that are trading at a distressed level, in anticipation that those securities will have a higher market valuation and generate profit at a future date, or strategies which take a position to potentially gain control of an asset. Turnaround investments focus on acquiring voting control in companies that are in distress and aim to subsequently restore the company to profitability. Mezzanine debt strategies provide a middle level of financing in leveraged buyouts, which is below the senior debt layer and above the equity layer. A typical mezzanine investment includes a loan to the borrower, in addition to the borrower's issuance of equity in the form of warrants, common stock, preferred stock, or some other equity investment. All of the investments provide for transfer or sale of the limited partnership interest with the prior written approval of the General Partner. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 1 to 11 years.
7. General partner equity stake private equity funds include investments in 1 fund and 3 separate accounts, which acquire minority equity interests in investment management companies. Investments in these funds have a perpetual term and cannot be redeemed.
8. Opportunistic hedge funds include investments in 4 hedge funds that invest in speculative opportunities with high net market exposure across varied markets. Opportunistic funds include global macro funds, commodity trading advisor funds, and funds employing other similar strategies. Investments representing approximately 42% of the value of the investments in this type cannot be redeemed because the investments include restrictions. As of June 30, 2023, the remaining redemption restriction period is 1 year.

Notes to Financial Statements — June 30, 2023, *continued*

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

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

As discussed in note 1, in the State fiscal year ended June 30, 2009, the State passed P.L. 2009, C. 19 to allow local employers of PFRS and PERS to contribute 50% of the normal and accrued liability contributions amounts, while deferring the remaining amount for a 15-year period with payments beginning in the State fiscal year ended June 30, 2012. At June 30, 2023, the remaining receivable balances related to P.L. 2009, C. 19 were $11.8 million and $2.9 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 ($111,129,715); SPRS ($266,662,479); TPAF ($17,605,442,219); PFRS ($4,164,297,517); PERS ($17,151,265,252)

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 ($-11,258,636); SPRS ($1,698,349,788); TPAF ($-35,301,584,151); PERS ($-23,108,559,668)

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.

Notes to Financial Statements — June 30, 2023, *continued*

Retirement Reserve – JRS ($112,763,336); SPRS ($143,641,468); TPAF ($44,826,323,200); PFRS ($34,174,573,088); PERS ($40,721,175,506)

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 (7.0% for State fiscal year 2023) is credited to the Retirement Reserve.

Retirement Reserve – POPF ($4,661,202)

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

Non-Contributory Group Insurance Premium Reserve – PFRS – Local ($62,649,128); PERS – Local ($67,771,846)

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

Pension Accumulation Reserve – PFRS ($-5,834,285,447)

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

Pension Reserve – CPFPF ($2,172,278)

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

SHBP Reserve Fund – Local - Retired ($-116,962,691)

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

Variable Accumulation Reserve – NJSEDCP ($5,428,733,561); SACT ($225,688,303)

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

Variable Benefits Reserve – SACT ($63,653,701)

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

The State has not made the full actuarial required contribution to the defined benefit pension plans over the past several years resulting in a negative fund balance in certain reserves. However, the defined benefit pension plans have sufficient net position to make benefit payments as they become due and the State has started making its full actuarial required contribution in State fiscal year 2023.

Notes to Financial Statements — June 30, 2023, *continued*

Various reserve balances as of June 30, 2023 are as follows:

		Pension Reserves	Other Postemployment Benefit Plan Reserves
Members' Annuity Savings Reserve and Accumulated Interest Reserve	$	39,298,797,182	–
Contingent Reserve		(56,723,052,667)	–
Retirement Reserve		119,983,137,800	–
Non-Contributory Group Insurance Premium Reserve		130,420,974	–
Pension Accumulation Reserve		(5,834,285,447)	–
Pension Reserve		2,172,278	–
SHBP Reserve		–	(116,962,691)
Variable Accumulation Reserve		5,654,421,864	–
Variable Benefits Reserve		63,653,701	–
Total	$	102,575,265,685	(116,962,691)

(11) Contingencies

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

Required Supplementary Information
Schedule of Changes in Net Pension Liability and Related Ratios
Defined Benefit Pension Plans — Judicial Retirement System (Unaudited)
June 30, 2023

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:										
Service cost	$ 25,247,323	25,155,887	51,347,166	43,552,248	37,584,273	35,477,981	37,224,230	33,333,864	30,702,986	32,123,341
Interest on total pension liability	62,546,102	61,145,172	39,537,147	45,751,351	38,067,870	36,209,627	30,788,977	36,471,524	41,473,055	40,332,123
Effect of economic/demographic (gains) or losses	1,460,241	311,962	(1,657,542)	2,816,229	19,557,727	(8,553,096)	14,120,673	254,822	(1,733,197)	–
Effect of assumptions changes or inputs	–	(1,861,080)	(402,501,116)	112,739,048	151,274,804	(23,084,707)	(70,235,370)	85,677,552	(41,873,530)	26,907,821
Transfers from other systems	1,184,212	1,990,120	–	1,025,802	1,310,118	2,859,841	1,121,097	726,284	2,081,523	–
Benefit payments	(68,192,235)	(64,714,728)	(62,705,183)	(60,949,109)	(59,591,606)	(58,286,421)	(56,365,718)	(54,686,521)	(52,430,016)	(49,604,080)
Net change in total pension liability	22,245,643	22,027,333	(375,979,528)	144,935,569	188,203,186	(15,376,775)	(43,346,111)	101,777,525	(21,779,179)	49,759,205
Total pension liability-beginning	901,205,780	879,178,447	1,255,157,975	1,110,222,406	922,019,220	937,395,995	980,742,106	878,964,581	900,743,760	850,984,555
Total pension liability-ending (a)	$ 923,451,423	$ 901,205,780	879,178,447	1,255,157,975	1,110,222,406	922,019,220	937,395,995	980,742,106	878,964,581	900,743,760
Plan fiduciary net position:										
Contributions-employer	$ 69,711,704	$ 72,954,420	52,508,011	37,496,113	29,702,700	24,023,637	20,341,379	14,794,774	17,031,026	15,874,857
Contributions-employee	9,799,479	9,608,031	9,426,354	9,239,505	9,688,270	9,177,453	10,348,191	9,271,869	6,310,124	5,096,577
Net investment (loss) income	17,292,141	(19,197,001)	37,225,810	1,972,315	9,230,701	14,809,869	20,031,152	(2,721,949)	8,475,641	34,448,036
Net transfers from other systems	1,184,212	1,990,120	–	1,025,802	1,310,118	2,859,841	1,121,097	726,284	2,081,523	–
Benefit payments, including refunds of employee contributions	(68,192,235)	(64,714,728)	(62,705,183)	(60,949,109)	(59,591,606)	(58,286,421)	(56,365,718)	(54,686,521)	(52,430,016)	(49,604,080)
Administrative expense	(177,626)	(183,857)	(324,080)	(219,976)	(200,338)	(185,364)	(150,588)	(168,008)	(168,762)	(162,372)
Net change in Plan fiduciary net position	29,617,675	456,985	36,130,912	(11,435,350)	(9,860,155)	(7,600,985)	(4,674,487)	(32,783,551)	(18,700,464)	5,653,018
Plan fiduciary net position-beginning	183,016,740	182,559,755	146,428,843	157,864,193	167,724,348	175,325,333	179,999,820	212,783,371	231,483,835	225,830,817
Plan fiduciary net position-ending (b)	212,634,415	183,016,740	182,559,755	146,428,843	157,864,193	167,724,348	175,325,333	179,999,820	212,783,371	231,483,835
Plan's net pension liability-ending (a)-(b)	$ 710,817,008	$ 718,189,040	696,618,692	1,108,729,132	952,358,213	754,294,872	762,070,662	800,742,286	666,181,210	669,259,925
Plan fiduciary net position as a percentage of the total pension liability	23.03%	20.31%	20.76%	11.67%	14.22%	18.19%	18.70%	18.35%	24.21%	25.70%
Covered-employee payroll	$ 77,035,971	$ 76,401,342	76,970,450	76,627,036	77,763,777	69,216,709	68,062,584	67,097,166	66,028,491	67,810,110
Net pension liability as a percentage of covered-employee payroll	922.71%	940.02%	905.05%	1,446.92%	1,224.68%	1,089.76%	1,119.66%	1,193.41%	1,008.93%	986.96%

Notes to Schedule:

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Changes in benefit terms:	None									
Changes in assumptions:										
Discount rate	7.00%	7.00%	7.00%	3.10%	4.07%	4.09%	3.83%	3.11%	4.12%	4.58%
Long-term expected rate of return	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.65%	7.90%	7.90%

For 2021 through 2023, the Scale MP-2021 was used for mortality improvement. For 2022, demographic assumptions were updated to reflect the most recent experience study for the period July 1, 2018 to June 30, 2021.

For 2020, the mortality improvement scale was updated to scale MP-2020.

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

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

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

See accompanying independent auditors' report.

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SCHEDULE 1

Required Supplementary Information
Schedule of Changes in Net Pension Liability (Asset) and Related Ratios
Defined Benefit Pension Plans — Prison Officers' Pension Fund (Unaudited)
June 30, 2023

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:										
Service cost	$ –	–	–	–	–	–	–	–	–	–
Interest on total pension liability	91,899	70,689	81,970	152,968	188,032	215,068	198,788	251,254	331,362	401,659
Effect of economic/demographic (gains) or losses	(8,340)	(79,991)	34,727	(339,022)	127,146	(407,471)	82,047	96,657	(296,620)	–
Effect of assumptions changes or inputs	(11,570)	(185,319)	23,594	204,867	(36,496)	(73,662)	(240,233)	1,171,953	163,490	129,449
Benefit payments	(455,371)	(509,871)	(642,747)	(715,168)	(816,972)	(947,877)	(1,069,209)	(1,240,307)	(1,377,505)	(1,583,408)
Net change in total pension liability	(383,382)	(704,492)	(502,456)	(696,355)	(538,290)	(1,213,942)	(1,028,607)	279,557	(1,179,273)	(1,052,300)
Total pension liability-beginning	2,821,728	3,526,220	4,028,676	4,725,031	5,263,321	6,477,263	7,505,870	7,226,313	8,405,586	9,457,886
Total pension liability-ending (a)	$ 2,438,346	2,821,728	3,526,220	4,028,676	4,725,031	5,263,321	6,477,263	7,505,870	7,226,313	8,405,586
Plan fiduciary net position:										
Contributions-other	$ –	313,575	330,028	361,956	412,250	484,565	552,131	634,217	698,360	793,174
Net investment income	169,271	13,892	5,903	74,920	111,413	70,215	30,847	18,067	6,355	7,368
Benefit payments, including refunds of employee contributions	(455,371)	(509,871)	(642,747)	(715,168)	(816,972)	(947,877)	(1,069,209)	(1,240,307)	(1,377,505)	(1,583,408)
Administrative expense	(3,112)	(3,226)	(3,429)	(4,628)	(4,215)	(4,315)	(4,134)	(5,312)	(5,843)	(5,853)
Net change in Plan fiduciary net position	(289,212)	(185,630)	(310,245)	(282,920)	(297,524)	(397,412)	(490,365)	(593,335)	(678,633)	(788,719)
Plan fiduciary net position-beginning	4,950,414	5,136,044	5,446,289	4,925,932	5,223,456	5,620,868	6,111,233	6,704,568	7,383,201	8,171,920
Plan fiduciary net position-ending (b)	4,661,202	4,950,414	5,136,044	4,643,012	4,925,932	5,223,456	5,620,868	6,111,233	6,704,568	7,383,201
Plan's net pension liability (asset)-ending (a)-(b)	$ (2,222,856)	(2,128,686)	(1,609,824)	(614,336)	(200,901)	39,865	856,395	1,394,637	521,745	1,022,385
Plan fiduciary net position as a percentage of the total pension liability (asset)	191.16%	175.44%	145.65%	115.25%	104.25%	99.24%	86.78%	81.42%	92.78%	87.84%
Covered-employee payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Net pension liability (asset) as a percentage of covered-employee payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes to Schedule:

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Changes in benefit terms:	None									
Changes in assumptions:										
Discount rate	3.65%	3.54%	2.16%	2.21%	3.50%	3.87%	3.58%	2.85%	3.80%	4.29%
Long-term expected rate of return	3.65%	3.54%	2.16%	2.21%	3.50%	3.87%	3.58%	2.85%	3.80%	4.29%

For 2021 through 2023, the Scale MP-2021 was used for mortality improvement.
For 2020, the mortality improvement scale was updated to Scale MP-2020.
For 2019, the mortality tables used were the Pub-2010 Safety Healthy Retiree, Pub-2010 General Healthy Retiree, Pub-2010 Safety Disabled Retiree for healthy retirees, beneficiaries, and disabled retirees, respectively. Each used a base year of 2010 with future improvement from the base year on a generational basis using Scale MP-2019.
For 2016, the mortality improvement assumption was revised to be projected on a generational basis from the base year of 2000 to 2014 using Projection Scale BB as the base tables and further projected beyond the valuation date using the plan actuary's modified 2014 projection. Further, the RP-2000 disabled retiree mortality table is used for the period after disability retirement for disability retirements.

Adjustment to 2021 Plan fiduciary net position-beginning (July 1, 2020)
During fiscal year 2021, the Division adopted GASB Statement No. 84, *Fiduciary Activities,* which resulted in the recognition of historical activity of the legacy Pension Adjustment Fund respective to POPF being recognized as an adjustment to the plan fiduciary net position-beginning.

See accompanying independent auditors' report

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SCHEDULE 1

Required Supplementary Information
Schedule of Changes in Net Pension Liability and Related Ratios
Defined Benefit Pension Plans — State Police Retirement System (Unaudited)
June 30, 2023

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:										
Service cost	$ 85,593,034	72,160,698	106,016,397	92,264,920	100,705,109	119,718,797	139,506,057	113,546,510	93,740,921	93,623,020
Interest on total pension liability	292,841,117	280,610,597	251,694,211	253,377,036	240,494,663	226,928,605	202,545,532	221,675,495	216,980,562	209,010,706
Effect of economic/demographic (gains) or losses	25,672,722	85,334,517	3,828,967	6,595,373	(11,528,958)	(19,592,172)	23,786,696	(17,580,385)	35,245,543	–
Effect of assumptions changes or inputs	–	(24,764,266)	(1,109,430,087)	303,378,361	(333,811,404)	(379,490,284)	(697,970,471)	747,941,075	435,691,094	92,686,900
Transfers from other systems	364,489	370,785	530,473	305,306	(39,834)	190,903	3,925	54,000	222,557	–
Benefit payments	(253,767,797)	(251,116,766)	(237,959,841)	(230,638,032)	(225,682,230)	(222,315,723)	(217,303,946)	(213,436,150)	(206,493,624)	(197,958,938)
Net change in total pension liability	150,703,565	162,595,565	(985,319,880)	425,282,964	(229,862,654)	(274,559,874)	(549,432,207)	852,200,545	575,387,053	197,361,688
Total pension liability-beginning	4,222,410,235	4,059,814,670	5,045,134,550	4,619,851,586	4,849,714,240	5,124,274,114	5,673,706,321	4,821,505,776	4,246,118,723	4,048,757,035
Total pension liability-ending (a)	$ 4,373,113,800	$ 4,222,410,235	4,059,814,670	5,045,134,550	4,619,851,586	4,849,714,240	5,124,274,114	5,673,706,321	4,821,505,776	4,246,118,723
Plan fiduciary net position:										
Contributions-employer	$ 206,428,454	206,165,510	141,212,825	117,911,260	98,182,956	74,603,780	53,006,614	37,435,541	38,527,297	36,436,923
Contributions-employee	30,727,554	27,081,021	27,268,772	24,292,258	24,183,990	22,416,571	23,721,785	22,818,295	22,315,431	24,034,496
Net investment (loss) income	178,426,880	(170,386,626)	477,604,855	24,733,948	105,696,140	154,029,009	207,401,590	(19,284,054)	75,532,779	287,098,217
Net transfers from other systems	364,489	370,785	530,473	305,306	(39,834)	190,903	3,925	54,000	222,557	–
Benefit payments, including refunds of employee contributions	(253,767,797)	(251,116,766)	(237,959,841)	(230,638,032)	(225,682,230)	(222,315,723)	(217,303,946)	(213,436,150)	(206,493,624)	(197,958,938)
Administrative expense	(861,652)	(701,981)	(494,765)	(632,762)	(596,137)	(377,193)	(294,745)	(334,630)	(351,724)	(280,026)
Net change in Plan fiduciary net position	161,317,928	(188,588,057)	408,162,319	(64,028,022)	1,744,885	28,547,347	66,535,223	(172,746,998)	(70,247,284)	149,330,672
Plan fiduciary net position-beginning	1,947,335,807	2,135,923,864	1,727,761,545	1,791,789,567	1,790,044,682	1,761,497,335	1,694,962,112	1,867,709,110	1,937,956,394	1,788,625,722
Plan fiduciary net position-ending (b)	2,108,653,735	1,947,335,807	2,135,923,864	1,727,761,545	1,791,789,567	1,790,044,682	1,761,497,335	1,694,962,112	1,867,709,110	1,937,956,394
Plan's net pension liability-ending (a)-(b)	$ 2,264,460,065	$ 2,275,074,428	1,923,890,806	3,317,373,005	2,828,062,019	3,059,669,558	3,362,776,779	3,978,744,209	2,953,796,666	2,308,162,329
Plan fiduciary net position as a percentage of the total pension liability	48.22%	46.12%	52.61%	34.25%	38.78%	36.91%	34.38%	29.87%	38.74%	45.64%
Covered-employee payroll	$ 345,191,396	$ 332,022,798	298,254,514	296,189,926	275,790,087	284,707,387	277,771,135	275,477,457	262,496,289	262,063,829
Net pension liability as a percentage of covered-employee payroll	656.00%	685.22%	645.05%	1,120.02%	1,025.44%	1,074.67%	1,210.63%	1,444.31%	1,125.27%	880.76%

Notes to Schedule:

Changes in benefit terms: None

Changes in assumptions:	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Discount rate	7.00%	7.00%	7.00%	5.00%	5.51%	4.97%	4.42%	3.55%	4.59%	5.12%
Long-term expected rate of return	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.65%	7.90%	7.90%

For 2021 through 2023, the Scale MP-2021 was used for mortality improvement. For 2022, demographic assumptions were updated to reflect the most recent experience study for the period July 1, 2018 to June 30,2021.
For 2020, the mortality improvement scale was updated to Scale MP-2020.
For 2019, the assumed rates of retirement, mortality, salary increases, and inflation were updated based on the July 1, 2014 - June 30, 2018 Experience Study. For healthy retiree and pre-retirement mortality, the Pub-2010 Public Safety Above-Median Income Employee mortality table, unadjusted, with future improvement from the base year of 2010 on a generational basis was used. For beneficiaries, the Pub-2010 General Above-Median Income Healthy Retiree mortality table, unadjusted, with future improvement from the base year of 2010 was used. For disabled retiree mortality, the Pub-2010 Public Safety Disabled Retiree mortality table, unadjusted, with future improvement from the base year of 2010 on a generational basis was used. For mortality improvement, Scale MP-2019 was used.
For 2016, salary increases were assumed to increased 2.95% through fiscal year 2025 and 3.95% for each fiscal year thereafter.
For 2015, the demographic assumptions were revised to reflect those recommended on the basis of the July 1, 2011 - June 30, 2014 experience study.

See accompanying independent auditors' report.

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SCHEDULE 1

Required Supplementary Information
Schedule of Changes in Net Pension Liability and Related Ratios
Defined Benefit Pension Plans — Consolidated Police and Firemen's Retirement System (Unaudited)
June 30, 2023

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:										
Service cost	$ –	–	–	–	–	–	–	–	–	–
Interest on total pension liability	73,367	57,459	67,565	134,753	200,618	241,913	260,211	352,889	504,066	632,080
Effect of economic/demographic (gains) or losses	(463,932)	(116,774)	105,481	(277,515)	(196,476)	(582,507)	(984,588)	(71,313)	(993,528)	–
Effect of assumptions changes or inputs	(6,992)	(127,557)	18,418	147,999	(375,356)	(70,518)	(236,022)	1,273,909	193,719	163,528
Benefit payments	(328,373)	(473,437)	(702,399)	(889,923)	(1,033,175)	(1,289,899)	(1,535,623)	(1,881,252)	(2,445,627)	(2,942,035)
Net change in total pension liability	(725,930)	(660,309)	(510,935)	(884,686)	(1,404,389)	(1,701,011)	(2,496,022)	(325,767)	(2,741,370)	(2,146,427)
Total pension liability-beginning	2,235,283	2,895,592	3,406,527	4,291,213	5,695,602	7,396,613	9,892,635	10,218,402	12,959,772	15,106,199
Total pension liability-ending (a)	$ 1,509,353	2,235,283	2,895,592	3,406,527	4,291,213	5,695,602	7,396,613	9,892,635	10,218,402	12,959,772
Plan fiduciary net position:										
Contributions-nonemployer	$ 76,000	76,000	248,000	–	–	325,000	575,000	148,000	–	11,740
Net investment income	65,412	6,654	5,956	17,129	28,518	21,542	10,099	10,856	198	585
Contributions-other	202,530	368,072	441,879	541,279	631,757	806,330	964,280	1,196,017	1,577,751	1,889,091
Benefit payments, including refunds of employee contributions	(328,373)	(473,437)	(702,399)	(889,923)	(1,033,175)	(1,289,899)	(1,535,623)	(1,881,252)	(2,445,627)	(2,942,035)
Administrative expense	(2,819)	(3,226)	(2,620)	(3,308)	(3,013)	(4,006)	(4,188)	(6,643)	(8,003)	(9,566)
Net change in Plan fiduciary net position	12,750	(25,937)	(9,184)	(334,823)	(375,913)	(141,033)	9,568	(533,022)	(875,681)	(1,050,185)
Plan fiduciary net position-beginning	2,159,528	2,185,465	2,194,649	1,387,550	1,763,463	1,904,496	1,894,928	2,427,950	3,303,631	4,353,816
Plan fiduciary net position-ending (b)	2,172,278	2,159,528	2,185,465	1,052,727	1,387,550	1,763,463	1,904,496	1,894,928	2,427,950	3,303,631
Plan's net pension liability-ending (a)-(b)	$ (662,925)	$ 75,755	710,127	2,353,800	2,903,663	3,932,139	5,492,117	7,997,707	7,790,452	9,656,141
Plan fiduciary net position as a percentage of the total pension liability	143.92%	96.61%	75.48%	30.90%	32.33%	30.96%	25.75%	19.15%	23.76%	25.49%
Covered-employee payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Net pension liability as a percentage of covered-employee payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes to Schedule:

Changes in benefit terms: None

Changes in assumptions:

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Discount rate	3.65%	3.54%	2.16%	2.21%	3.50%	3.87%	3.58%	2.85%	3.80%	4.29%
Long-term expected rate of return	3.65%	3.54%	2.16%	2.21%	3.50%	3.87%	3.58%	2.85%	3.80%	4.29%

For 2021 through 2023, the Scale MP-2021 was used for mortality improvement.For 2020, the mortality improvement scale was updated to Scale MP-2020.
For 2019, the mortality tables used were the Pub-2010 Public Safety Healthy Retiree and Pub-2010 General Healthy Retiree for healthy retirees and beneficiaries, respectively. Each used a base year of 2010 with future improvement from the base year on a generational basis using Scale MP-2019.
For 2016, the mortality improvement assumption was revised to be projected on a generational basis from the base year of 2000 to 2014 using Projection Scale BB as the base tables and further projected beyond the valuation date using the plan actuary's modified 2014 projection. Further, the RP-2000 disabled retiree mortality table is used for the period after disability retirement for disability retirements.

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

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

See accompanying independent auditors' report.

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SCHEDULE 1

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, 2023

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:										
Service cost	$ 1,364,281,690	1,195,044,307	1,759,507,848	1,643,902,335	1,882,081,572	2,229,422,113	3,028,689,581	2,344,321,810	2,022,411,197	1,870,901,832
Interest on total pension liability	5,268,967,929	5,146,965,905	4,695,758,765	4,680,942,056	4,201,672,382	3,858,188,355	3,304,988,177	3,694,844,118	3,797,032,970	3,794,362,523
Changes of benefit terms	–	–	–	(16,738,469)	–	–	–	–	–	–
Effect of economic/demographic (gains) or losses	193,571,995	(20,645,797)	195,943,171	(8,596,840)	(155,621,840)	1,195,858,381	236,377,556	(134,644,168)	365,228,279	(24,898,221)
Effect of assumptions changes or inputs	–	110,219,657	(14,765,458,197)	1,613,054,603	(4,005,548,119)	(6,816,855,725)	(13,285,524,000)	10,827,093,000	5,913,556,000	2,614,173,709
Transfers from other systems	4,968,584	9,387,288	1,287,750	9,417,333	6,655,677	5,686,293	1,338,431	1,564,002	4,117,141	–
Benefit payments	(4,908,764,941)	(4,822,987,222)	(4,710,584,326)	(4,615,149,051)	(4,510,860,239)	(4,401,203,131)	(4,306,268,745)	(4,169,070,762)	(4,015,003,587)	(3,837,859,513)
Net change in total pension liability	1,923,025,257	1,617,984,138	(12,823,544,989)	3,306,831,967	(2,581,620,567)	(3,928,903,714)	(11,020,399,000)	12,564,108,000	8,087,342,000	4,416,680,330
Total pension liability-beginning	76,317,117,835	74,699,133,697	87,522,678,686	84,215,846,719	86,797,467,286	90,726,371,000	101,746,770,000	89,182,662,000	81,095,320,000	76,678,639,670
Total pension liability-ending (a)	$ 78,240,143,092	76,317,117,835	74,699,133,697	87,522,678,686	84,215,846,719	86,797,467,286	90,726,371,000	101,746,770,000	89,182,662,000	81,095,320,000
Plan fiduciary net position:										
Contributions-employer	$ 3,494,558	3,758,422	2,684,911	2,109,340	2,050,414	1,723,827	1,404,292	1,105,810	807,246	4,688,045
Contributions-nonemployer	4,169,444,800	4,188,158,390	2,933,363,049	2,268,898,389	2,013,446,234	1,514,407,623	1,125,614,188	798,963,467	539,796,289	423,012,101
Contributions-employee	933,033,324	907,326,471	883,659,076	867,037,595	846,166,328	810,899,751	790,788,033	761,711,695	740,296,265	716,183,306
Net investment (loss) income	2,300,606,725	(2,166,014,956)	5,902,191,421	318,393,101	1,361,781,295	2,016,316,929	2,736,988,791	(267,684,353)	1,066,062,926	4,100,273,453
Net Transfers from other systems	4,968,584	9,387,288	1,287,750	9,417,333	6,655,677	5,686,293	1,338,431	1,564,002	4,117,141	–
Employer specific contributions-delayed appropriation and delayed enrollments	449,590	395,540	403,226	329,570	300,112	345,897	357,659	243,660	358,899	–
Benefit payments, including refunds of employee contributions	(4,908,764,941)	(4,822,987,222)	(4,710,584,326)	(4,615,149,051)	(4,510,860,239)	(4,401,203,131)	(4,306,268,745)	(4,169,070,762)	(4,015,003,587)	(3,837,859,513)
Administrative expense	(13,581,904)	(12,635,916)	(9,042,590)	(18,590,555)	(13,922,385)	(13,222,178)	(11,923,787)	(13,768,112)	(13,890,080)	(12,170,971)
Net change in Plan fiduciary net position:	2,489,650,736	(1,892,611,983)	5,003,962,517	(1,167,554,278)	(294,382,564)	(65,044,989)	338,298,862	(2,886,934,593)	(1,677,454,901)	1,394,126,421
Plan fiduciary net position-beginning	24,640,530,532	26,533,142,515	21,529,179,998	22,696,734,276	22,991,116,840	23,056,161,829	22,717,862,967	25,604,797,560	27,282,252,461	25,888,126,040
Plan fiduciary net position-ending (b)	27,130,181,268	24,640,530,532	26,533,142,515	21,529,179,998	22,696,734,276	22,991,116,840	23,056,161,829	22,717,862,967	25,604,797,560	27,282,252,461
Plan's net pension liability-ending (a)-(b)	$ 51,109,961,824	51,676,587,303	48,165,991,182	65,993,498,688	61,519,112,443	63,806,350,446	67,670,209,171	79,028,907,033	63,577,864,440	53,813,067,539
Plan fiduciary net position as a percentage of the total pension liability	34.68%	32.29%	35.52%	24.60%	26.95%	26.49%	25.41%	22.33%	28.71%	33.64%
Covered-employee payroll	$ 11,866,192,351	$ 11,509,652,923	11,338,928,538	11,061,603,138	10,823,504,797	10,636,814,121	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	430.72%	448.98%	424.78%	596.60%	568.38%	599.86%	648.42%	766.86%	625.63%	536.05%

Notes to Schedule:

Changes in benefit terms:

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

Changes in assumptions:

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Discount rate	7.00%	7.00%	7.00%	5.40%	5.60%	4.86%	4.25%	3.22%	4.13%	4.68%
Long-term expected rate of return	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.65%	7.90%	7.90%

For 2021 through 2023, the Scale MP-2021 was used for mortality improvement. For 2022, demographic assumptions were updated to reflect the most recent experience study for the period July 1, 2018 to June 30,2021.

For 2020, the mortality improvement scale was updated to Scale MP-2020.

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

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

See accompanying independent auditors' report.

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SCHEDULE 1

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, 2023

		2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:											
Service cost	$	933,459,971	888,117,411	878,718,561	890,425,657	958,392,935	1,030,735,624	1,136,338,028	1,148,613,712	994,248,683	1,079,166,175
Interest on total pension liability		3,355,222,471	3,246,376,600	3,226,402,697	3,131,523,540	3,025,500,679	2,898,092,706	2,738,598,309	2,751,445,220	2,680,664,300	2,535,619,539
Change of benefit terms		112,669,226	180,976,807	147,434,341	–	–	–	–	–	–	–
Effect of economic/demographic (gains) or losses		196,461,055	601,305,607	(1,120,768,361)	67,509,143	(138,356,304)	47,676,088	89,364,940	(34,916,637)	(215,122,438)	–
Effect of assumptions changes or inputs		–	(403,018,428)	52,875,942	(892,759,358)	(1,875,170,696)	(2,069,626,924)	(3,534,553,975)	343,078,737	3,755,474,472	649,814,155
Transfers from other systems		2,752,442	2,508,887	2,308,815	2,350,928	3,239,769	3,422,888	289,960	358,929	800,782	–
Benefit payments		(3,043,451,698)	(2,970,223,769)	(2,852,083,674)	(2,725,565,718)	(2,606,863,711)	(2,523,462,466)	(2,421,485,437)	(2,324,175,953)	(2,205,464,297)	(2,105,829,011)
Net change in total pension liability		1,557,113,467	1,546,043,115	334,888,321	473,484,192	(633,257,328)	(613,162,084)	(1,991,448,175)	1,884,404,008	5,010,601,502	2,158,770,858
Total pension liability-beginning		48,518,717,954	46,972,674,839	46,637,786,518	46,164,302,326	46,797,559,654	47,410,721,738	49,402,169,913	47,517,765,905	42,507,164,403	40,348,393,545
Total pension liability-ending (a)	$	50,075,831,421	48,518,717,954	46,972,674,839	46,637,786,518	46,164,302,326	46,797,559,654	47,410,721,738	49,402,169,913	47,517,765,905	42,507,164,403
Plan fiduciary net position:											
Contributions-employer	$	1,729,861,608	1,701,099,844	1,442,270,056	1,352,498,105	1,206,535,544	1,127,617,114	1,002,043,734	900,033,567	883,776,917	858,047,628
Contributions-nonemployer		232,824,730	253,611,000	178,577,000	154,309,000	130,202,000	108,857,000	86,467,000	61,466,000	76,038,000	–
Contributions-employee		439,236,770	430,285,900	419,458,195	416,433,179	410,943,242	395,604,883	395,878,384	388,681,408	386,991,641	385,660,096
Net investment (loss) income		2,497,976,803	(2,243,518,603)	6,952,727,005	425,543,356	1,549,138,833	2,139,481,226	2,791,104,860	(150,693,159)	922,598,676	3,381,553,869
Net Transfers from other systems		2,752,442	2,508,887	2,308,815	2,350,928	3,239,769	3,422,888	289,960	358,929	800,782	–
Employer specific contributions-additional contribution		–	416,245	355,901	997,622	847,716	173,554	268,910	1,923,531	535,424	–
Employer specific contributions-delayed appropriation		579,698	1,257,718	966,820	603,835	422,890	450,244	892,514	763,176	865,936	–
Employer specific contributions-delayed enrollments		85,425	208,506	186,293	165,704	96,603	90,933	179,386	142,034	224,629	–
Employer specific contributions-retroactive		9,954,750	5,015,523	4,652,327	5,230,213	6,501,177	3,120,240	11,476,881	3,661,101	24,536,440	–
Contributions-other		–	–	–	–	–	(12,230)	–	–	–	–
Benefit payments, including refunds of employee contributions		(3,043,451,698)	(2,970,223,769)	(2,852,083,674)	(2,725,565,718)	(2,606,863,711)	(2,523,462,466)	(2,421,485,437)	(2,324,175,953)	(2,205,464,297)	(2,105,829,011)
Administrative expense		(11,239,652)	(15,261,328)	(18,293,096)	(12,859,324)	(7,199,218)	(4,505,685)	(4,124,457)	(4,292,891)	(4,531,012)	(3,884,342)
Net change in Plan fiduciary net position:		1,858,580,876	(2,834,600,077)	6,131,125,642	(380,293,100)	693,864,845	1,250,837,701	1,862,991,735	(1,122,132,257)	86,373,136	2,515,548,240
Plan fiduciary net position-beginning		30,708,653,410	33,543,253,487	27,412,127,845	27,792,420,945	27,098,556,100	25,847,718,399	23,984,726,664	25,106,858,921	25,020,485,785	22,504,937,545
Plan fiduciary net position-ending (b)		32,567,234,286	30,708,653,410	33,543,253,487	27,412,127,845	27,792,420,945	27,098,556,100	25,847,718,399	23,984,726,664	25,106,858,921	25,020,485,785
Plan's net pension liability-ending (a)-(b)	$	17,508,597,135	17,810,064,544	13,429,421,352	19,225,658,673	18,371,881,381	19,699.003,554	21,563,003,339	25,417,443,249	22,410,906,984	17,486,678,618
Plan fiduciary net position as a percentage of the total pension liability		65.04%	63.29%	71.41%	58.78%	60.20%	57.91%	54.52%	48.55%	52.84%	58.86%
Covered-employee payroll	$	4,308,888,412	4,201,978,195	4,142,905,791	3,937,977,209	3,870,718,707	3,803,348,329	3,726,807,562	3,695,509,355	3,682,677,356	3,678,910,266
Net pension liability as a percentage of covered-employee payroll		406.34%	423.85%	324.15%	488.21%	474.64%	517.94%	578.59%	687.79%	608.55%	475.32%

Notes to Schedule:

Changes in benefit terms:

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

Changes in assumptions:

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Discount rate	7.00%	7.00%	7.00%	7.00%	6.85%	6.51%	6.14%	5.55%	5.79%	6.32%
Long-term expected rate of return	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.65%	7.90%	7.90%

For 2021 through 2023, the Scale MP-2021 was used for mortality improvement. For 2022, demographic assumptions were updated to reflect the most recent experience study for the period July 1, 2018 to June 30,2021.

For 2020, the mortality improvement scale was updated to Scale MP-2020.

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

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

See accompanying independent auditors' report.

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SCHEDULE 1

Required Supplementary Information
Schedule of Changes in Net Pension Liability and Related Ratios
Defined Benefit Pension Plans — Public Employees' Retirement System (Unaudited)
June 30, 2023

		2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:											
Service cost	$	1,218,502,310	1,132,080,147	1,134,836,940	1,298,089,823	1,330,518,589	1,555,424,045	1,865,398,219	1,628,065,678	1,523,631,386	1,592,214,831
Interest on total pension liability		4,832,168,694	4,771,520,285	4,666,037,367	4,408,636,380	4,084,253,310	3,849,650,265	3,412,789,012	3,653,373,426	3,647,688,354	3,506,486,225
Changes of benefit terms		–	10,701,169	8,488,231	(27,350,963)	–	–	–	–	–	–
Effect of economic/demographic (gains) or losses		475,958,828	(166,220,680)	103,617,038	799,902,851	137,159,950	(363,908,216)	306,941,390	600,806,505	1,050,795,158	–
Effect of assumptions changes or inputs		–	(250,480,946)	131,461,485	(5,511,377,388)	(3,283,548,860)	(5,613,718,254)	(10,156,789,076)	8,792,817,065	4,091,557,460	1,222,437,554
Transfers from other systems		(11,291,075)	(15,575,176)	(4,754,619)	(14,123,679)	(11,955,594)	(13,217,000)	854,976	778,753	1,651,542	–
Benefit payments		(4,793,287,477)	(4,617,971,525)	(4,434,554,694)	(4,253,053,912)	(4,118,371,422)	(3,936,320,575)	(3,810,818,692)	(3,629,651,915)	(3,441,046,065)	(3,259,290,114)
Net change in total pension liability		1,722,051,280	864,053,274	1,605,131,748	(3,299,276,888)	(1,861,944,027)	(4,522,089,735)	(8,381,624,171)	11,046,189,512	6,874,277,835	3,061,848,496
Total pension liability-beginning		70,174,138,275	69,310,085,001	67,704,953,253	71,004,230,141	72,866,174,168	77,388,263,903	85,769,888,074	74,723,698,562	67,849,420,727	64,787,572,231
Total pension liability-ending (a)	$	71,896,189,555	70,174,138,275	69,310,085,001	67,704,953,253	71,004,230,141	72,866,174,168	77,388,263,903	85,769,888,074	74,723,698,562	67,849,420,727
Plan fiduciary net position:											
Contributions-employer	$	3,197,442,898	3,114,403,554	2,477,308,520	2,108,766,760	1,862,706,649	1,680,631,409	1,465,931,579	1,273,425,342	1,085,237,214	917,689,000
Contributions-nonemployer		61,366,036	48,654,369	13,079,912	8,117,299	6,829,134	–	–	–	–	–
Contributions-employee		961,919,241	933,155,302	909,939,594	908,936,226	909,191,554	854,178,790	847,952,137	821,305,787	805,232,235	797,818,225
Net investment (loss) income		2,855,139,988	(2,594,503,769)	7,708,453,890	456,271,235	1,741,296,887	2,435,763,559	3,202,393,837	(237,215,643)	1,117,827,113	4,102,964,869
Net transfers from other systems		(11,291,075)	(15,575,176)	(4,754,619)	(14,123,679)	(11,955,594)	(13,217,000)	854,976	778,753	1,651,542	–
Employer specific contributions-additional contribution		38,784	75,615	93,521	102,853	103,872	28,566	25,676	257,850	111,824	–
Employer specific contributions-delayed appropriation		3,050,065	3,147,089	2,411,251	(4,146,446)	1,775,826	2,687,967	3,224,612	1,721,199	1,664,415	–
Employer specific contributions-delayed enrollments		987,536	984,714	740,098	567,434	657,701	931,611	1,030,774	532,612	594,843	–
Employer specific contributions-retroactive		7,305,219	5,977,713	3,838,038	5,318,876	4,623,577	4,818,841	11,230,521	687,225	6,504,878	–
Contributions - other		–	–	–	–	2,387	–	(7,797)	(51,586)	(31,006)	–
Benefit payments, including refunds of employee contributions		(4,793,287,477)	(4,617,971,525)	(4,434,554,694)	(4,253,053,912)	(4,118,371,422)	(3,936,320,575)	(3,810,818,692)	(3,629,651,915)	(3,441,046,065)	(3,259,290,114)
Administrative expense		(19,140,588)	(18,030,213)	(14,120,177)	(19,365,010)	(21,257,441)	(21,368,150)	(19,648,715)	(23,285,920)	(23,761,860)	(21,756,019)
Net change in Plan fiduciary net position		2,263,530,627	(3,139,682,327)	6,662,435,334	(802,608,364)	375,603,130	1,008,135,018	1,702,168,908	(1,791,496,296)	(446,014,867)	2,537,425,961
Plan fiduciary net position-beginning		32,568,122,309	35,707,804,636	29,045,369,302	29,847,977,666	29,472,374,536	28,464,239,518	26,762,070,610	28,553,566,906	28,999,581,773	26,462,155,812
Plan fiduciary net position-ending (b)		34,831,652,936	32,568,122,309	35,707,804,636	29,045,369,302	29,847,977,666	29,472,374,536	28,464,239,518	26,762,070,610	28,553,566,906	28,999,581,773
Plan's net pension liability-ending (a)-(b)	$	37,064,536,619	37,606,015,966	33,602,280,365	38,659,583,951	41,156,252,475	43,393,799,632	48,924,024,385	59,007,817,464	46,170,131,656	38,849,838,954
Plan fiduciary net position as a percentage of the total pension liability		48.45%	46.41%	51.52%	42.90%	42.04%	40.45%	36.78%	31.20%	38.21%	42.74%
Covered-employee payroll	$	12,256,433,730	11,948,582,339	1,965,922,552	11,775,149,674	11,440,021,762	11,360,644,671	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		302.41%	314.73%	280.82%	328.32%	359.76%	381.97%	433.10%	521.26%	403.53%	339.34%

Notes to Schedule:

Changes in benefit terms:

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

Changes in assumptions:

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Discount rate	7.00%	7.00%	7.00%	7.00%	6.28%	5.66%	5.00%	3.98%	4.90%	5.39%
Long-term expected rate of return	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.65%	7.90%	7.90%

For 2021 through 2023, the Scale MP-2021 was used for mortality improvement. For 2022, demographic assumptions were updated to reflect the most recent experience study for the period July 1, 2018 to June 30,2021.

For 2020, the mortality improvement scale was updated to Scale MP-2020.

For 2019, the assumed rates of retirement, mortality, salary increases, and inflation were updated based on the July 1, 2014 - June 30, 2018 Experience Study. For pre-retirement mortality, the Pub 2010 General Below-Median Income Employee mortality table with a 82.2% adjustment for males and 101.4% adjustment for females, and with future improvement from the base year of 2010 on a generational basis was used. For healthy retirees and beneficiaries, the Pub-2010 General Below-Median Income Healthy Retiree mortality table with a 91.4% adjustment for males and 99.7% adjustment for females, and with future improvement from the base year of 2010 on a generational basis was used. For disabled retiree mortality, the Pub-2010 Non-Safety Disabled Retiree mortality table with a 127.7% adjustment for males, and a 117.2% adjustment for females, and with future improvement from the base year of 2010 on a generational basis was used. For mortality improvement, Scale MP-2019 was used.

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

See accompanying independent auditors' report.

SCHEDULE 2

Required Supplementary Information

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

Judicial Retirement System

Year ended June 30:	Actuarially determined contribution	Actual employer & nonemployer contribution	Contribution excess (deficiency)	Covered payroll	Contribution as a percentage of covered payroll
2023	$ 69,711,274	69,711,704	430	77,035,971	90.49%
2022	67,651,519	72,954,420	5,302,901	76,401,342	95.49
2021	66,973,041	52,508,011	(14,465,030)	76,970,450	68.22
2020	53,213,618	37,496,113	(15,717,505)	76,627,036	48.93
2019	49,099,041	29,702,700	(19,396,341)	77,763,777	38.20
2018	47,224,943	24,023,637	(23,201,306)	69,216,709	34.71
2017	44,807,771	20,341,379	(24,466,392)	68,062,584	29.89
2016	47,305,819	14,794,774	(32,511,045)	67,097,166	22.05
2015	45,136,504	17,031,026	(28,105,478)	66,028,491	25.79
2014	43,922,167	15,874,681	(28,047,486)	67,810,110	23.41

Prison Officers' Pension Fund

Year ended June 30:	Actuarially determined contribution	Actual employer & nonemployer contribution	Contribution excess (deficiency)	Covered payroll	Contribution as a percentage of covered payroll
2023	$ –	–	–	N/A	N/A
2022	–	–	–	N/A	N/A
2021	–	–	–	N/A	N/A
2020	–	–	–	N/A	N/A
2019	–	–	–	N/A	N/A
2018	–	–	–	N/A	N/A
2017	–	–	–	N/A	N/A
2016	–	–	–	N/A	N/A
2015	–	–	–	N/A	N/A
2014	–	–	–	N/A	N/A

SCHEDULE 2

Required Supplementary Information
Schedule of Employer Contributions — Defined Benefit Pension Plans
(Unaudited)

State Police Retirement System

Year ended June 30:	Actuarially determined contribution	Actual employer & nonemployer contribution	Contribution excess (deficiency)	Covered payroll	Contribution as a percentage of covered payroll
2023	$ 206,428,186	206,428,454	268	345,191,396	59.80%
2022	191,415,727	206,165,510	14,749,783	332,022,798	62.09
2021	180,556,737	141,212,825	(39,343,912)	298,254,514	47.35
2020	167,567,439	117,911,260	(49,656,179)	296,189,926	39.81
2019	161,134,729	98,182,956	(62,951,773)	275,790,087	35.60
2018	145,908,823	74,603,780	(71,305,043)	284,707,387	26.20
2017	135,017,662	53,006,614	(82,011,048)	277,771,135	19.08
2016	120,800,705	37,435,541	(83,365,164)	275,477,457	13.59
2015	110,904,703	38,527,297	(72,377,406)	262,496,289	14.68
2014	105,093,378	36,436,923	(68,656,455)	262,063,829	13.90

Consolidated Police and Firemen's Pension Fund

Year ended June 30:	Actuarially determined contribution	Actual employer & nonemployer contribution	Contribution excess (deficiency)	Covered payroll	Contribution as a percentage of covered payroll
2023	$ 596,597	76,000	(520,597)	N/A	N/A
2022	76,209	76,000	(209)	N/A	N/A
2021	245,506	248,000	2,494	N/A	N/A
2020	–	–	–	N/A	N/A
2019	–	–	–	N/A	N/A
2018	325,191	325,000	(191)	N/A	N/A
2017	884,680	1,539,280	654,600	N/A	N/A
2016	491,683	1,324,017	832,334	N/A	N/A
2015	–	1,577,751	–	N/A	N/A
2014	864,041	1,900,831	1,036,790	N/A	N/A

SCHEDULE 2

Required Supplementary Information
Schedule of Employer Contributions — Defined Benefit Pension Plans (Unaudited)

Year ended June 30:	Actuarially determined contribution	Actual employer & nonemployer contribution	Contribution excess (deficiency)	Covered payroll	Contribution as a percentage of covered payroll
	Teachers' Pension and Annuity Fund				
2023	$ 4,001,746,562	4,172,939,358	171,192,796	11,866,192,351	35.17%
2022	3,877,974,331	4,191,916,812	313,942,481	11,509,652,923	36.42
2021	3,727,967,714	2,936,047,960	(791,919,754)	11,338,928,538	25.89
2020	3,286,527,638	2,271,007,729	(1,015,519,909)	11,061,603,138	20.53
2019	3,249,224,200	2,015,496,648	(1,233,727,552)	10,823,504,797	18.62
2018	3,035,344,625	1,516,131,450	(1,519,213,175)	10,636,814,121	14.25
2017	2,737,175,151	1,127,018,480	(1,610,156,671)	10,436,205,103	10.80
2016	2,544,811,534	800,069,277	(1,744,742,257)	10,305,472,484	7.76
2015	2,306,611,715	540,603,535	(1,766,008,180)	10,162,263,470	5.32
2014	2,159,287,358	427,700,146	(1,731,587,212)	10,038,792,896	4.26

Year ended June 30:	Actuarially determined contribution	Actual employer & nonemployer contribution	Contribution excess (deficiency)	Covered payroll	Contribution as a percentage of covered payroll
	Police and Firemen's Retirement System				
2023	$ 1,942,204,908	1,957,388,222	15,183,314	4,308,888,412	45.43%
2022	1,798,890,158	1,845,994,703	47,104,545	4,201,978,195	43.93
2021	1,725,652,140	1,600,575,026	(125,077,114)	4,142,905,791	39.85
2020	1,592,156,607	1,427,886,341	(164,270,266)	3,937,977,209	36.26
2019	1,545,236,051	1,332,222,254	(213,013,797)	3,870,718,707	34.42
2018	1,424,767,509	1,236,395,284	(188,372,225)	3,803,348,329	32.51
2017	1,335,659,737	1,046,327,392	(289,332,345)	3,726,807,562	28.08
2016	1,311,849,713	986,654,840	(325,194,873)	3,695,509,355	26.70
2015	1,217,110,411	941,950,336	(275,160,075)	3,682,677,356	25.58
2014	1,150,719,106	880,431,697	(270,287,409)	3,678,910,266	23.93

SCHEDULE 2

Required Supplementary Information
Schedule of Employer Contributions — Defined Benefit Pension Plans
(Unaudited)

Year ended June 30:	Actuarially determined contribution	Actual employer & nonemployer contribution	Contribution excess (deficiency)	Covered payroll	Contribution as a percentage of covered payroll
			Public Employees' Retirement System		
2023	$ 3,078,274,829	3,195,194,692	116,919,863	12,256,433,730	26.07%
2022	2,984,018,597	3,085,421,792	101,403,195	11,948,582,339	25.82
2021	2,860,929,748	2,431,743,316	(429,186,432)	11,965,922,552	20.32
2020	2,457,669,386	2,015,797,615	(441,871,771)	11,775,149,674	17.12
2019	2,457,773,619	1,912,209,917	(545,563,702)	11,440,021,762	16.72
2018	2,306,287,092	1,632,971,072	(673,316,020)	11,360,644,671	14.37
2017	2,207,859,541	1,448,520,025	(759,339,516)	11,296,345,312	12.82
2016	2,097,570,117	1,265,246,226	(832,323,891)	11,320,198,747	11.18
2015	1,935,315,246	1,067,584,583	(867,730,663)	11,441,433,226	9.33
2014	1,797,073,081	941,023,184	(856,049,897)	11,448,531,265	8.22

See accompanying independent auditors' report.

SCHEDULE 2

Schedule of Employer Contributions — Defined Benefit Pension Plans
Last 10 Fiscal Years (Unaudited)

Notes to Schedule:

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

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS
Actuarial cost method	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	Level Dollar, open	Level Dollar	Level Dollar, open	Level Dollar, open	Level Dollar, open
Remaining amortization period	30 years	1 year	30 years	1 year	30 years	30 years	30 years
Asset valuation method	Five-year smoothing difference between market value and expected actuarial value	Market value	Five-year smoothing difference between market value and expected actuarial value	Market value	Five-year smoothing difference between market value and expected actuarial value	Five-year smoothing difference between market value and expected actuarial value	Five-year smoothing difference between market value and expected actuarial value
Projected salary increase 2023							
Initial fiscal year applied through	2025	N/A^	All future years	N/A^	All future years	All future years	All future years
Rate	2.00%	N/A^	2.75 - 6.75% based on years of service	N/A^	2.75 - 4.25% based on years of service	3.25 - 16.25% based on years of service	2.75 - 6.55% based on years of service
Thereafter	2.75%	N/A^	Not Applicable	N/A^	Not Applicable	Not Applicable	Not Applicable
2022							
Initial fiscal year applied through	2025	N/A^	All future years	N/A^	All future years	All future years	All future years
Rate	2.00%	N/A^	2.75 - 6.75% based on years of service	N/A^	2.75 - 4.25% based on years of service	3.25 - 16.25% based on years of service	2.75 - 6.55% based on years of service
Thereafter	2.75%	N/A^	Not Applicable	N/A^	Not Applicable	Not Applicable	Not Applicable
2021							
Initial fiscal year applied through	2025	N/A^	2025	N/A^	2026	N/A	2026
Rate	2.00%	N/A^	2.95%	N/A^	1.55 - 4.45% based on years of service	Varies based on experience	2.00 - 6.00% based on years of service
Thereafter	2.75%	N/A^	3.95%	N/A^	2.75 - 5.65% based on years of service	Varies based on experience	3.00 - 7.00% based on years of service
2016 through 2020							
Initial fiscal year applied through	2025	N/A^	2025	N/A^	2026	2025	2026
Rate	2.00%	N/A^	2.95%	N/A^	1.55 - 3.80% based on years of service	2.10 - 8.98% based on age	1.65 - 4.15% based on age
Thereafter	3.00%	N/A^	3.95%	N/A^	2.00 - 4.90% based on years of service	3.10 - 9.98% based on age	2.65 - 5.15% based on age
2014 and 2015							
Through fiscal year 2021	2.00%	N/A^	2.95%	N/A^	Varies based on experience	2.60 - 9.48% based on age	2.15 - 4.40% based on age
Thereafter	3.00%	N/A^	3.95%	N/A^	Varies based on experience	3.60 - 10.48% based on age	3.15 - 5.40% based on age
Projected COLAs	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*
Investment rate of return							
2023	7.00%	2.00%	7.00%	2.00%	7.00%	7.00%	7.00%
2022	7.00%	2.00%	7.00%	2.00%	7.00%	7.00%	7.00%
2021	7.30%	2.00%	7.30%	2.00%	7.30%	7.30%	7.30%
2020	7.30%	2.00%	7.30%	2.00%	7.30%	7.30%	7.30%
2019	7.50%	5.00%	7.50%	2.00%	7.50%	7.50%	7.50%
2018	7.50%	5.00%	7.50%	2.00%	7.50%	7.50%	7.50%
2017	7.50%	5.00%	7.50%	2.00%	7.50%	7.50%	7.50%
2016	7.65%	5.00%	7.65%	2.00%	7.65%	7.65%	7.65%
2015	7.90%	5.00%	7.90%	2.00%	7.90%	7.90%	7.90%
2014	7.90%	5.00%	7.90%	2.00%	7.90%	7.90%	7.90%

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

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

See accompanying independent auditors' report.

SCHEDULE 3

Required Supplementary Information

Schedule of Investment Returns — Defined Benefit Pension Plans
Annual Money-Weighted Rate of Return, Net of Investment Expense (Unaudited)

	JRS, SPRS, TPAF, PERS and PFRS*	POPF	CPFPF
Year ended June 30:			
2023	9.12%	3.66%	3.66%
2022	(7.66)%	0.24%	0.24%
2021	28.60%	0.12%	0.12%
2020	1.40%	1.57%	1.57%
2019	6.17%	2.29%	2.29%
2018	9.11%	1.36%	1.36%
2017	13.01%	0.53%	0.53%
2016	(1.15)%	0.28%	0.50%
2015	4.08%	0.09%	0.34%
2014	16.79%	0.09%	0.02%

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

See accompanying independent auditors' report.

SCHEDULE 4

Required Supplementary Information

Schedule of Changes in Net OPEB Liability and Related Ratios
Defined Benefit Other Postemployment Benefit Plan (Unaudited)
June 30, 2023

		2023	2022	2021	2020	2019	2018	2017
Total OPEB liability:								
Service cost	$	597,135,801	796,654,029	846,075,674	605,949,339	666,574,660	896,235,148	1,064,525,862
Interest on total OPEB liability		581,375,849	401,372,615	413,837,061	497,444,533	636,082,461	764,082,232	648,423,508
Changes of benefit terms		23,039,435	402,474,416	2,029,119	1,055,527	(1,903,958)	–	–
Difference between expected and actual experience		(2,123,324,632)	572,046,963	(1,564,654,436)	852,424,987	(1,399,921,930)	(3,626,384,047)	–
Effect of changes of assumptions		255,103,873	(3,599,550,175)	333,095,471	3,138,556,114	(1,635,760,217)	(2,314,240,675)	(2,587,850,974)
Contributions - employee		62,414,616	53,166,360	43,309,873	37,546,413	43,249,952	53,987,166	53,585,505
Benefit payments		(597,093,300)	(585,291,951)	(509,642,373)	(466,218,997)	(470,179,613)	(421,621,253)	(417,488,848)
Net change in total OPEB liability		(1,201,348,358)	(1,959,127,743)	(435,949,611)	4,666,757,916	(2,161,858,645)	(4,647,941,429)	(1,238,804,947)
Total OPEB liability-beginning		16,090,925,144	18,050,052,887	18,486,002,498	13,819,244,582	15,981,103,227	20,629,044,656	21,867,849,603
Total OPEB liability-ending (a)	$	14,889,576,786	16,090,925,144	18,050,052,887	18,486,002,498	13,819,244,582	15,981,103,227	20,629,044,656
Plan fiduciary net position:								
Contributions-employer	$	431,386,179	389,490,003	325,097,477	292,404,377	346,415,056	421,194,662	381,813,324
Contributions-nonemployer contributing entity		55,614,978	45,792,081	37,777,433	35,011,940	43,854,500	53,548,285	53,064,311
Contributions-employee		62,414,616	53,166,360	43,309,873	37,546,413	43,249,952	53,987,166	53,585,505
Net investment income		2,001,914	235,962	201,343	2,858,334	4,826,936	2,320,422	791,049
Benefit payments		(597,093,300)	(585,291,951)	(509,642,373)	(466,218,997)	(470,179,613)	(421,621,253)	(417,488,848)
Administrative expense		(12,616,744)	(12,334,441)	(11,334,383)	(9,913,267)	(9,478,435)	(8,200,113)	(8,894,576)
Net change in Plan fiduciary net position		(58,292,357)	(108,941,986)	(114,590,630)	(108,311,200)	(41,311,604)	101,229,169	62,870,765
Plan fiduciary net position-beginning		(58,670,334)	50,271,652	164,862,282	273,173,482	314,485,086	213,255,917	150,385,152
Plan fiduciary net position-ending (b)		(116,962,691)	(58,670,334)	50,271,652	164,862,282	273,173,482	314,485,086	213,255,917
Plan's net OPEB liability-ending (a)-(b)	$	15,006,539,477	16,149,595,478	17,999,781,235	18,321,140,216	13,546,071,100	15,666,618,141	20,415,788,739
Plan fiduciary net position as a percentage of the total OPEB liability		-0.79%	-0.36%	0.28%	0.89%	1.98%	1.97%	1.03%
Covered-employee payroll	$	5,385,250,793	5,244,103,018	4,991,824,527	4,872,992,497	4,801,667,470	4,646,915,753	4,336,016,376
Net OPEB liability as a percentage of covered-employee payroll		278.66%	307.96%	360.59%	375.97%	282.11%	337.14%	470.84%

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

Notes to Schedule:

Changes in benefit terms:

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

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

Changes in assumptions:

In 2022 and 2023, demographic assumptions were updated to reflect the most recent PFRS and PERS experience studies for the period July 1, 2018 to June 30,2021. Further, the discount rate changed to 3.54% from 2.16% for 2022 and from 3.54% to 3.65% for 2023. For 2022 and 2023, the Scale MP-2021 was used for mortality improvement, too.

In 2021, the discount rate was changed to 2.16% from 2.21% and the mortality improvement scale was changed to Scale MP-2021.

In 2020, the discount rate changed to 2.21% from 3.50%. Further, there were changes in the assumed health care cost trend rates, the impact of the repeal of the excise tax, and the use of the Scale MP-2020 for mortality improvement.

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

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

See accompanying independent auditors' report.

SCHEDULE 5

Required Supplementary Information

Schedule of Investment Returns — Defined Benefit Other Postemployment Benefit Plan
Annual Money-Weighted Rate of Return, Net of Investment Expense
(Unaudited)

Year ended June 30:	
2023	3.66%
2022	0.24%
2021	0.12%
2020	1.57%
2019	2.29%
2018	1.28%
2017	0.58%

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

See accompanying independent auditors' report.

SCHEDULE 6

Schedule of Administrative Expenses
Year ended June 30, 2023

Personnel Services:	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	NJSEDCP	Total
Salaries and wages	$ 145,800	1,541	656,151	1,645	8,054,407	1,868,554	11,523,617	304,733	22,556,448
Employee benefits	25,540	598	147,006	212	4,368,129	1,253,246	5,664,729	186,377	11,645,837
Total personnel services	171,340	2,139	803,157	1,857	12,422,536	3,121,800	17,188,346	491,110	34,202,285
Professional services:									
Actuarial services	33,300	429	160,627	312	190,215	201,100	268,727	–	854,710
Data processing	3,124	245	49,120	190	1,397,174	3,169	1,633,664	–	3,086,686
Information systems	4,012	308	43,033	191	1,248,150	53,862	2,093,542	26,991	3,470,089
Other professional [(1)]	2,616	213	64,841	124	1,423,645	13,255,385	1,874,805	–	16,621,629
Medical reviews (exams/hearings)	–	–	6,031	–	184,753	485,899	509,635	–	1,186,318
Elections	–	–	–	–	–	–	7,588	–	7,588
Internal audit and legal	2,562	164	95,240	137	834,954	404,506	246,451	–	1,584,014
Total professional services	45,614	1,359	418,892	954	5,278,891	14,403,921	6,634,412	26,991	26,811,034
Communication:									
Travel	–	–	–	–	2,514	8,130	4,040	–	14,684
Telephone	340	22	5,001	21	140,677	–	222,031	2,800	370,892
Postage	684	63	11,218	53	389,719	–	933,413	1,000	1,336,150
Motor pool	39	2	976	2	8,976	–	14,422	–	24,417
Printing and office	405	21	7,476	17	107,144	–	113,636	–	228,699
Total communication	1,468	108	24,671	93	649,030	8,130	1,287,542	3,800	1,974,842
Miscellaneous:									
Office space	1,775	186	32,872	147	914,164	–	1,396,034	12,000	2,357,178
Maintenance	50	12	5,608	8	55,224	184,911	90,270	30,394	366,477
Equipment	33	27	8,155	19	34,740	100,568	88,421	–	231,963
Other services and charges	–	1	2,214	3	7,544	–	7,644	–	17,406
Total miscellaneous	1,858	226	48,849	177	1,011,672	285,479	1,582,369	42,394	2,973,024
Total administrative expenses	$ 220,280	3,832	1,295,569	3,081	19,362,129	17,819,330	26,692,669	564,295	65,961,185

[(1)] Portion of consulting

See accompanying independent auditors' report.

SCHEDULE 7

Schedule of Investment Expenses
Year ended June 30, 2023

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	NJSEDCP	Total
Investment expense	$ 42,655	720	429,558	262	5,452,057	6,239,100	6,725,782	229,931	19,120,065

See accompanying independent auditors' report.

SCHEDULE 8

Schedule of Expenses for Consultants
Year ended June 30, 2023

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	Total
Actuarial:								
Cheiron	$ 33,300	429	160,627	312	190,215	–	268,727	653,610
Segal	–	–	–	–	–	201,100	–	201,100
Professional services:								
Exams/Hearings/Court Reporters	–	–	6,031	–	184,753	485,899	509,635	1,186,318
Board Elections:								
Election America	–	–	–	–	–	–	7,588	7,588
Total expenses for consultants	$ 33,300	429	166,658	312	374,968	686,999	785,950	2,048,616

See accompanying independent auditors' report.

SCHEDULE 9

Combining Schedule of Fiduciary Net Position Information
Fiduciary Funds — Select Pension Trust Funds
June 30, 2023

	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	$ 5,196,110	106,729	21,134,589	412,746	408,320,703	251,031,721	383,839,905	1,070,042,503
Receivables:								
Contributions:								
Members	375,614	–	1,289,970	–	94,258,915	55,871,258	62,905,922	214,701,679
Employers and nonemployer	–	–	–	140,102	110,706,886	1,364,692,473	1,409,522,790	2,885,062,251
Accrued interest and dividends	4,416	57	17,538	44	353,359	4,382,152	332,946	5,090,512
Other	–	–	56,410	8,777	1,723,218	35,534,127	5,710,289	43,032,821
Total receivables	380,030	57	1,363,918	148,923	207,042,378	1,460,480,010	1,478,471,947	3,147,887,263
Investments, at fair value:								
Cash Management Fund	26,360,535	4,621,181	47,897,596	1,655,833	819,150,356	728,522,878	921,807,802	2,550,016,181
Common Pension Fund A	4,647,435	–	59,039,642	–	722,590,136	–	934,995,145	1,721,272,358
Common Pension Fund D	130,654,929	–	1,340,183,039	–	17,254,338,386	18,982,222,823	20,817,477,742	58,524,876,919
Common Pension Fund E	51,274,443	–	655,173,436	–	8,024,450,304	9,374,677,298	10,380,226,094	28,485,801,575
Total investments	212,937,342	4,621,181	2,102,293,713	1,655,833	26,820,529,182	29,085,422,999	33,054,506,783	91,281,967,033
Securities lending collateral	3,930,168	–	40,313,400	–	519,019,434	570,995,092	626,200,511	1,760,458,605
Members' loans and mortgages	22,192	–	9,553,770	–	275,371,477	2,045,775,403	545,441,085	2,876,163,927
Total assets	222,465,842	4,727,967	2,174,659,390	2,217,502	28,230,283,174	33,413,705,225	36,088,460,231	100,136,519,331
Liabilities:								
Accounts payable and accrued expenses	22,405	–	112,159	–	143,067,906	9,359,498	181,317,503	333,879,471
Retirement benefits payable	5,660,013	62,933	21,377,967	42,143	411,638,560	260,987,056	410,445,121	1,110,213,793
Noncontributory group life insurance premiums payable	–	–	2,921,331	–	7,204,050	5,338,509	12,380,936	27,844,826
Administrative expense payable	220,281	3,832	1,295,569	3,081	19,362,129	–	26,692,669	47,577,561
Securities lending collateral and rebates payable	3,928,728	–	40,298,629	–	518,829,261	570,785,876	625,971,066	1,759,813,560
Total liabilities	9,831,427	66,765	66,005,655	45,224	1,100,101,906	846,470,939	1,256,807,295	3,279,329,211
Net position restricted for pension	$ 212,634,415	4,661,202	2,108,653,735	2,172,278	27,130,181,268	32,567,234,286	34,831,652,936	96,857,190,120

See accompanying independent auditors' report.

SCHEDULE 10

Combining Schedule of Changes in Fiduciary Net Position Information
Fiduciary Funds — Select Pension Trust Funds
Year ended June 30, 2023

	Judicial Retirement System	Prison Officers' Pension Fund	State Police Retirement System	Consolidated Police and Firemen's Pension Fund	Teachers' Pension and Annuity Fund	Police and Firemen's Retirement System	Public Employees' Retirement System	Total
Additions:								
Contributions:								
Members:								
State	$ 9,799,479	–	30,727,554	–	933,033,324	53,703,766	357,335,214	1,384,599,337
Local	–	–	–	–	–	385,533,004	604,584,027	990,117,031
Employers:								
State	69,711,704	–	206,428,454	–	3,494,558	397,779,705	1,860,915,639	2,538,330,060
Local	–	–	–	–	–	1,332,081,903	1,336,527,259	2,668,609,162
Nonemployer	–	–	–	76,000	4,169,444,800	232,824,730	61,366,036	4,463,711,566
Employer specific and other	–	–	–	202,530	449,590	10,619,873	11,381,604	22,653,597
Total contributions	79,511,183	–	237,156,008	278,530	5,106,422,272	2,412,542,981	4,232,109,779	12,068,020,753
Investment income:								
Net increase/(decrease) in fair value of investments	12,558,985	–	131,621,220	–	1,679,286,570	1,789,708,385	2,074,116,477	5,687,291,637
Interest	4,775,811	169,991	47,235,218	65,674	626,772,212	714,507,518	787,749,293	2,181,275,717
	17,334,796	169,991	178,856,438	65,674	2,306,058,782	2,504,215,903	2,861,865,770	7,868,567,354
Less investment expense	42,655	720	429,558	262	5,452,057	6,239,100	6,725,782	18,890,134
Net investment income/(loss)	17,292,141	169,271	178,426,880	65,412	2,300,606,725	2,497,976,803	2,855,139,988	7,849,677,220
Transfers	1,284,248	–	387,576	–	19,745,418	3,318,920	14,506,497	39,242,659
Total additions	98,087,572	169,271	415,970,464	343,942	7,426,774,415	4,913,838,704	7,101,756,264	19,956,940,632
Deductions:								
Benefits:								
Benefit expense - retirement allowances	66,295,316	455,371	252,067,625	328,373	4,782,278,137	2,990,411,812	4,511,211,847	12,603,048,481
Noncontributory group insurance expense	1,385,704	–	1,554,454	–	55,182,358	42,265,825	109,678,977	210,067,318
Refunds of contributions	511,215	–	145,718	–	71,304,446	10,774,061	172,396,653	255,132,093
Transfers	100,036	–	23,087	–	14,776,834	566,478	25,797,572	41,264,007
Administrative and miscellaneous expenses	177,626	3,112	861,652	2,819	13,581,904	11,239,652	19,140,588	45,007,353
Total deductions	68,469,897	458,483	254,652,536	331,192	4,937,123,679	3,055,257,828	4,838,225,637	13,154,519,252
Change in net position	29,617,675	(289,212)	161,317,928	12,750	2,489,650,736	1,858,580,876	2,263,530,627	6,802,421,380
Net position restricted for pension:								
Beginning of year	183,016,740	4,950,414	1,947,335,807	2,159,528	24,640,530,532	30,708,653,410	32,568,122,309	90,054,768,740
End of year	$ 212,634,415	4,661,202	2,108,653,735	2,172,278	27,130,181,268	32,567,234,286	34,831,652,936	96,857,190,120

See accompanying independent auditors' report.

INVESTMENT SECTION

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State of New Jersey

PHILIP D. MURPHY
Governor

TAHESHA L. WAY
Lt. Governor

DEPARTMENT OF THE TREASURY
DIVISION OF INVESTMENT
P.O. BOX 290
TRENTON, NJ 08625-0290
Telephone (609) 292-5106
Facsimile (609) 984-4425

ELIZABETH MAHER MUOIO
State Treasurer

SHOAIB KHAN
Director

The Division of Investment (the "Division") is responsible for the investment management of the assets of seven public pension systems: the Consolidated Police and Firemen's Pension Fund, the Judicial Retirement System of New Jersey, the Police and Firemen's Retirement System of New Jersey, the Prison Officers' Pension Fund, the Public Employees' Retirement System of New Jersey, the State Police Retirement System of New Jersey, and the Teachers' Pension and Annuity Fund (collectively referred to as the "Pension Fund").

The Division was created in 1950 by the New Jersey Legislature (P.L. 1950, c.270) to centralize all functions relating to the purchase, sale or exchange of securities for the State's diverse funds under experienced and professional management. The statute also established the State Investment Council (the "Council") to formulate policies that govern the methods, practices or procedures for investment, reinvestment, sale or exchange transactions to be followed by the Director of the Division (the "Director"). The statute vests investment authority in the Director, who is appointed by the State Treasurer from a list of qualified candidates submitted by the Council. Proposed regulations and amendments are filed upon approval of the Council with the Office of Administrative Law and reported in *The New Jersey Register,* followed by a 60-day public comment period. After the public comment period, each proposal is returned to the Council for adoption, along with any comments received. The Council's current regulations may be found in the New Jersey Administrative Code (N.J.A.C. 17:16).

On July 3, 2018, the Governor signed P.L. 2018, c. 55 (the "PFRS Act") which, among other changes, transferred certain investment authority and duties relating to the assets of the Police and Firemen's Retirement System of New Jersey ("PFRSNJ") to a newly constituted PFRSNJ Board of Trustees (the "PFRSNJ Board"). The Division continues to work with the PFRSNJ Board and PFRSNJ staff to implement the provisions of the PFRS Act.

The Council is comprised of 16 members pursuant to N.J.S.A. 52:18A-83. Nine members are appointed by the Governor for five-year terms, and are drawn traditionally from the investment community. Of those nine appointments, eight are made with the advice and consent of the State Senate. One appointment is made from nominees submitted jointly by the President of the Senate and Speaker of the Assembly. Four members are appointed by the Governor from nominees submitted by various employee organizations. Two of the four members are appointed for five-year terms from nominees submitted by the New Jersey State AFL-CIO. One of the four members is appointed for a three-year term from nominees submitted by the New Jersey Education Association. The fourth member is appointed by the Governor for a three-year term from nominees submitted by the State Troopers Fraternal Association. Two members, representing the Public Employees' Retirement System of New Jersey (PERS), and the Teachers' Pension and Annuity Fund (TPAF), are designated from members of the respective pension system's board of trustees and serve three-year terms. One member is designated by the Chief Justice of the New Jersey Supreme Court from members of the Retired Judges Association of New Jersey and serves a three-year term. State law requires that no Council member shall hold any office, position or employment with any political party, and none can benefit from the transactions of the Division.

All investments by the Director must conform to the heightened "prudent person" standard set by the New Jersey Legislature (N.J.S.A. 52:1SA-89). This standard requires the Director "to manage and invest the portfolio solely in the interests of the beneficiaries of the portfolio and for the exclusive purpose of providing financial benefits to the beneficiaries of the portfolio."

To the best of our knowledge, performance is calculated using the time-weighted return based on the modified Dietz method.

Shoaib Khan
Director
Division of Investment

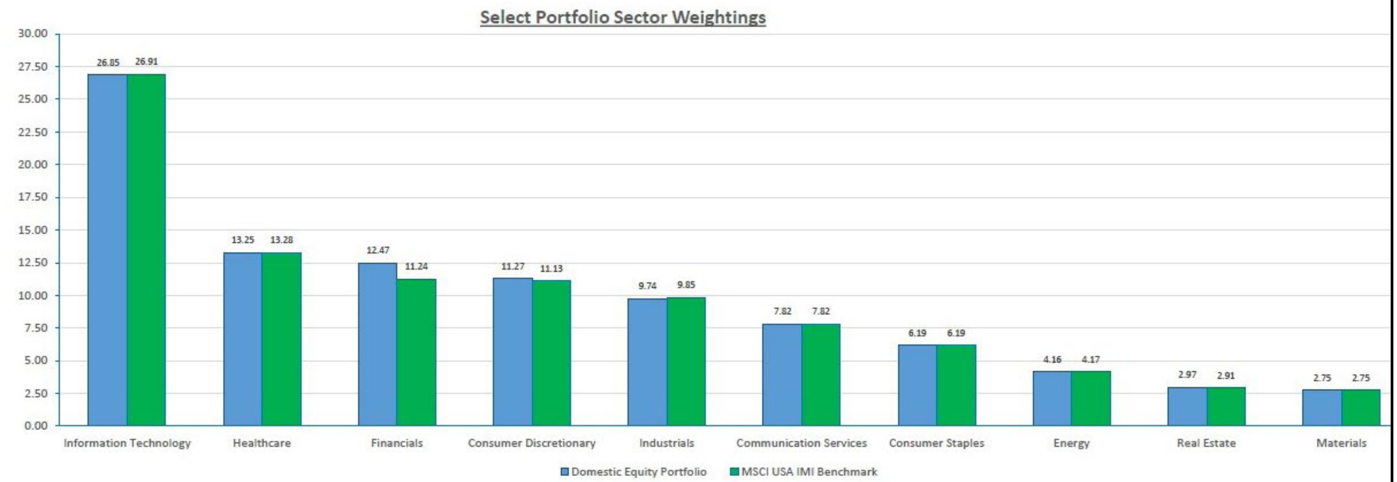
State Investment Council
Policies Regarding the Investment of Pension Fund Assets
(at June 30, 2023)

- Investment of pension assets is governed by the State Investment Council Regulations (N.J.A.C. 17:16) (the "Regulations") as well as an asset allocation plan approved by the State Investment Council (the "Council").
- Global equity investments, excluding exchange-traded funds that invest in fixed income assets, strategies or indices, shall not exceed 70 percent of the market value of the pension assets.
- Unlimited investment is permitted in securities issued by the U.S. Government and designated agencies.
- Investment in global debt obligations, non-convertible preferred stocks, and collateralized notes and mortgages are subject to minimum rating requirements of Baa3 by Moody's, BBB- by Standard & Poor's and BBB- by Fitch Ratings. Investment in mortgage backed passthrough securities are subject to a minimum rating requirement of A3 by Moody's, A- by Standard & Poor's and A- by Fitch Ratings. Up to eight percent of the pension assets may be invested in these securities not meeting the minimum rating requirements.
- Investments in international government and agency obligations are limited to direct debt obligations of a sovereign government or its political subdivisions, debt obligations of agencies of a sovereign government which are unconditionally guaranteed as to principal and interest by the sovereign government's full faith and credit, and debt obligations of international agencies or financial institutions that are backed, but not necessarily guaranteed, by the collective credit of multiple sovereign governments.
- Investments in fixed income securities such as municipal bonds, commercial paper, repurchase agreements, and certificates of deposit are all permitted by specific Regulations which specify high credit standards and conservative investment limits.
- Subject to specified limitations, futures, swaps, covered call options and put options may be utilized in the management of the portfolios.
- The currency exposure on international investments may be hedged through currency transactions.
- The Regulations contain limits on (1) the percentage of the pension assets that can be invested in any one security, (2) the percentage of the outstanding amount of any one security that can be owned and (3) the percentage of pension assets invested in any one issuer and affiliated entities. These limits help to insure that the portfolio is adequately diversified and that competitive market pricing is obtained.
- Investments in alternative investments are limited to no more than 45% of the portfolio in the aggregate, with individual category limitations for private equity (18%), private credit (13%), real estate (13%), real assets (7%) and hedge funds (10%).

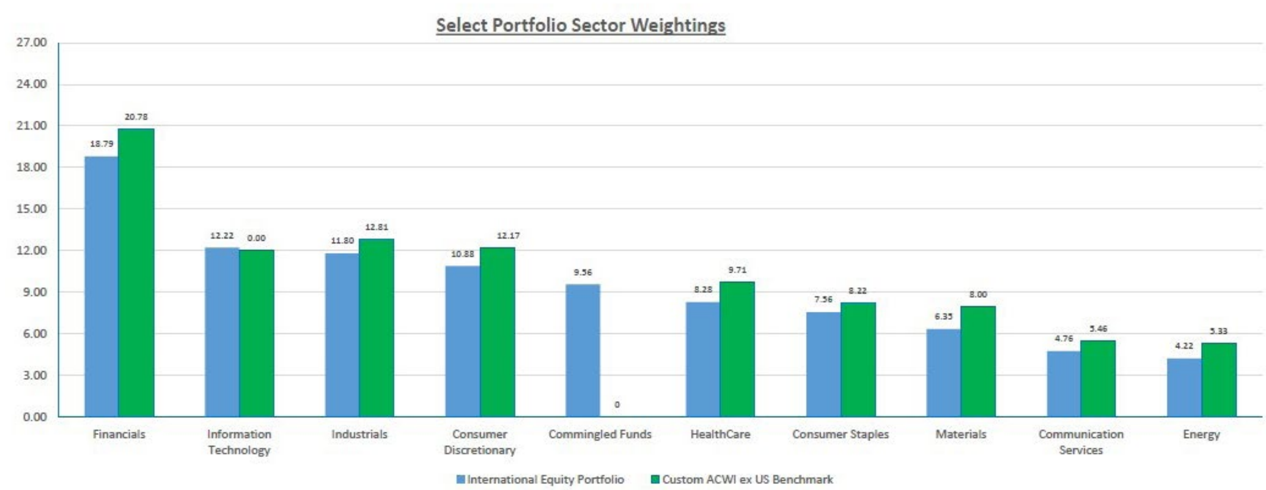
PROXY VOTING

- The Proxy Voting Policy summarizes guidelines for addressing key proxy issues. Business judgment is applied in determining the most advantageous position to the pension fund as a shareholder.
- The Division seeks to vote all proxies received, unless shares are out on loan. Under certain circumstances, the Division may restrict shares from being loaned or recall loaned shares in order to preserve the right to vote on proxy issues.

U.S. Equities Market
Select Portfolio Sector Weightings June 30, 2023



International Equities Market
Select Portfolio Sector Weightings June 30, 2023

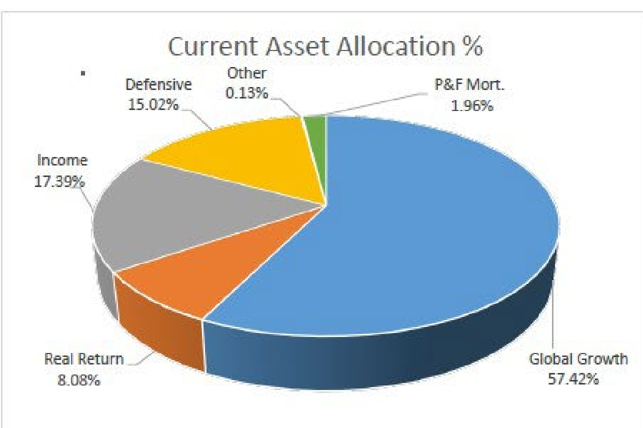


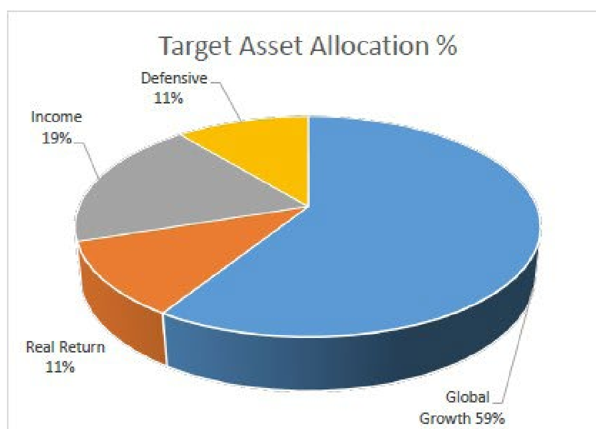
Pension Fund Asset Allocation — June 30, 2023

	Actual Allocation %	Target %	Difference %	Allocation in millions ($)
U.S. Equity	27.50	27.00	0.50	25,633.11
Non-US Developed Markets Equity	13.02	13.50	(0.48)	12,134.11
Emerging Markets Equity	4.95	5.50	(0.55)	4,615.58
Private Equity	11.95	13.00	(1.05)	11,139.08
Equity Oriented Hedge Funds	0.00	0.00	0.00	0.62
Global Growth	**57.42**	**59.00**	**(1.58)**	**53,522.50**
Real Estate	5.68	8.00	(2.32)	5,290.68
Real Assets	2.40	3.00	(0.60)	2,236.89
Real Return	**8.08**	**11.00**	**(2.92)**	**7,527.57**
High Yield	3.45	4.00	(0.55)	3,216.91
Private Credit	7.14	8.00	(0.86)	6,654.21
Investment Grade Credit	6.80	7.00	(0.20)	6,337.42
Income	**17.39**	**19.00**	**(1.61)**	**16,208.54**
Cash Equivalents[1]	8.43	4.00	4.43	7,853.42
U.S. Treasuries	3.79	4.00	(0.21)	3,529.87
Risk Mitigation Strategies	2.81	3.00	(0.19)	2,618.44
Defensive	**15.02**	**11.00**	**4.02**	**14,001.73**
Other	0.13	0.00	0.13	121.27
Police & Fire Mortgage Program	1.96	0.00	1.96	1,831.57
Total Pension Fund	**100.00**	**100.00**	**0.00**	**93,213.19**

Sum of components may not equal total due to rounding.

[1] The cash aggregate comprises the three Common Pension Fund cash accounts, in addition to the seven plan cash accounts.





Pension Fund Rate of Return — Periods Ending June 30, 2023

	Annualized		
	1 Year	**3 Year**	**5 Year**
U.S. Equity	19.10	14.06	11.16
Custom U.S. Policy Benchmark	19.20	14.09	11.69
Non-U.S. Developed Markets Equity	16.89	9.02	4.68
Custom EAFE + Canada Benchmark [1]	17.16	9.20	4.53
Emerging Markets Equity	6.75	4.60	2.23
Custom Emerging Markets Benchmark [1]	1.61	2.23	0.98
Equity Oriented Hedge Funds	5.79	(28.72)	(20.04)
50% HFRI EH 50% HFRI ED ACTIVIST (1 month lag)	1.02	9.49	4.19
Private Equity	5.00	18.12	12.84
Custom Cambridge Blend	(1.42)	22.02	15.55
Global Growth	**14.27**	**12.84**	**9.19**
Global Growth Benchmark	**13.22**	**14.18**	**10.49**
Real Estate	(3.58)	9.20	6.45
Real Estate Index	(3.91)	7.46	6.56
Real Assets	2.65	15.74	4.67
Custom Cambridge Associates Real Asset Benchmark	7.75	18.55	5.98
Real Return	**(1.76)**	**11.03**	**5.87**
Real Return Benchmark	**(0.45)**	**10.65**	**6.78**
High Yield	9.04	3.37	3.16
Custom High Yield Benchmark	9.07	3.12	3.34
Private Credit	9.01	10.88	6.81
Bloomberg US Corp HY 1month lag + 100bps	1.05	3.93	4.12
Investment Grade Credit	0.44	(4.07)	1.42
Custom Investment Grade Credit Benchmark	0.40	(3.93)	1.30
Income	**5.47**	**2.66**	**3.69**
Income Benchmark	**1.83**	**(0.13)**	**2.73**
Cash Equivalents	3.88	1.47	1.89
ICE BofA US 3-Month Treasury Bill	3.59	1.27	1.55
U.S. Treasuries	(1.91)	(4.72)	0.43
Custom Government Benchmark	(2.13)	(4.80)	0.44
Risk Mitigation Strategies	3.30	7.26	5.67
T-Bill + 300 BP	6.73	4.35	4.63
Defensive	**2.13**	**0.42**	**2.02**
Liquidity Benchmark	**2.12**	**(0.38)**	**1.64**
Total Pension Fund	**9.06**	**8.92**	**6.80**
Pension Fund Policy Index	8.43	9.40	7.86

[1] SOURCE: MSCI. Each benchmark is a custom index calculated by MSCI for, and as requested by the Division, based on screening criteria defined by the Division. These benchmarks exclude those securities deemed ineligible for investment under the State statutes governing investments in Iran, Sudan and companies that boycott Israel. The MSCI data is for internal use only and may not be redistributed or used in connection with creating or offering any securities, financial products or indices. Neither MSCI or any other third party involved in or related to compiling, computing or creating the MSCI data (the "MSCI Parties") makes any express or implied warranties or representations with respect to such data (or the results to be obtained by the use thereof), and the MSCI Parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to such data. Without limiting any of the foregoing, in no event shall any of the MSCI Parties have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

Largest Domestic Stock Holdings (by Fair Value)
June 30, 2023

Shares	Stock	Fair Value (USD)
9,292,615	APPLE INC	1,803,070,442
4,155,058	MICROSOFT CORP	1,414,963,451
5,422,818	AMAZON.COM INC	706,918,554
1,452,011	NVIDIA CORP	614,229,693
1,677,192	TESLA INC	439,038,550
3,501,222	ALPHABET INC CL A	419,096,273
3,158,149	ALPHABET INC CL C	382,041,285
1,302,417	META PLATFORMS INC CLASS A	373,767,631
551,844	UNITEDHEALTH GROUP INC	265,238,300
764,640	BERKSHIRE HATHAWAY INC CL B	260,742,240

Largest International Stock Holdings (by Fair Value)
June 30, 2023

Shares	Stock	Fair Value (USD)
9,500,471	ISHARES CORE MSCI EAFE ETF	641,281,793
5,265,236	ISHARES MSCI EAFE SMALL CAP ET	310,543,619
5,550,732	ISHARES MSCI INDIA ETF	242,566,988
2,147,901	TAIWAN SEMICONDUCTOR SP ADR	216,766,169
3,590,960	SAMSUNG ELECTRONICS CO LTD	196,764,932
1,629,911	NESTLE SA REG	196,030,206
240,548	ASML HOLDIING NV	173,996,360
4,088,984	TENCENT HOLDINGS LTD	173,022,369
3,253,090	ISHARES CORE MSCI EMERGING MAR	160,344,806
984,305	NOVO NORDISK A/S B	158,559,517

Largest Domestic Bond Holdings (by Fair Value)
June 30, 2023

Par	Bonds	Coupon	Due	Fair Value (USD)
280,000,000	US TREASURY N/B	0.500%	10/31/2027	239,006,250
236,277,000	US TREASURY N/B	2.000%	05/31/2024	229,050,246
235,000,000	US TREASURY N/B	0.875%	06/30/2026	211,738,673
358,300,000	US TREASURY N/B	1.250%	05/15/2050	201,543,750
209,900,000	US TREASURY N/B	1.500%	02/15/2030	179,825,266
205,000,000	US TREASURY N/B	1.875%	02/15/2032	175,627,344
195,000,000	US TREASURY N/B	0.375%	01/31/2026	175,058,204
6,950,000	SPDR BLOOMBERG SHORT TERM HIGH	0.000%		171,665,000
168,463,000	US TREASURY N/B	1.625%	02/15/2026	156,091,498
1,480,000	SPDR BLOOMBERG HIGH YIELD BOND	0.000%		136,204,400

Largest International Bond Holdings (by Fair Value)
June 30, 2023

Par	Bonds	Coupon	Due	Fair Value (USD)
69,000,000	HYDRO QUEBEC	8.50%	12/01/2029	82,884,180
60,000,000	PROVINCE OF QUEBEC	7.50%	09/15/2029	69,862,800
60,000,000	AID ISRAEL	5.50%	09/18/2023	59,983,200
60,000,000	PROVINCE OF QUEBEC	3.63%	04/13/2028	57,861,600
65,000,000	ONTARIO (PROVINCE OF)	1.80%	10/14/2031	54,108,600
50,000,000	PFIZER INVESTMENT ENTER	5.11%	05/19/2043	50,016,500
50,000,000	PROVINCE OF SASKATCHEWAN	3.25%	06/08/2027	47,520,000
50,000,000	MANITOBA (PROVINCE OF)	1.50%	10/25/2028	43,111,500
50,000,000	CANADA HOUSING TRUST	2.90%	06/15/2024	37,025,128
38,000,000	WESTPAC BANKING CORP	1.02%	11/18/2024	35,774,340

Commissions on Global Securities[1]
Fiscal Year 2023

Broker	Shares	Total Commissions	Commissions per Share
Barclays Capital Inc.	33,597,434	$ 148,593	$0.004
BofA Securities Inc.	4,523,000	45,230	0.010
FBN Securities, Inc.	4,220,141	29,541	0.007
Goldman, Sachs & Co. LLC	1,890,500	18,905	0.010
Jane Street	27,323,000	254,855	0.009
Loop Capital Markets LLC	12,024,088	30,551	0.003
Macquarie Capital (USA) Inc.	230,441,061	88,995	0.000
Meridian Equity Partners, Inc.	63,715,258	35,961	0.001
Penserra Securities, LLC	22,185,377	37,047	0.002
Siebert Williams Shank & Co.	145,194	1,452	0.010
Themis Trading LLC	14,241,028	114,078	0.008
Wallachbeth	14,243,705	109,901	0.008
	428,549,786	$ 915,109	$0.002
Trades executed through advisers with various brokers	1,232,420,753	$ 2,073,142	$0.002

Note:
[1] Includes commissions for all funds under Division of Investment Management.

Schedule of Fees (in thousands)
Year ending June 30, 2023

	Pension Fund Net Assets under Management	Fees (a)	Basis Points
Investment advisers' fees:			
Fixed income advisers	$ 1,255,410	$ 4,477	
International small cap advisers	812,698	5,422	
Emerging market advisers	4,455,233	16,019	
	$ 6,523,342	25,918	39.732
Alternative Investment funds	$ 26,705,408	364,695	136.562
Other investment service fees:			
Custodian		1,507	
Security lending fees		49,126	
Investment consultants		2,572	
		53,205	
Total	$ 93,213,187	$ 443,818	47.613

Sum of components may not equal total due to rounding.

(a) Fees for alternative investment funds include the management fees.
Fees do not include performance allocation.

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ACTUARIAL SECTION

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CHEIRON *Classic Values, Innovative Advice*

March 27, 2024

Board of Trustees
Public Employees' Retirement System of New Jersey

Re: Actuary's Certification Letter

Dear Board Members:

This is the Actuary's Certification Letter for the Actuarial Section of the Annual Comprehensive Financial Report for the Public Employees' Retirement System of New Jersey (PERS or System) as of June 30, 2023. This letter includes references to three documents produced by Cheiron for the System: the Actuarial Valuation Report as of July 1, 2022 (transmitted February 3, 2023) and the GASB 67 and 68 Reports as of June 30, 2023 (transmitted February 13, 2024).

Actuarial Valuation Report as of July 1, 2022

The purpose of the annual Actuarial Valuation Report as of July 1, 2022, is to determine the actuarial funding status of PERS on that date and to calculate the Statutory Contribution amounts for the State and Local employers for the Fiscal Year Ending 2024. The prior review was conducted as of July 1, 2021, and included the Statutory Contribution amounts for the Fiscal Year Ending 2023.

Actuarial funding is based on the Projected Unit Credit Cost Method. The Statutory Contribution amounts contain two components: the employer normal cost (cost of benefits for the upcoming year) and an amortization for the unfunded actuarial liability (UAL). The funding methodology prescribed by the N.J. State Statutes does not include a cost component for administrative expenses, and therefore administrative expenses are implicitly covered by the investment rate of return assumption.

In accordance with Chapter 78, P.L. 2011:

- Beginning with the July 1, 2010 actuarial valuation, the amortization amount is calculated to amortize the UAL over an open 30 year period as a level dollar amount.
- Beginning with the July 1, 2019 actuarial valuation, the amortization amount will be calculated to amortize the UAL over a closed 30 year period (i.e., for each subsequent actuarial valuation, the amortization period shall decrease by one year) as a level dollar amount.
- Beginning with the July 1, 2029 actuarial valuation, when the amortization period reaches 20 years, an increase or decrease in the UAL as a result of actuarial losses and gains will increase or decrease, respectively, the amortization period for the UAL, except that the amortization period will not exceed 20 years.

Certain portions of the normal cost and UAL attributable to Local employers are payable by the State and/or over different periods in accordance with N.J. State Statutes.

To the extent that the amortization period remains an open period in future years and depending upon the specific circumstances, it should be noted that in the absence of emerging actuarial gains or contributions made in excess of the Statutory Contribution, any existing UAL may not be fully amortized in the future.

Member contributions are set in the N.J. State Statutes.

The non-contributory group life insurance benefit is funded separately through a term cost.

For actuarial valuation purposes, assets are valued at Actuarial Value as prescribed in the N.J. State Statutes. Under this method, the assets used to determine the Statutory Contribution amounts take into account market value by spreading all investment gains and losses (returns above or below expected returns) over a rolling five-year period.

The actuarial value of assets is intended to dampen the volatility of the market value of assets, resulting in a smoother pattern of contributions. Actuarial Standards of Practice (ASOP) No. 44 states that the asset valuation method should produce an actuarial value of assets that falls within a reasonable range of market value, recognizes the difference between the market value and actuarial value of assets within a reasonably short period of time, and is likely to produce actuarial value of assets that are sometimes greater than and sometimes less than the corresponding market values. The asset method required under the N.J. State Statutes does not meet the requirements of ASOP No. 44 because this method has produced actuarial value of assets which have consistently been greater than the market value of assets and recognizes investment losses slowly over time. Additionally, the method may produce an actuarial value of assets that falls outside of a reasonable range of the market value.

We prepared the following schedules, which we understand will be included in the Actuarial Section of the Annual Comprehensive Financial Report, based on the July 1, 2022 actuarial valuation. All historical information prior to the July 1, 2018 actuarial valuation shown in these schedules is based on information reported by the prior actuary, Buck Global, LLC.

- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Schedule of Active Member Valuation Data
- Schedule of Funding Progress
- Schedule of Funded Liabilities by Type (formerly referred to as the Solvency Test)
- Analysis of Financial Experience: Change in Unfunded Actuarial Accrued Liability
- Summary of Plan Provisions
- Summary of Current Actuarial Assumptions and Methods
- Membership Information (Active, Deferred Vested, and Retired)

The demographic and economic (other than the investment rate of return) actuarial assumptions are based on the recommendations from the July 1, 2018 – June 30, 2021 Experience Study, which was approved by the Board of Trustees on November 16, 2022. As a result of this Experience Study, the termination rates, retirement rates, disability rates, salary increase rates, mortality improvement scale, and family composition assumptions were updated.

The assumed investment rate of return of 7.00% was recommended by the State Treasurer.

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices except as noted. In particular, the assumptions and methods (other than the asset method) used for funding purposes meet the requirements of the Actuarial Standards of Practice (ASOP), in particular ASOPs Nos. 4, 27 and 35. As noted above the asset method does not meet the requirements of ASOP No. 44.

GASB 67 and 68 Reports as of June 30, 2023

The purpose of the GASB 67 and 68 Reports as of June 30, 2023 is to provide accounting and financial reporting information under GASB 67 for PERS and under GASB 68 for the State and Local employers. These reports are not appropriate for other purposes, including the measurement of funding requirements for PERS.

For financial reporting purposes, the Total Pension Liability is based on the July 1, 2022 actuarial valuation updated to the measurement date of June 30, 2023. We are not aware of any other significant events between the valuation date and the measurement date that are measurable at this time, so the update procedures only included the addition of service cost and interest cost offset by actual benefit payments.

Please refer to our GASB 67 and 68 Reports as of June 30, 2023 for additional information related to the financial reporting of the System. We prepared the following schedules for inclusion in the Financial Section of the Annual Comprehensive Financial Report based on the June 30, 2023 GASB 67 and 68 reports:

- Change in Net Pension Liability
- Sensitivity of Net Pension Liability to Changes in Discount Rate
- Schedule of Changes in Net Pension Liability and Related Ratios
- Schedule of Employer Contributions
- Notes to the Schedule of Employer Contributions

The demographic and economic (other than the investment rate of return) actuarial assumptions are based on the recommendations from the July 1, 2018 – June 30, 2021 Experience Study performed by Cheiron and approved by the Board of Trustees on November 16, 2022. The assumptions used in the most recent reports are intended to produce results that, in the aggregate, reasonably approximate the anticipated future experience of the Plan. The next experience analysis is expected to cover the years through 2024.

Based on the State Treasurer's recommendation, the investment return assumption used to determine the Statutory Contribution amounts is 7.00% per annum.

In accordance with Paragraph 40 of GASB Statement No. 67, the projection of the Plan's fiduciary net position is based on a long-term expected rate of return of 7.00% per annum as recommended by the State Treasurer.

We certify that the reports were performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for disclosure purposes have been prepared in accordance with our understanding of generally accepted accounting principles as promulgated by the GASB.

Disclaimers

In preparing our reports, we relied on information (some oral and some written) supplied by the DPB. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

Cheiron's reports were prepared for PERS for the purposes described herein and for use by the plan auditor in completing an audit related to matters herein. Other users of these reports are not intended as users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

These reports and their contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinions contained in these reports. These reports do not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Respectfully submitted,

Janet Cranna, FSA, FCA, MAAA, EA
Principal Consulting Actuary

Jonathan B. Chipko, FSA, MAAA, EA
Consulting Actuary

Anu Patel, FSA, MAAA, EA
Principal Consulting Actuary

Jake Libauskas, FSA, FCA, MAAA, EA
Consulting Actuary

CHEIRON

MEMBERSHIP INFORMATION

The data for this valuation was provided by the New Jersey Division of Pensions and Benefits as of July 1, 2022. Cheiron did not audit any of the data. However, we did perform an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality. The following is a list of data charts contained in this section:

- A-1 to A:3: Contributing Active Member Data by Tier
- A-4: Non-Contributing Active Member Data by Tier
- A-5: Inactive Member Data by Status
- A-6: Reconciliation of Plan Membership

Table A-1
Contributing Active Member Data by Tier
State

	July 1, 2022	July 1, 2021	% Change		July 1, 2022	July 1, 2021	% Change
Tier 1				**Tier 2**			
Count	30,379	33,427	-9.1%	Count	2,588	2,708	-4.4%
Average Age	54.3	53.9	0.6%	Average Age	50.2	49.4	1.6%
Average Service	22.7	22.2	2.2%	Average Service	14.2	13.2	7.3%
Average Appropriation Pay	$ 82,119	$ 78,500	4.6%	Average Appropriation Pay	$ 71,934	$ 67,611	6.4%
Total Appropriation Payroll	$ 2,494,692,557	$ 2,624,017,813	-4.9%	Total Appropriation Payroll	$ 186,166,282	$ 183,089,341	1.7%
Tier 3				**Tier 4**			
Count	1,775	1,861	-4.6%	Count	1,265	1,342	-5.7%
Average Age	49.3	48.7	1.4%	Average Age	47.8	47.2	1.3%
Average Service	12.8	11.8	8.0%	Average Service	11.5	10.6	9.4%
Average Appropriation Pay	$ 71,007	$ 67,234	5.6%	Average Appropriation Pay	$ 75,521	$ 70,774	6.7%
Total Appropriation Payroll	$ 126,037,227	$ 125,122,012	0.7%	Total Appropriation Payroll	$ 95,534,610	$ 94,979,103	0.6%
Tier 5				**Total**			
Count	28,350	26,217	8.1%	Count	64,357	65,555	-1.8%
Average Age	41.7	41.1	1.4%	Average Age	48.3	48.3	-0.1%
Average Service	4.8	4.4	7.4%	Average Service	14.0	14.2	-1.7%
Average Appropriation Pay	$ 62,171	$ 59,178	5.1%	Average Appropriation Pay	$ 72,486	$ 69,845	3.8%
Total Appropriation Payroll	$ 1,762,537,588	$ 1,551,465,802	13.6%	Total Appropriation Payroll	$ 4,664,968,264	$ 4,578,674,071	1.9%

Reflects all records for multiple members, which are members employed by more than one PERS-participating employer at the same time.

Membership Information, *continued*

Table A-2
Contributing Active Member Data by Tier
Local Employers

	July 1, 2022	July 1, 2021	% Change		July 1, 2022	July 1, 2021	% Change
Tier 1				**Tier 2**			
Count	58,625	64,715	-9.4%	Count	6,656	7,077	-5.9%
Average Age	57.6	57.2	0.6%	Average Age	54.0	53.3	1.3%
Average Service	22.7	22.0	3.0%	Average Service	14.3	13.3	7.3%
Average Appropriation Pay	$ 61,861	$ 59,424	4.1%	Average Appropriation Pay	$ 50,905	$ 48,227	5.6%
Total Appropriation Payroll	$ 3,626,585,945	$ 3,845,628,038	-5.7%	Total Appropriation Payroll	$ 338,822,522	$ 341,301,240	-0.7%
Tier 3				**Tier 4**			
Count	4,162	4,473	-7.0%	Count	1,925	2,102	-8.4%
Average Age	52.9	52.0	1.7%	Average Age	50.7	50.0	1.4%
Average Service	12.8	11.8	8.2%	Average Service	11.7	10.6	9.6%
Average Appropriation Pay	$ 54,405	$ 51,723	5.2%	Average Appropriation Pay	$ 62,082	$ 58,792	5.6%
Total Appropriation Payroll	$226,433,989	$ 231,358,541	-2.1%	Total Appropriation Payroll	$ 119,507,684	$ 123,579,879	-3.3%
Tier 5				**Total**			
Count	67,705	60,305	12.3%	Count	139,073	138,672	0.3%
Average Age	43.8	43.4	0.9%	Average Age	50.5	50.7	-0.5%
Average Service	4.5	4.3	3.1%	Average Service	13.0	13.4	-3.1%
Average Appropriation Pay	$ 48,447	$ 46,896	3.3%	Average Appropriation Pay	$ 54,586	$ 53,146	2.7%
Total Appropriation Payroll	$ 3,280,115,326	$ 2,828,040,570	16.0%	Total Appropriation Payroll	$ 7,591,465,466	$ 7,369,908,268	3.0%

Reflects all records for multiple members, which are members employed by more than one PERS-participating employer at the same time.

Membership Information, *continued*

Table A-3
Contributing Active Member Data by Tier
Total

	July 1, 2022	July 1, 2021	% Change		July 1, 2022	July 1, 2021	% Change
Tier 1				**Tier 2**			
Count	89,004	98,142	-9.3%	Count	9,244	9,785	-5.5%
Average Age	56.5	56.1	0.6%	Average Age	52.9	52.2	1.4%
Average Service	22.7	22.1	2.7%	Average Service	14.3	13.3	7.3%
Average Appropriation Pay	$ 68,775	$ 65,921	4.3%	Average Appropriation Pay	$ 56,792	$ 53,591	6.0%
Total Appropriation Payroll	$ 6,121,278,502	$ 6,469,645,851	-5.4%	Total Appropriation Payroll	$524,988,804	$ 524,390,581	0.1%
Tier 3				**Tier 4**			
Count	5,937	6,334	-6.3%	Count	3,190	3,444	-7.4%
Average Age	51.8	51.0	1.6%	Average Age	49.6	48.9	1.3%
Average Service	12.8	11.8	8.2%	Average Service	11.6	10.6	9.5%
Average Appropriation Pay	$ 59,369	$ 56,280	5.5%	Average Appropriation Pay	$ 67,411	$ 63,461	6.2%
Total Appropriation Payroll	$ 352,471,216	$ 356,480,553	-1.1%	Total Appropriation Payroll	$ 215,042,294	$ 218,558,982	-1.6%
Tier 5				**Total**			
Count	96,055	86,522	11.0%	Count	203,430	204,227	-0.4%
Average Age	43.2	42.7	1.1%	Average Age	49.8	50.0	-0.4%
Average Service	4.6	4.4	4.4%	Average Service	13.3	13.7	-2.7%
Average Appropriation Pay	$ 52,498	$ 50,617	3.7%	Average Appropriation Pay	$ 60,249	$ 58,506	3.0%
Total Appropriation Payroll	$ 5,042,652,914	$ 4,379,506,372	15.1%	Total Appropriation Payroll	$ 12,256,433,730	$ 11,948,582,339	2.6%

Reflects all records for multiple members, which are members employed by more than one PERS-participating employer at the same time.

Membership Information, *continued*

Table A-4
Non-Contributing Active Member Data by Tier[1]

	State		Local Employers		Total	
	July 1, 2022	July 1, 2021	July 1, 2022	July 1, 2021	July 1, 2022	July 1, 2021
Tier 1						
Count	4,884	5,081	13,873	14,839	18,757	19,920
Average Age	59.9	59.7	63.3	63.0	62.4	62.1
Accumulated Deductions with Interest	$ 365,915,074	$ 362,019,014	$ 640,659,335	$ 660,497,016	$ 1,006,574,409	$ 1,022,516,030
Average Reported Pay[2]	$ 58,310	N/A	$ 49,660	N/A	$ 52,904	N/A
Tier 2						
Count	359	376	1,278	1,403	1,637	1,779
Average Age	54.0	54.6	57.3	56.9	56.6	56.4
Accumulated Deductions with Interest	$ 17,215,775	$ 15,299,813	$ 34,534,922	$ 31,421,546	$ 51,750,697	$ 46,721,359
Average Reported Pay[2]	$ 56,192	N/A	$ 40,831	N/A	$ 45,798	N/A
Tier 3						
Count	220	241	739	810	959	1,051
Average Age	51.8	51.9	56.2	55.9	55.2	54.9
Accumulated Deductions with Interest	$ 10,575,548	$ 9,307,941	$ 21,581,730	$ 18,182,028	$ 32,157,278	$ 27,489,969
Average Reported Pay[2]	$ 66,366	N/A	$ 46,464	N/A	$ 52,007	N/A
Tier 4						
Count	112	101	227	261	339	362
Average Age	49.4	48.5	51.5	50.0	50.8	49.6
Accumulated Deductions with Interest	$ 5,272,454	$ 3,562,410	$ 8,763,910	$ 7,071,148	$ 14,036,364	$ 10,633,558
Average Reported Pay[2]	$ 72,352	N/A	$ 58,613	N/A	$ 63,609	N/A
Tier 5						
Count	4,222	3,637	11,885	9,985	16,107	13,622
Average Age	38.0	38.9	39.7	39.7	39.2	39.5
Accumulated Deductions with Interest	$ 49,738,053	$ 36,696,979	$ 105,459,000	$ 77,254,024	$ 155,197,053	$ 113,951,003
Average Reported Pay[2]	$ 55,018	N/A	$ 43,262	N/A	$ 46,869	N/A
Total						
Count	9,797	9,436	28,002	27,298	37,799	36,734
Average Age	49.9	51.2	52.6	53.4	51.9	52.9
Accumulated Deductions with Interest	$ 448,716,904	$ 426,886,157	$ 810,998,897	$ 794,425,762	$ 1,259,715,801	$ 1,221,311,919
Average Reported Pay[2]	$ 56,311	N/A	$ 44,569	N/A	$ 48,330	N/A

[1] Includes 11 and 67 deferred beneficiaries for State and Local employers, respectively, for 2022 and 183 and 876 deferred beneficiaries for State and Local employers, respectively, for 2021.
[2] Average reported pay only includes non-contributing members reported with pay.

Accumulated deductions with interest as reported by DPB.

Membership Information, *continued*

Table A-5
Inactive Member Data by Status[1]

	July 1, 2022			July 1, 2021		
	State	**Local Employers**	**Total**	**State**	**Local Employers**	**Total**
Retirees						
Count	52,861	107,918	160,779	51,659	105,744	157,403
Annual Retirement Allowances	$ 1,656,669,081	$ 2,196,925,453	$ 3,853,594,534	$ 1,580,380,612	$ 2,101,663,102	$ 3,682,043,714
Average Retirement Allowance	$ 31,340	$ 20,357	$ 23,968	$ 30,593	$ 19,875	$ 23,392
Beneficiaries						
Count	5,074	11,877	16,951	4,897	11,541	16,438
Annual Retirement Allowances	$ 93,024,961	$ 162,833,504	$ 255,858,465	$ 88,181,040	$ 154,455,891	$ 242,636,931
Average Retirement Allowance	$ 18,334	$ 13,710	$ 15,094	$ 18,007	$ 13,383	$ 14,761
Ordinary Disability						
Count	4,403	7,563	11,966	4,468	7,707	12,175
Annual Retirement Allowances	$ 91,979,706	$ 132,681,901	$ 224,661,607	$ 92,238,384	$ 133,716,763	$ 225,955,147
Average Retirement Allowance	$ 20,890	$ 17,544	$ 18,775	$ 20,644	$ 17,350	$ 18,559
Accidental Disability						
Count	504	841	1,345	511	845	1,356
Annual Retirement Allowances	$ 15,957,947	$ 24,899,866	$ 40,857,813	$ 16,044,417	$ 24,534,981	$ 40,579,398
Average Retirement Allowance	$ 31,663	$ 29,607	$ 30,378	$ 31,398	$ 29,035	$ 29,926
In-Pay Total						
Count	**62,842**	**128,199**	**191,041**	**61,535**	**125,837**	**187,372**
Annual Retirement Allowances	**$ 1,857,631,695**	**$ 2,517,340,724**	**$ 4,374,972,419**	**$ 1,776,844,453**	**$ 2,414,370,737**	**$4,191,215,190**
Average Retirement Allowance	**$ 29,560**	**$ 19,636**	**$ 22,901**	**$ 28,875**	**$ 19,186**	**$ 22,368**
Deferred Vested Members						
Count	147	433	580	186	537	723
Annual Retirement Allowances	$ 2,483,676	$ 4,890,048	$ 7,373,724	$ 3,165,564	$ 5,923,740	$ 9,089,304
Average Retirement Allowance	$ 16,896	$ 11,293	$ 12,713	$ 17,019	$ 11,031	$ 12,572

QDRO benefits included with member records for valuation purposes.

Membership Information, *continued*

Table A-6
Reconciliation of Plan Membership from July 1, 2021 to July 1, 2022

	Contributing Actives	Non-Contributing Members	Deferred Beneficiaries	Deferred Vested	Retired	Disabled	Beneficiaries	Total
1. July 1, 2021	**204,227**	**35,675**	**1,059**	**723**	**157,403**	**13,531**	**16,438**	**429,056**
2. Additions								
a. New entrants	18,946	1,885						20,831
b. Data updates	188	901			39	2	312	1,442
c. Total	19,134	2,786	0	0	39	2	312	22,273
3. Reductions								
a. Withdrawal/Certain Period End	(3,519)	(6,112)	(115)	(1)			(13)	(9,760)
b. Died without beneficiary	(336)	(468)		(2)	(4,896)	(519)	(957)	(7,178)
c. Data updates	(154)	(39)	(867)	(1)	(347)	(17)	(47)	(1,472)
d. Total	(4,009)	(6,619)	(982)	(4)	(5,243)	(536)	(1,017)	(18,410)
4. Changes in Status								
a. Contributing Actives	(9,741)	9,741						0
b. Non-Contributing Actives	2,425	(2,425)						0
c. Deferred Vested	(2)	(26)		28				0
d. Retired	(8,393)	(1,144)		(166)	9,634			(69)
e. Disabled	(174)	(256)		(1)	(8)	439		0
f. Died with beneficiary	(37)	(11)	1		(1,046)	(125)	1,218	0
g. Total	(15,922)	5,879	1	(139)	8,580	314	1,218	(69)
5. July 1, 2022	**203,430**	**37,721**	**78**	**580**	**160,779**	**13,311**	**16,951**	**432,850**

QDRO benefits included with member records for valuation purposes.

Reflects all records for multiple members, which are members employed by more than one PERS-participating employer at the same time.
The decreases due to Changes in Status occur when active records for multiple members are combined into a single retiree record.

ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1.Investment Rate of Return 7.00% per annum, compounded annually.

2. Administrative Expenses No explicit assumption is made for administrative expenses for funding purposes per the funding methodology prescribed by NJ State Statute.

3. Interest Crediting Rate on Accumulated Deductions 7.00% per annum, compounded annually. Interest credits are assumed to end upon termination.

4. Cost-of-Living Adjustments (COLAs) No future COLAs are assumed. Previously granted COLAs are included in the data.

5. Salary Increases Salaries are assumed to increase annually as follows:

Salary Increases	
Years of Service	Rates
0	6.55%
1	6.55
2	6.35
3	6.15
4	5.95
5	5.75
6	5.55
7	5.35
8	5.15
9	4.95
10	4.75
11	4.55
12	4.35

Salary Increases	
Years of Service	Rates
13	4.15%
14	3.95
15	3.75
16	3.55
17	3.45
18	3.35
19	3.25
20	3.15
21	3.05
22	2.95
23-27	2.85
28+	2.75

Salary increases are assumed to occur on July 1.

Non-contributing members reported with a salary are assumed to have no future salary increases

6. 401 (a)(17) Pay Limit $305,000 in 2022 increasing 2.75% per annum, compounded annually.

7. Social Security Wage Base $147,000 in 2022 increasing 3.25% per annum, compounded annually.

Actuarial Assumptions and Methods, *continued*

8. Termination Termination rates are shown separately for members electing a refund of contributions and members electing deferred annuity.

Termination rates for members electing a refund of contributions are as follows:

Termination Rates for Members Electing A Refund				
	State		Local Employers	
Service	Less Than 31 Years Old	31 Years or Older	Less Than 31 Years Old	31 Years or Older
0	21.00%	11.00%	19.00%	11.50%
1	21.00	11.00	19.00	11.50
2	11.50	7.50	15.50	8.50
3	9.50	6.50	14.00	7.50
4	9.00	5.50	11.50	6.50
5	8.00	5.50	10.50	6.00
6	7.00	5.00	8.50	5.50
7	7.00	4.50	8.00	5.00
8	7.00	4.00	7.50	4.50
9	7.00	3.50	6.50	4.00
10	1.70	1.70	1.70	1.70
11	1.50	1.50	1.50	1.50
12	1.10	1.10	1.40	1.40

Termination Rates for Members Electing A Refund				
	State		Local Employers	
Service	Less Than 31 Years Old	31 Years or Older	Less Than 31 Years Old	31 Years or Older
13	1.10%	1.10%	1.20%	1.20%
14	0.70	0.70	1.10	1.10
15	0.60	0.60	0.90	0.90
16	0.60	0.60	0.80	0.80
17	0.60	0.60	0.70	0.70
18	0.50	0.50	0.60	0.60
19	0.50	0.50	0.60	0.60
20	0.50	0.50	0.50	0.50
21	0.50	0.50	0.50	0.50
22	0.40	0.40	0.50	0.50
23	0.40	0.40	0.40	0.40
24-29	0.30	0.30	0.30	0.30

No termination is assumed after attainment of retirement eligibility.

Termination rates for members electing a deferred annuity are as follows:

Termination Rates for Members Electing a Deferred Annuity		
Service	State	Local Employers
<10	N/A	N/A
10	1.60%	1.80%
11	1.60	1.80
12	1.20	1.70
13	1.20	1.60
14	1.00	1.50
15	0.90	1.40
16	0.90	1.30

Termination Rates for Members Electing a Deferred Annuity		
Service	State	Local Employers
17	0.80%	1.20%
18	0.80	1.10
19	0.80	1.00
20	0.80	1.00
21	0.70	0.90
22	0.50	0.80
23	0.50	0.80
24	0.40	0.70

No termination is assumed after attainment of retirement eligibility.

Actuarial Assumptions and Methods, *continued*

9. Disability

Ordinary disability rates are as follows:

Ordinary Disability Rates					
Age	State	Local Employers	Age	State	Local Employers
25	0.100%	0.200%	50	0.335%	0.335%
26	0.110	0.200	51	0.350	0.350
27	0.120	0.200	52	0.365	0.365
28	0.130	0.200	53	0.380	0.380
29	0.140	0.200	54	0.395	0.395
30	0.150	0.205	55	0.410	0.405
31	0.160	0.210	56	0.425	0.415
32	0.170	0.215	57	0.440	0.425
33	0.180	0.220	58	0.455	0.435
34	0.190	0.225	59	0.470	0.445
35	0.205	0.225	60	0.485	0.455
36	0.220	0.225	61	0.500	0.465
37	0.220	0.225	62	0.515	0.475
38	0.220	0.225	63	0.530	0.485
39	0.220	0.225	64	0.545	0.495
40	0.230	0.235	65	0.560	0.505
41	0.240	0.245	66	0.575	0.515
42	0.250	0.255	67	0.590	0.525
43	0.260	0.265	68	0.605	0.535
44	0.270	0.275	69	0.620	0.545
45	0.280	0.275	70	0.630	0.560
46	0.290	0.275	71	0.640	0.575
47	0.300	0.290	72	0.650	0.590
48	0.310	0.305	73	0.660	0.605
49	0.320	0.320	74	0.670	0.620

Accidental disability rates are assumed to be 0.02% for all State members and 0.03% for all Local employers' members.

Ordinary disability rates apply upon attainment of 10 years of service and continue through the ultimate retirement age.

Members are assumed to receive the greater of the applicable disability benefit or the early or service retirement benefit, depending on eligibility.

Tier 4 and Tier 5 Members are not eligible for the Ordinary or Accidental Disability benefits but the disability rates still apply. Such members terminating under the disability decrement are assumed to separate from service and elect a Deferred Retirement benefit.

Actuarial Assumptions and Methods, *continued*

10. Mortality

Pre-Retirement Mortality (Non-Annuitants): The Pub-210 General Below-Median Income Employee Mortality table *[PubG-2010(B) Employee]* as published by the Society of Actuaries with an 82.2% adjustment for males and 101.4% adjustment for females, and with future improvement from the base year 2010 on a generational basis using SOA's Scale MP-2021.

All pre-retirement deaths are assumed to be ordinary deaths.

Healthy Retirees and Beneficiaries (Healthy Annuitants): The Pub-2010 General Below-Median Income Healthy Retiree mortality table *[PubG-2010(B) Healthy Retiree]* as published by the Society of Actuaries with a 91.4% adjustment for males and 99.7% adjustment for females, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

Disabled Retirees (Disabled Annuitants): The Pub-2010 Non-Safety Disabled Retiree mortality table *[PubNS-2010 Disabled Retiree]* as published by the Society of Actuaries with a 127.7% adjustment for males and 117.2% adjustment for females, and with future improvement from the base year 2010 on a generational basis using SOA's Scale MP-2021.

11. Retirement

Retirement rates for State Tier 1-4 members are as follows:

State Tiers 1-4 Retirement Rates			
Age	Less Than 25 Years of Service	25 Years of Service	26 or More Years of Service
<49	N/A	3.50%	2.00%
49	N/A	3.50	2.00
50	N/A	3.50	3.50
51	N/A	3.50	3.50
52	N/A	6.00	4.25
53	N/A	6.00	5.50
54	N/A	7.00	6.75
55	N/A	17.50	18.00
56	N/A	17.50	15.00
57	N/A	17.50	14.00
58	N/A	20.00	14.00
59	N/A	20.00	14.00
60	5.00	20.00	17.00
61	5.00	30.00	17.00

State Tiers 1-4 Retirement Rates			
Age	Less Than 25 Years of Service	25 Years of Service	26 or More Years of Service
62	8.00	36.50%	27.00%
63	8.00	36.50	24.00
64	8.00	36.50	21.00
65	12.00	44.00	25.00
66	17.00	55.00	30.00
67	16.00	50.00	26.00
68	15.00	47.00	23.00
69	15.00	47.00	23.00
70	15.00	47.00	26.00
71	15.00	47.00	23.00
72	15.00	47.00	21.00
73	15.00	47.00	21.00
74	15.00	47.00	21.00
75	100.00	100.00	100.00

Rates apply upon retirement eligibility by tier.

Actuarial Assumptions and Methods, *continued*

Retirement rates for Local Employers Tiers 1-4 members are as follows:

Local Employers Tiers 1-4 Retirement Rates			
Age	Less Than 25 Years of Service	25 Years of Service	26 or More Years of Service
<49	N/A	3.00%	2.25%
49	N/A	3.00	3.00
50	N/A	3.50	3.50
51	N/A	4.25	3.75
52	N/A	4.75	3.75
53	N/A	7.00	5.00
54	N/A	7.00	6.00
55	N/A	15.00	15.00
56	N/A	17.00	13.00
57	N/A	18.00	12.00
58	N/A	18.00	12.00
59	N/A	18.00	12.00
60	4.50	18.00	14.00
61	4.50	18.00	14.00
62	7.50	34.00	25.00
63	7.50	34.00	22.00
64	7.50	34.00	20.00
65	11.00	35.00	20.00
66	15.00	43.00	26.00
67	14.00	40.00	26.00
68	13.00	40.00	22.00
69	13.00	37.00	22.00
70	13.00	37.00	24.00
71	13.00	37.00	24.00
72	13.00	37.00	20.00
73	13.00	37.00	20.00
74	13.00	37.00	20.00
75	100.00	100.00	100.00

Rates apply upon retirement eligibility by tier.

Actuarial Assumptions and Methods, *continued*

Retirement rates for State Tier 5 members are as follows:

State Tier 5 Retirement Rates					
Age	Less Than 25 Years of Service	25 Years of Service	26 to 29 Years of Service	30 Years of Service	31 or More Years of Service
<49	N/A	N/A	N/A	3.50%	2.00%
49	N/A	N/A	N/A	3.50	2.00
50	N/A	N/A	N/A	3.50	3.50
51	N/A	N/A	N/A	3.50	3.50
52	N/A	N/A	N/A	6.00	4.25
53	N/A	N/A	N/A	6.00	5.50
54	N/A	N/A	N/A	7.00	6.75
55	N/A	N/A	N/A	17.50	18.00
56	N/A	N/A	N/A	17.50	15.00
57	N/A	N/A	N/A	17.50	14.00
58	N/A	N/A	N/A	20.00	14.00
59	N/A	N/A	N/A	20.00	14.00
60	N/A	N/A	N/A	20.00	17.00
61	N/A	N/A	N/A	30.00	17.00
62	N/A	N/A	N/A	36.50	27.00
63	N/A	N/A	N/A	36.50	24.00
64	N/A	N/A	N/A	36.50	21.00
65	12.00	44.00	44.00	44.00	25.00
66	17.00	55.00	30.00	30.00	30.00
67	16.00	50.00	26.00	26.00	26.00
68	15.00	47.00	23.00	23.00	23.00
69	15.00	47.00	23.00	23.00	23.00
70	15.00	47.00	26.00	26.00	26.00
71	15.00	47.00	23.00	23.00	23.00
72	15.00	47.00	21.00	21.00	21.00
73	15.00	47.00	21.00	21.00	21.00
74	15.00	47.00	21.00	21.00	21.00
75	100.00	100.00	100.00	100.00	100.00

Actuarial Assumptions and Methods, *continued*

Retirement rates for Local employers Tier 5 members are as follows:

Local Employers Tier 5 Retirement Rates					
Age	Less Than 25 Years of Service	25 Years of Service	26 to 29 Years of Service	30 Years of Service	31 or More Years of Service
<49	N/A	N/A	N/A	3.00%	2.25%
49	N/A	N/A	N/A	3.00	3.00
50	N/A	N/A	N/A	3.50	3.50
51	N/A	N/A	N/A	4.25	3.75
52	N/A	N/A	N/A	4.75	3.75
53	N/A	N/A	N/A	7.00	5.00
54	N/A	N/A	N/A	7.00	6.00
55	N/A	N/A	N/A	15.00	15.00
56	N/A	N/A	N/A	17.00	13.00
57	N/A	N/A	N/A	18.00	12.00
58	N/A	N/A	N/A	18.00	12.00
59	N/A	N/A	N/A	18.00	12.00
60	N/A	N/A	N/A	18.00	14.00
61	N/A	N/A	N/A	18.00	14.00
62	N/A	N/A	N/A	34.00	25.00
63	N/A	N/A	N/A	34.00	22.00
64	N/A	N/A	N/A	34.00	20.00
65	11.00	35.00	35.00	35.00	20.00
66	15.00	43.00	26.00	26.00	26.00
67	14.00	40.00	26.00	26.00	26.00
68	13.00	40.00	22.00	22.00	22.00
69	13.00	37.00	22.00	22.00	22.00
70	13.00	37.00	24.00	24.00	24.00
71	13.00	37.00	24.00	24.00	24.00
72	13.00	37.00	20.00	20.00	20.00
73	13.00	37.00	20.00	20.00	20.00
74	13.00	37.00	20.00	20.00	20.00
75	100.00	100.00	100.00	100.00	100.00

Retirement rates for members of Prosecutors Part (Chapter 366, P.L. 2001) are as follows:

- Members with less than 25 years of service: 6.0% for all ages,
- Members with 25 years of service: 40.0% for all ages,
- Members with 26 or more years of service: 20.0% for all ages.

Rates apply upon retirement eligibility. 100% retirement is assumed at age 70.

Actuarial Assumptions and Methods, *continued*

Retirement rates for members of WCJ Part (Chapter 140, P.L. 2021) are as follows:

Age	Less Than 15 Years of WCJ Part Service	15-19 Years of WCJ Part Service	20 or more Years of WCJ Part Service
<60	0.0%	0.0%	0.0%
60	2.0	2.0	20.0
61	2.0	2.0	20.0
62	2.0	2.0	20.0
63	2.0	2.0	20.0
64	2.0	2.0	20.0
65	5.0	40.0	30.0
66	2.0	40.0	20.0
67	2.0	40.0	20.0
68	2.0	40.0	20.0
69	2.0	40.0	20.0
70	100.0	100.0	100.0

12. Family Composition Assumptions

For members not currently in receipt, 50% of members are assumed married to spouses of the opposite sex. Males are assumed to be two years older than females.

For purposes of the optional form of payment death benefit for members currently in receipt, beneficiary status is based on the beneficiary allowance reported. If no beneficiary date of birth is provided, the beneficiary is assumed to be the member's spouse of the opposite sex with males assumed to be two years older than females.

No additional dependent children or parents are assumed.

13. Form of Payment

Current active members are assumed to elect the Maximum Option.

14. Non-Contributory Group Insurance Benefit Form of Payment

All benefits are assumed to be paid as lump sums.

15. Data

Non-contributing members reported without a salary are included in the valuation with a liability based on the reported Accumulated Deductions with interest (Annuity Savings Fund or ASF), adjusted to include interest through the valuation date.

Per discussions with DPB, the statuses for active records in Locations 4 - 7 (General Assembly and Senate) are based on changes in service instead of the contribution code.

For current beneficiaries with incomplete information, reasonable assumptions were made based on information available in prior years.

Deferred beneficiaries were reported seperately from other non-contributing members for the first time in 2021. The benefit is based on the reported accumulated Deductions with interest (Annuity Savings Fund or ASF).

Actuarial Assumptions and Methods, *continued*

Inactive participants receiving benefits according to the 2021 data but omitted from the 2022 data are assumed to have died without a beneficiary.

For retirees who earned benefits under both a State and Local employer, their total benefit is assigned to the location with the highest salary prior to retirement.

Tier 4 and 5 members on long-term disability appeared on the active data for the first time in 2019. The number of members on long-term disability is immaterial for valuation purposes. Therefore, we valued these members as regular contributing and non-contributing members while we gain clarity on what happens with these members.

16. Rationale for Assumptions

The demographic and economic assumptions used in this report, except for the investment return assumption, reflect the results of the July 1, 2018 - June 30, 2021 Experience Study which was approved by the Board of Trustees on November 16, 2022.

The investment return assumption was recommended by the State Treasurer.

17. Changes in Assumptions since Last Valuation

The termination rates, retirement rates, disability rates, salary increase rates, mortality improvement scale and family composition assumptions were based on the July 1, 2018 - June 30, 2021 Experience Study, which was approved by the Board of Trustees on November 16, 2022. For a detailed description of each of the assumptions before and after the changes reflected in this valuation, please reference the Experience Study.

B. Projection Assumptions

1. Investment Rate of Return

7.00% per annum, compounded annually.

2. Appropriation Percentages

The State is assumed to appropriate 100% of the Statutory contribution each year.

3. Administrative Expenses

The actual administrative expenses paid in FYE 2022 are assumed to increase by 2.75% per annum, compounded annually.

4. New Entrants

- Contributing active population assumed to remain at 2022 levels.
- Assumed to join mid-year.
- Age/sex distributions based on the last three years of new hires.
- Salary based on salary for most recent hires reported on 2022 data.
- New entrant salary assumed to increase with the salary increase rates applicable for members with 28 or more years of service (i.e., 2.75%).

5. Demographic Assumptions

Same as those used for valuation purposes.

6. Projection Basis

This report includes projections of future assets, liabilities, funded status and contributions for the purpose of assisting the Board of Trustees with the management of the System.

Actuarial Assumptions and Methods, *continued*

The projections are based on the same census data and financial information as of July 1, 2022 which has been used for the actuarial valuation. The projections assume continuation of the plan provision and actuarial assumptions in effect as of July 1, 2022 and do not reflect the impact of any changes in benefits or actuarial assumptions that may be adopted after July 1, 2022 unless otherwise indicated. While the assumptions individually are reasonable for the underlying valuation that supports the projections, specifically for projection purposes, they are also considered reasonable in the aggregate.

The projections are based on our proprietary model *PScan* developed by our firm that utilizes the results shown in this valuation report. The projections assume that all future assumptions are met except where indicated with respect to future investment returns and demographic assumptions. The future outcomes be come increasingly uncertain over time, and therefore the general trends and not the absolute values should be considered in the review of these projections.

C. Actuarial Methods

The actuarial methods used for determining State and Local employers' contributions are described below.

1. Actuarial Cost Method

The actuarial cost method for funding calculations is the Projected Unit Credit Cost Method. Non-contributing members reported with a salary use the Projected Unit Credit Cost Method without any future projected salary increases.

The actuarial liability is calculated as the actuarial present value of the projected benefits linearly allocated to periods prior to the valuation year based on service (WCJ Part Service for members in the WCJ Part). Refunds are valued as the reported Accumulated Deductions with interests of the valuation date. The unfunded actuarial liability is the actuarial liability on the valuation date less the actuarial value of assets.

In accordance with Chapter 78, P.L. 2011:

- Beginning with the July 1, 2010 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars, it will amortize the unfunded accrued liability over an open 30 year period.
- Beginning with the July 1, 2019 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars, it will amortize the unfunded accrued liability over a closed 30 year period (i.e., for each subsequent actuarial valuation the amortization period shall decrease by one year).
- Beginning with the July 1, 2029 actuarial valuation, when the remaining amortization period reaches 20 years, any increase or decrease in the unfunded accrued liability as a result of actuarial losses or gains for subsequent valuation years shall serve to increase or decrease, respectively, the amortization period for the unfunded accrued liability, unless an increase in the amortization period will cause it to exceed 20 years. If an increase in the amortization period as a result of actuarial losses for a valuation year would exceed 20 years, the accrued liability contribution shall be computed for the valuation year using a 20 year amortization period.

Certain portions of the normal cost and unfunded actuarial liabilities attributable to Local employers are payable by the State and/or over different periods in accordance with the NJ State Statutes.

To the extent that the amortization period remains an open period in future years and depending upon the specific circumstances, it should be noted that in the absence of emerging actuarial gains or contributions made in excess of the actuarially determined contribution, any existing unfunded accrued liability may not be fully amortized in the future.

The non-contributory group life insurance benefit is funded separately through a term cost.

2. Asset Valuation Method

For the purposes of determining contribution rates, an actuarial value of assets is used that dampens the volatility in the market value of assets, resulting in a smoother pattern of contributions.

Actuarial Assumptions and Methods, *continued*

The actuarial value of assets is adjusted to reflect actual contributions, benefit payments and administrative expenses, and an assumed rate of return on the previous year's assets and current year's cash flow at the prior year's actuarial valuation interest rate, with a further adjustment to reflect 20% of the difference between the resulting value and the actual market value of Plan assets.

3. Contributions

Chapter 83, P.L. 2016 requires the State to make pension contributions on a quarterly basis in each fiscal year according to the following schedule: at least 25 percent by September 30, at least 50 percent by December 31, at least 75 percent by March 31, and at least 100 percent by June 30. As such, contributions are assumed to be made on a quarterly basis with the first contribution 15 months after the associated valuation date, with the exception of the FYE 2022 contribution. For FYE 2022 only, the entire contribution was made in a single payment on July 1, 2021 based on information provided by the DPB.

Local employers' contributions are expected to be paid on April 1st, 21 months after the associated valuation date.

Chapter 98, P.L. 2017, the Lottery Enterprise Contribution Act allows PERS to receive 21.02% of the proceeds of the Lottery Enterprise, based upon its members' past or present employment in schools and institutions in the State for a term of 30 years. Revenues from Chapter 98, P.L. 2017, the Lottery Enterprise Contribution Act, are assumed to be contributed to the trust on a monthly basis. The State's pension contribution is reduced by the product of the allocable percentage for the PERS, the adjustment percentage, and the special asset adjustment.

Contributions payable in the fiscal year starting on the valuation date are included in the actuarial value of assets as receivable contributions, discounted by the applicable valuation interest rate.

Legislation has provided for additional benefits and/or funding requirements which are included in this valuation and are described as follows.

Early Retirement Incentive Programs

Local employers which elected to participate in various early retirement incentive programs authorized by NJ Statute make contributions to cover the cost of these programs over amortization periods elected by the employer to the extent permitted by NJ Statute.

Chapter 133, P.L. 2001

Chapter 133, P.L. 2001 increased the accrual rate from 1/60 to 1/55. In addition, it lowered the age required for a veteran benefit equal to 1/55 of highest 12-month Compensation for each Year of Service from 60 to 55.

Chapter 133, P.L. 2001 also established the Benefit Enhancement Fund (BEF) to fund the additional annual employer normal contribution due to the Statute's increased benefits. (Chapter 353, P.L. 2001 extended this coverage to this Statute's additional annual employer normal contribution.) If the assets in the BEF are insufficient to cover the normal contribution for the increased benefits for a valuation period, the State will pay such amount for both the State and Local employers. As of July 1, 2022, there are no assets in the BEF.

Chapter 259, P.L. 2001

Chapter 259, P.L. 2001 established the Workers' Compensation Judges Part of the System with special retirement benefits for Workers' Compensation Judges. See Appendix C for details.

In accordance with the provisions of Chapter 259, P.L. 2001, the additional contributions for these special retirement benefits will be funded by transfers from the Second Injury Fund.

Chapter 366, P.L. 2001

Chapter 366, P.L. 2001 established the Prosecutors Part of the System with special retirement benefits for Prosecutors. See Appendix C for details.

Chapter 366, P.L. 2001 also requires the State be liable for any increase in pension costs to a County that results from the enrollment of Prosecutors in the Prosecutors Part. Any increase in the unfunded actuarial liability arising from the benefits established for the Prosecutors Part are to be amortized over a closed 30 year period.

Actuarial Assumptions and Methods, *continued*

Chapter 19, P.L. 2009

Chapter 19, P.L. 2009 provided that the State Treasurer will reduce for Local employers the normal and accrued liability contributions to 50 percent of the amount certified for fiscal year 2009. The remaining 50% of the contribution (unfunded liability) will be paid by the Local employers in level annual payments over a period of 15 years with the first payment due in the fiscal year ending June 30, 2012. The unfunded liability will be adjusted by the rate of return on the actuarial value of assets. The legislation also provided that a Local employer may pay 100% of the contribution for the 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. In addition, certain Local employers who were eligible to defer 50% of their fiscal year 2009 pension contributions but instead paid 100% of the fiscal year 2009 pension contributions were permitted to defer 50% of their 2010 fiscal year pension contributions. The unfunded liability will be paid by these Local employers over a period of 15 years with the first payment due in the fiscal year ending June 30, 2012. The unfunded liability will be adjusted by the rate of return on the actuarial value of assets.

Chapter 140, P.L. 2021

Chapter 140, P.L. 2021 reopened the Worker's Compensation Judges (WCJ) Part of PERS and transferred WCJs from the Defined Contribution Retirement Program (DCRP) and the regular part of PERS into the WCJ Part of PERS.

The corresponding increase in the unfunded actuarial liability is amortized over a closed 20-year period. The additional unfunded actuarial liability contribution and the increased normal cost contribution will be paid by transfers from the Second Injury Fund (SIF).

4. Valuation Software

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

5. Changes Since Last Valuation

The expected member contributions used to calculate the employer normal cost are determined on an individual basis using the underlying actuarial assumptions. Previously, expected member contributions were calculated on an aggregate basis by increasing the appropriation payroll with a year of general payroll inflation multiplied by the member contribution rate.

Non-contributing members reported with salary are valued using the Projected Unit Credit Cost Method without any future projected salary increases. Liabilities were previously determined using the reported Accumulated Deductions with interest (Annuity Savings Fund or ASF), adjusted to include interest through the valuation date.

The actuarial liability for retirees who earned benefits under both State and Local employer is assigned to the location with the highest salary prior to retirement upon direction from the DPB. Previously, the actuarial liability for the retirees was split between State and Local employers based on the benefit reported in the valuation data for each location.

SUMMARY OF PLAN PROVISIONS

This summary of Plan provisions provides an overview of the major provisions of the PERS used in the actuarial valuation. It is not intended to replace the more precise language of the NJ State Statutes, Title 43, Chapter 15A, and if there is any difference between the description of the plan herein and the actual language in the NJ State Statutes, the NJ State Statutes will govern. This valuation is prepared based on plan provisions in effect as of July 1, 2022 and does not reflect the impact of any changes in the benefits that may have been approved after the valuation date.

1. Eligibility for Membership

Employees of the State or any county, municipality, school district, or public agency employed on a regular basis in a position covered by Social Security and not required to be a member of any other State or local government retirement system. Certain exceptions apply.

a) Class B (or Tier 1) Member: Any member hired prior to July 1, 2007.

b) Class D (or Tier 2) Member: Any member hired on or after July 1, 2007 and before November 2, 2008.

c) Class E (or Tier 3) Member: Any member hired after November 1, 2008 and before May 22, 2010.

d) Class F (or Tier 4) Member: Any member hired after May 21, 2010 and before June 28, 2011.

e) Class G (or Tier 5) Member: Any member hired on or after June 28, 2011.

The hiring, rehiring, retention, and benefits of certain public employees during the COVID-19 Public Health Emergency was modified under Executive Order No. 103 of 2020, as extended.

2. Plan Year

The 12-month period beginning on July 1 and ending on June 30.

3. Years of Service

A year of service for each year an employee is a Member of the Retirement System plus service, if any, covered by a prior service liability. Tier 4 and Tier 5 Members must be scheduled to work at least 35 hours per week for the State or 32 hours per week for a Local employer. Tier 3, 4 and 5 Members must have an annual salary of $7,500 (indexed for inflation) and other members must have an annual salary of $1,500.

4. Compensation

Base salary upon which contributions by a Member to the Annuity Savings Fund were based. Chapter 113, P.L. 1997 provides that Compensation cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code. Chapter 103, P.L. 2007 provides that for a Tier 2, 3, 4 or 5 Member, Compensation cannot exceed the annual maximum wage contribution base for Social Security, pursuant to the Federal Insurance Contribution Act.

5. Final Compensation

The average annual compensation upon which contributions by a Member are made for the three consecutive years of service immediately preceding retirement, or the highest three fiscal years of service, if greater. Chapter 1, P. L. 2010 provides that for a Tier 4 or Tier 5 Member, Final Compensation is the average annual compensation upon which contributions by a Member are made for the five consecutive years of service immediately preceding retirement, or the highest five fiscal years of service, if greater.

6. Final Year Compensation

The compensation upon which contributions by a Member to the Annuity Savings Fund are based in the last year of service.

7. Accumulated Deductions

The sum of all amounts deducted from the compensation of a Member or contributed by the Member or on the Member's behalf without interest.

Summary of Plan Provisions, *continued*

8. Interest Credits on Accumulated Deductions

Members receive interest credits while contributing and for the first two years of inactivity. The rate depends on the type of benefit. Prior to July 1, 2018, members received interest credits for the entire period of inactivity until retirement or death.

9. Member Contributions

Each Member contributes a percentage of Compensation. Effective October 1, 2011, Chapter 78, P.L. 2011 set the member contribution rate at 6.5% and increased it by $1/7^{th}$ of 1% each July thereafter until it attained an ultimate rate of 7.5% on July 1, 2018.

For members who are eligible to retire under the Prosecutors Part as provided by Chapter 366, P.L. 2001, Chapter 78, P.L. 2011 set the member contribution rate at 10.0%, effective October 1, 2011.

10. Benefits

a) **Service Retirement:** For a Tier 1 or Tier 2 Member, age 60. For a Tier 3 or Tier 4 Member, age 62. For a Tier 5 Member, age 65.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of:

(1) For a Tier 1, 2 or 3 Member, 1/55 of Final Compensation for each Year of Service.

(2) For a Tier 4 or 5 Member, 1/60 of Final Compensation for each Year of Service.

b) **Early Retirement:** Prior to eligibility for Service Retirement. For a Tier 1, 2, 3 or 4 Member, 25 Years of Service. For a Tier 5 Member, 30 Years of Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of:

(1) For a Tier 1 Member, the Service Retirement benefit reduced by 1/4 of one percent for each month the retirement date precedes age 55.

(2) For a Tier 2 Member, the Service Retirement benefit reduced by 1/12 of one percent for each month the retirement date precedes age 60 through age 55 and by 1/4 of one percent for each month the retirement date precedes age 55.

(3) For a Tier 3 or 4 Member, the Service Retirement benefit reduced by 1/12 of one percent for each month the retirement date precedes age 62 through age 55 and by 1/4 of one percent for each month the retirement date precedes age 55.

(4) For a Tier 5 Member, the Service Retirement benefit reduced by 1/4 of one percent for each month the retirement date precedes age 65.

c) **Veteran Retirement:** Age 55 with 25 Years of Service or Age 60 with 20 Years of Service for a qualified military veteran who retires directly from active service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of the greater of:

(1) 54.5% of highest 12-month Compensation, or

(2) For a member who is at least age 55 with 35 Years of Service, 1/55 of highest 12-month Compensation for each Year of Service. Veterans may receive a Service Retirement benefit if greater.

Summary of Plan Provisions, *continued*

d) **Deferred Retirement:** Termination of service prior to eligibility for Service Retirement with 10 Years of Service.

Benefit is either:

(1) A refund of Accumulated Deductions plus, if the member has completed three years of service, interest accumulated at 2.0% per annum; or

(2) A deferred life annuity, commencing at age 60 for a Tier 1 or Tier 2 Member, age 62 for a Tier 3 or Tier 4 Member, or age 65 for a Tier 5 Member, comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of the Service Retirement benefit based on Final Compensation and Years of Service at date of termination.

For Members who die during the deferral period, the benefit is a return of Accumulated Deductions with credited interest.

e) **Non-Vested Termination:** Termination of service prior to eligibility for Service Retirement and less than 10 Years of Service.

Benefit is a refund of Accumulated Deductions plus, if the member has completed three years of service, interest accumulated at 2.0% per annum.

f) **Death Benefits**

(1) Ordinary Death Before Retirement: Death of an active contributing Member. Benefit is equal to:

a. Lump sum payment equal to 150% of Final Year Compensation, also known as the non-contributory group life insurance benefit, plus

b. Accumulated Deductions with credited interest.

(2) Accidental Death Before Retirement: Death of an active Member resulting from injuries received from an accident during performance of duty and not a result of willful negligence. Benefit is equal to:

a. Lump sum payment equal to 150% of Final Year Compensation, also known as the non-contributory group life insuranc benefit, plus

b. Spouse life annuity of 50% of Final Year Compensation payable until spouse's death or remarriage. If there is no surviving spouse or upon death or remarriage, a total of 20% (35%, 50%) of Final Year Compensation payable to one (two, three or more) dependent child(ren). If there is no surviving spouse or dependent child(ren), 25% (40%) of Final Year Compensation to one (two) dependent parent(s). If there is no surviving spouse, dependent child(ren) or parent(s), the benefit is a refund of Accumulated Deductions with credited interest.

(3) Death After Retirement: Death of a retired Member. Benefit is equal to:

a. Lump sum payment equal to 3/16 of Final Year Compensation for a Member retired under Service, Early, Veteran or Deferred Retirement with 10 Years of Service. For a Member receiving a Disability benefit, lump sum payment of 150% of Final Year Compensation if death occurs prior to age 60 and 3/16 of Final Compensation if death occurs after age 60. This benefit is also known as the non-contributory group life insurance benefit, plus

b. Any survivor benefit due under the Member's optional form of payment election. Previously granted COLAs also apply to life annuities.

Members are also eligible for a voluntary, employee-paid life insurance policy, known as the contributory group life insurance policy. This benefit is not paid through the System and is not considered for valuation purposes.

Summary of Plan Provisions, *continued*

g) Disability Retirement

(1) Ordinary Disability Retirement: 10 years of service and totally and permanently incapacitated from the performance of normal or assigned duties. Only available to Tier 1, 2 and 3 members.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of:

a. 1.64% of Final Compensation for each Year of Service; or

b. 43.6% of Final Compensation.

(2) Accidental Disability Retirement: Total and permanent incapacitation as a direct result of a traumatic event occurring during and as a result of the performance of regular or assigned duties. Under certain conditions for law enforcement officers or emergency medical technicians, regular or assigned duties may include the World Trade Center (WTC) rescue, recovery, or cleanup operations between September 11, 2001 and October 11, 2001. For such members who participated in the WTC rescue, recovery, or cleanup operations, the total and permanent disability may occur after retirement on a service retirement or an ordinary disability retirement. Only available to Tier 1, 2 and 3 Members.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 72.7% of Compensation at the date of injury.

The pension portion of the benefit will be offset for any periodic Workers' Compensation benefits.

Tier 4 and Tier 5 Members are eligible for long-term disability coverage. This benefit is not paid through the System and is not considered for valuation purposes. Both Member and employer contributions to the System continue while on long-term disability, with the policy covering the Member portion. The long-term disability benefit equals 60% of Final Year Compensation and may be offset for other periodic benefits, such as Workers' Compensation, short-term disability or Social Security. The long-term disability benefit may continue through the earlier of age 70 or commencement of a retirement benefit under the System.

11. Benefits for Special Employee Groups

Certain members qualify for enrollment into special employee groups. Such members receive the greater of the special benefits described below or the regular PERS benefit described above. For benefit types not explicitly mentioned, the regular PERS benefit applies.

a) Law Enforcement Officers (LEOs):

Members employed in eligible job titles as well as individuals who do not meet the age or medical requirements for entry into the Police and Firemen's Retirement System (PFRS).

(1) Service and Special Retirement:

Mandatory retirement at age 65. Veterans with less than 20 Years of Service at age 65 must retire upon attainment of 20 Years of Service or age 70, whichever is earlier. Voluntary retirement prior to those ages.

a. Service Retirement: Age 55 after 20 Years of LEO Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 2% of Final Compensation for each Year of LEO Service up to 25 years plus 1% of Final Compensation for each Year of LEO Service over 25 years.

The Member is also eligible for a regular PERS benefit based on any non-LEO service.

b. Special Retirement: 25 Years of LEO Service.

Benefit is the Service Retirement benefit plus 5% of Final Compensation with a maximum of 70% of Final Compensation.

Summary of Plan Provisions, *continued*

(2) Ordinary Disability Retirement: 5 Years of LEO Service.

Benefit is the regular PERS Ordinary Disability benefit.

(3) Death Benefits:

Benefit is the regular PERS Death benefit except, upon Accidental Disability Retirement, the minimum lump sum payment is $5,000.

b) Legislative Retirement System (LRS):

Members of the State Legislature. Chapter 92, P.L. 2007 closed LRS to new members enrolled on or after July 1, 2007.

(1) Special Legislative Retirement: Age 60.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 3% of Final Compensation for each Year of Legislative Service with a maximum of two-thirds of Final Compensation.

The Member is also eligible for a regular PERS benefit based on any non-legislative service.

(2) Deferred Retirement: Termination of service prior to eligibility for Service or Special Legislative Retirement with 8 Years of Legislative Service.

Benefit is either:

a. A refund of Accumulated Deductions plus, if the Member has completed three years of service, interest accumulated at 2.0% per annum; or

b. A deferred life annuity, commencing at age 60, comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of the Service or Special Legislative Retirement benefit based on Final Compensation and Years of Service at date of termination.

c) Prosecutors Part (Chapter 366, P.L. 2001):

Covers prosecutors as well as members employed in certain other related job titles. Chapter 1. P .L. 2010 closed the Prosecutors Part to new members enrolled on or after May 22, 2010.

Chapter 226,P.L. 2021 repoened the Prosecutors Part of PERS and made membership in the Prosecutors Part of PERS mandatory for prosecutors.

(1) Service and Special Retirement

Mandatory retirement at age 70. Voluntary retirement prior to that age.

In addition to the benefits described below, the member is eligible for a regular PERS benefit based on any non-Prosecutors Part service.

a. Service Retirement: For a Prosecutors Part Member enrolled as of January 7, 2002, age 55 or 20 Years of Prosecutors Part Service. For a Prosecutors Part Member enrolled after January 7, 2002, age 55.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of the greater of:

i. 2% of Final Year Compensation for each Year of Prosecutors Part Service up to 30 years plus 1% of Final Year Compensation for each Year of Prosecutors Part Service over 30 years.

ii. 50% of Final Year Compensation for Prosecutors Part Members with 20 or more Years of Prosecutors Part Service.

iii. 1/60 of Final Year Compensation for each Year of Prosecutors Part Service.

Summary of Plan Provisions, *continued*

b. Special Retirement: 25 Years of Prosecutors Part Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 65% of Final Year Compensation plus 1% of Final Year Compensation for each Year of Prosecutors Part Service in excess of 25 years with a maximum of 70% of Final Compensation.

(2) Deferred Retirement: Termination of service prior to eligibility for Service or Special Retirement with 10 Years of Prosecutors Part Service.

Benefit is either:

a. A refund of Accumulated Deductions plus, if the Member has completed three years of service, interest accumulated at 2.0% per annum; or

b. A deferred life annuity, commencing at age 55, comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 2% of Final Year Compensation for each Year of Prosecutors Part Service.

(3) Death Benefits:

Benefit is the regular PERS Death benefit except, upon Service, Special or Deferred Prosecutors Part Retirement with 10 Years of Prosecutors Part Service, the lump sum payment equals 50% of Final Year Compensation.

d) Workers Compensation Judges (WCJ) Part (Chapter 259, P.L. 2001 and Chapter 140, P.L. 2021):

Member employed in an eligible job title by the Division of Workers' Compensation. Chapter 92, P.L. 2007 closed the Workers Compensation Judges Part to new members enrolled on or after July 1, 2007.

Chapter 140, P.L. 2021 reopened the Worker's Compensation Judges (WCJ) Part of PERS and transferred WCJs from the Defined Contribution Retirement program (DCRP) and the regular part of PERS into the WCJ Part of PERS.

(1) Service Retirement:

Mandatory retirement age 70. Voluntary retirement prior to that age.

a. Age 70 and 10 Years of WCJ Service; or
Age 65 and 15 Years of WCJ Service; or
Age 60 and 20 Years of WCJ Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 75% of contractual Compensation at the date of retirement.

b. Age 65, 5 consecutive Years of WCJ Service and 15 Years of Aggregate PERS Service; or
Age 60, 5 consecutive Years of WCJ Service and 20 Years of Aggregate PERS Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 50% of contractual Compensation at the date of retirement.

c. Age 60, 5 consecutive Years of WCJ Service and 15 Years of Aggregate PERS Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 2% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service up to 25 years plus 1% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service over 25 years.

Summary of Plan Provisions, *continued*

d. Age 60.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 2% of contractual Compensation at the date of retirement for each Year of WCJ Service up to 25 years plus 1% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service over 25 years.

(2) Early Retirement: Prior to eligibility for Service Retirement and 5 consecutive Years of WCJ Service and 25 Years of Aggregate PERS Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total retirement allowance of 2% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service up to 25 years plus 1% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service over 25 years, actuarially reduced for commencement prior to age 60.

(3) Deferred Retirement: Termination of service prior to eligibility for Service Retirement with 5 consecutive Years of WCJ Service and 10 Years of Aggregate PERS Service.

Benefit is either:

a. A refund of Accumulated Deductions plus, if the Member has completed three years of service, interest accumulated at 2.0% per annum; or

b. A deferred life annuity, commencing at age 60, comprised of a member annuity plus an employer pension which together with provide a total retirement allowance of 2% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service up to 25 years plus 1% of contractual Compensation at the date of retirement for each Year of Aggregate PERS Service over 25 years.

(4) Death Benefits

a. Before Retirement: Death of an active WCJ Member. Benefit is equal to:

i. Lump sum equal to 150% of contractual Compensation at the date of death, also known as the non-contributory group life insurance benefit, plus

ii. Spousal life annuity of 25% of contractual Compensation at the date of death payable until spouse's remarriage plus 10% (15%) to one (two or more) dependent child(ren). If there is no surviving spouse, or upon death or remarriage, a total of 15% (20%, 30%) of contractual Compensation at the date of death payable to one (two, three or more) dependent child(ren). If there is no surviving spouse or dependent child(ren), 20% (30%) of contractual Compensation at the date of death to one (two) dependent parent(s). If there is no surviving spouse, dependent child(ren) or parent(s), the benefit is a refund of Accumulated Deductions with interest.

b. After Retirement: Death of a retired WCJ Member. Benefit is equal to:

i. Lump sum equal to 25% of contractual Compensation at the date of death for a Member retired under Service or Early WCJ Retirement with 10 Years of Aggregate PERS Service. For a Member receiving a Disability benefit, lump sum payment of 150% of contractual Compensation at the date of death if death occurs prior to age 60 and 25% of contractual Compensation at the date of death if death occurs after age 60. This benefit is known as the non-contributory group life insurance benefit, plus

ii. Any survivor benefit due under the Member's optional form of payment election. Previously granted COLAs also apply to life annuities.

Summary of Plan Provisions, *continued*

12. Optional Forms of Payment

The member may elect the following forms of payment:

a) Maximum Option: Single life annuity with a return of the balance of the Accumulated Deductions with credited interest.

b) Option 1: Single life annuity with a return of the balance of the initial reserve.

c) Option 2: 100% joint and survivor annuity.

d) Option 3: 50% joint and survivor annuity.

e) Option 4: Other percentage joint and survivor annuity.

f) Option A: 100% pop-up joint and survivor annuity.

g) Option B: 75% pop-up joint and survivor annuity.

h) Option C: 50% pop-up joint and survivor annuity.

i) Option D: 25% pop-up joint and survivor annuity.

13. Cost-of-Living Adjustments

Also known as Pension Adjustments. Provided annually to retirees and survivors after 24 months of retirement prior to July 1, 2011. Chapter 78, P.L. 2011 eliminated future adjustments effective July 1, 2011. Adjustments may be reinstated in the future subject to certain conditions outlined in Chapter 78, P.L. 2011.

14. Changes in Plan Provisions Since Last Valuation

Chapter 226, P.L. 2021 reopened the Prosecutors Part of PERS and made membership in the Prosecutors Part of PERS mandatory for prosecutors. Chapter 498, P.L. 2021 permitted PERS retirees to return to employment in the NJ State Legislature after retirement under certain circumstances. Chapter 418, P.L. 2021 clarified the PERS eligibility for members of the New Jersey Maritime Pilot and Docking Pilot Commission.

HISTORICAL DATA AND REQUIRED ACFR EXHIBITS

The information on the following tables for State and Local employers is based on the final actuarial valuation reports for the given years. The amounts do not reflect differences between the discounted State appropriations receivable and the actual State contribution amounts that became known after the issuance of the reports.

In accordance with the Government Finance Officers Association (GFOA) and their recommended checklist for Annual Comprehensive Financial Reports (ACFRs), we prepared the following schedules for the System. The GFOA checklist uses the term Actuarial Accrued Liability, which is the same as the Actuarial Liability used elsewhere in this report.

Table D-1
Schedule of Retirees and Beneficiaries
Added to and Removed from Rolls

State

Valuation Date July 1,	Added to Rolls		Removed from Rolls		Rolls at End of Year		Average Annual Allowance[1]	% Increase in Average Annual Allowance[1]
	Number	Annual Allowance	Number[1]	Annual Allowance	Number[1]	Annual Allowance		
2022	3,680	$ 130,517,862	2,373	$50,234,719	62,842	$ 1,857,631,695	$ 29,560	2.37%
2021	2,975	98,190,097	2,223	48,208,424	61,535	1,776,844,453	28,875	1.66%
2020	3,127	99,862,605	2,193	45,081,368	60,783	1,726,418,877	28,403	1.72%
2019	3,232	103,191,557	1,939	40,171,452	59,849	1,671,166,694	27,923	1.70%
2018	3,217	102,255,260	2,281	45,351,461	58,556	1,607,733,796	27,456	1.25%
2017	3,267	104,489,121	1,479	29,655,761	57,174	1,550,464,743	27,118	1.83%
2016	3,515	109,122,538	2,203	40,303,068	55,386	1,474,917,885	26,630	2.45%
2015	4,114	124,446,887	1,754	32,905,541	54,074	1,405,596,194	25,994	2.33%
2014	3,183	93,940,693	1,696	30,809,304	51,714	1,313,713,988	25,403	2.06%
2013	2,864	82,357,835	1,685	29,723,562	50,227	1,250,142,686	24,890	1.96%

[1] Beginning with the 2018 valuation, multiple members with benefits in receipt from both State and Local employers are included in State headcounts.

This change resulted in 446 more records on the rolls as of July 1, 2018. The annual allowance for these records was included for all years.

Historical Data and Required ACFR Exhibits, *continued*

Table D-2
Schedule of Retirees and Beneficiaries
Added to and Removed from Rolls

Local Employers

Valuation Date July 1,	Added to Rolls		Removed from Rolls		Rolls at End of Year		Average Annual Allowance	% Increase in Average Annual Allowance
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance		
2022	7,956	$ 185,974,696	5,594	$ 84,197,549	128,199	$ 2,517,340,724	$ 19,636	2.35%
2021	7,336	167,060,350	5,491	81,935,010	125,837	2,414,370,737	19,186	2.17%
2020	7,078	157,358,396	5,729	81,347,000	123,992	2,328,399,284	18,779	2.30%
2019	7,199	158,384,725	4,748	65,855,298	122,643	2,251,384,758	18,357	2.24%
2018	7,272	151,992,839	5,537	76,519,975	120,192	2,157,906,233	17,954	2.17%
2017	7,444	155,525,527	3,725	50,460,932	118,457	2,081,607,680	17,573	2.04%
2016	7,856	159,065,854	5,681	72,658,490	114,738	1,975,865,848	17,221	2.65%
2015	7,870	149,903,333	4,309	54,707,095	112,563	1,888,507,678	16,777	2.02%
2014	7,003	137,416,194	4,288	52,540,322	109,002	1,792,563,653	16,445	2.40%
2013	6,911	123,953,479	4,169	49,483,971	106,287	1,706,902,310	16,059	1.90%

Table D-3
Schedule of Retirees and Beneficiaries
Added to and Removed from Rolls

Total

Valuation Date July 1,	Added to Rolls		Removed from Rolls		Rolls at End of Year		Average Annual Allowance[1]	% Increase in Average Annual Allowance[1]
	Number	Annual Allowance	Number[1]	Annual Allowance	Number[1]	Annual Allowance		
2022	11,636	$ 316,492,558	7,967	$134,432,267	191,041	$ 4,374,972,419	$ 22,901	2.38%
2021	10,311	265,250,447	7,714	130,143,433	187,372	4,191,215,190	22,368	1.93%
2020	10,205	257,221,002	7,922	126,428,368	184,775	4,054,818,161	21,945	2.09%
2019	10,431	261,576,282	6,687	106,026,750	182,492	3,922,551,452	21,494	2.03%
2018	10,489	254,248,099	7,818	121,871,436	178,748	3,765,640,029	21,067	1.87%
2017	10,711	260,014,648	5,204	80,116,693	175,631	3,632,072,423	20,680	1.95%
2016	11,371	268,188,392	7,884	112,961,558	170,124	3,450,783,733	20,284	2.61%
2015	11,984	274,350,220	6,063	87,612,636	166,637	3,294,103,872	19,768	2.28%
2014	10,186	231,356,887	5,984	83,349,626	160,716	3,106,277,641	19,328	2.30%
2013	9,775	206,311,314	5,854	79,207,533	156,514	2,957,044,996	18,893	1.90%

[1]Beginning with the 2018 valuation, multiple members with benefits in receipt from both State and Local employers are included in State headcounts.
This change resulted in 446 more records on the rolls as of July 1, 2018. The annual allowance for these records was included for all years.

Historical Data and Required ACFR Exhibits, *continued*

Table D-4
Schedule of Active Member Valuation Data

State

Valuation Date July 1,	Number of Contributing Active Members[1]	Annual Compensation[2]	Annual Average Compensation	% Increase in Average Annual Compensation	Number of Participating Employers[3]
2022	64,357	$ 4,664,968,264	$ 72,486	3.78%	281
2021	65,555	4,578,674,071	69,845	2.07%	282
2020	67,774	4,637,529,278	68,426	2.37%	283
2019	67,906	4,539,069,588	66,843	5.80%	286
2018	68,593	4,333,772,974	63,181	-0.45%	283
2017	68,156	4,325,784,579	63,469	-0.49%	N/A
2016	68,502	4,369,066,658	63,780	0.02%	N/A
2015	69,687	4,443,605,376	63,765	2.39%	N/A
2014	72,952	4,543,384,095	62,279	1.64%	N/A
2013	74,365	4,556,719,103	61,275	1.02%	N/A

[1] Beginning with the 2018 valuation, reflects all records for multiple members.
[2] Limited annual compensation.
[3] Number of locations reporting contributing active members. For GASB reporting purposes, the State may be considered the participating employer for multiple locations.

Table D-5
Schedule of Active Member Valuation Data

Local Employers

Valuation Date July 1,	Number of Contributing Active Members[1]	Annual Compensation[2]	Annual Average Compensation	% Increase in Average Annual Compensation	Number of Participating Employers[3]
2022	139,073	$ 7,591,465,466	$ 54,586	2.71%	1,651
2021	138,672	7,369,908,268	53,146	3.53%	1,659
2020	142,757	7,328,393,274	51,335	3.07%	1,663
2019	145,287	7,236,080,086	49,805	2.76%	1,664
2018	146,615	7,106,248,788	48,469	1.66%	1,670
2017	147,283	7,022,322,604	47,679	2.61%	N/A
2016	149,077	6,927,278,654	46,468	2.76%	N/A
2015	152,070	6,876,593,371	45,220	2.33%	N/A
2014	156,101	6,898,049,131	44,190	2.75%	N/A
2013	160,253	6,891,812,162	43,006	2.78%	N/A

[1] Beginning with the 2018 valuation, reflects all records for multiple members.
[2] Limited annual compensation.
[3] Number of locations reporting contributing active members.

Historical Data and Required ACFR Exhibits, *continued*

Table D-6
Schedule of Active Member Valuation Data

Total

Valuation Date July 1,	Number of Contributing Active Members[1]	Annual Compensation[2]	Annual Average Compensation	% Increase in Average Annual Compensation	Number of Participating Employers[3]
2022	203,430	$ 12,256,433,730	$ 60,249	2.98%	1,932
2021	204,227	11,948,582,339	58,506	2.94%	1,941
2020	210,531	11,965,922,552	56,837	2.91%	1,946
2019	213,193	11,775,149,674	55,232	3.90%	1,950
2018	215,208	11,440,021,762	53,158	0.92%	1,953
2017	215,439	11,348,107,183	52,674	1.46%	N/A
2016	217,579	11,296,345,312	51,918	1.70%	N/A
2015	221,757	11,320,198,747	51,048	2.20%	N/A
2014	229,053	11,441,433,226	49,951	2.37%	N/A
2013	234,618	11,448,531,265	48,796	2.16%	N/A

[1] Beginning with the 2018 valuation, reflects all records for multiple members.
[2] Limited annual compensation.
[3] Number of locations reporting contributing active members. For GASB reporting purposes, the State may be considered the participating employer for multiple locations.

Table D-7
Schedule of Funding Progress

State

Valuation Date July 1,	Actuarial Value of Assets[1] (a)	Actuarial Accrued Liability (b)	(Surplus)/Unfunded Actuarial Accrued Liability (c) = (b) - (a)	Funded Ratio (a) /(b)	Covered Payroll[2] (d)	(Surplus)/Unfunded Actuarial Accrued Liability as % of Covered Payroll (c) / (d)
2022	$ 9,354,810,560	$ 28,185,048,883	$ 18,830,238,323	33.19%	$ 4,664,968,264	403.65%
2021	8,889,754,699	27,489,997,258	18,600,242,559	32.34%	4,578,674,071	406.24%
2020	8,045,759,732	26,285,137,008	18,239,377,276	30.61%	4,637,529,278	393.30%
2019	8,017,468,579	25,666,760,996	17,649,292,417	31.24%	4,539,069,588	388.83%
2018	8,057,092,909	23,745,716,631	15,688,623,722	33.93%	4,333,772,974	362.01%
2017	8,208,333,488	23,324,861,385	15,116,527,897	35.19%	4,325,784,579	349.45%
2016	8,466,901,791	22,411,751,124	13,944,849,333	37.78%	4,369,066,658	319.17%
2015	8,868,254,006	21,635,507,298	12,767,253,292	40.99%	4,443,605,376	287.32%
2014	9,128,235,998	20,842,690,918	11,714,454,920	43.80%	4,543,384,095	257.84%
2013	9,614,698,050	19,993,957,432	10,379,259,382	48.09%	4,556,719,103	227.78%

[1] Includes receivable amounts. Excludes Special Asset Value.
[2] Limited annual compensation for contributing actives.

Historical Data and Required ACFR Exhibits, *continued*

Table D-8
Schedule of Funding Progress

Local Employers

Valuation Date July 1,	Actuarial Value of Assets[1] (a)	Actuarial Accrued Liability (b)	(Surplus)/Unfunded Actuarial Accrued Liability (c) = (b) - (a)	Funded Ratio (a) /(b)	Covered Payroll[2] (d)	(Surplus)/Unfunded Actuarial Accrued Liability as % of Covered Payroll (c) / (d)
2022	$26,694,121,356	$ 39,317,139,093	$ 12,623,017,737	67.89%	$7,591,465,466	166.28%
2021	25,965,285,547	38,393,126,094	12,427,840,547	67.63%	7,369,908,268	168.63%
2020	24,424,654,983	36,410,100,750	11,985,445,767	67.08%	7,328,393,274	163.55%
2019	23,928,515,595	35,526,210,970	11,597,695,375	67.35%	7,236,080,086	160.28%
2018	23,264,877,618	33,103,627,533	9,838,749,915	70.28%	7,106,248,788	138.45%
2017	22,522,697,150	32,238,416,280	9,715,719,130	69.86%	7,022,322,604	138.35%
2016	21,900,421,798	30,673,935,604	8,773,513,806	71.40%	6,927,278,654	126.65%
2015	21,495,828,937	29,431,895,200	7,936,066,263	73.04%	6,876,593,371	115.41%
2014	20,766,663,796	28,255,077,220	7,488,413,424	73.50%	6,898,049,131	108.56%
2013	19,978,598,632	27,005,782,517	7,027,183,885	73.98%	6,891,812,162	101.96%

[1] Includes receivable amounts. Excludes Special Asset Value.
[2] Limited annual compensation for contributing actives.

Historical Data and Required ACFR Exhibits, *continued*

Table D-9
Schedule of Funding Progress

Total

Valuation Date July 1,	Actuarial Value of Assets[1] (a)	Actuarial Accrued Liability (b)	(Surplus)/Unfunded Actuarial Accrued Liability (c) = (b) - (a)	Funded Ratio (a) /(b)	Covered Payroll[2] (d)	(Surplus)/Unfunded Actuarial Accrued Liability as % of Covered Payroll (c) / (d)
2022	$ 36,048,931,916	$67,502,187,976	$ 31,453,256,060	53.40%	$ 12,256,433,730	256.63%
2021	34,855,040,246	65,883,123,352	31,028,083,106	52.90%	11,948,582,339	259.68%
2020	32,470,414,715	62,695,237,758	30,224,823,043	51.79%	11,965,922,552	252.59%
2019	31,945,984,174	61,192,971,966	29,246,987,792	52.21%	11,775,149,674	248.38%
2018	31,321,970,527	56,849,344,164	25,527,373,637	55.10%	11,440,021,762	223.14%
2017	30,731,030,638	55,563,277,665	24,832,247,027	55.31%	11,348,107,183	218.82%
2016	30,367,323,589	53,085,686,728	22,718,363,139	57.20%	11,296,345,312	201.11%
2015	30,364,082,943	51,067,402,498	20,703,319,555	59.46%	11,320,198,747	182.89%
2014	29,894,899,794	49,097,768,138	19,202,868,344	60.89%	11,441,433,226	167.84%
2013	29,593,296,682	46,999,739,949	17,406,443,267	62.96%	11,448,531,265	152.04%

[1] Includes receivable amounts. Excludes Special Asset Value.
[2] Limited annual compensation for contributing actives.

Historical Data and Required ACFR Exhibits, *continued*

Table D-10
Schedule of Funded Liabilities by Type (Solvency Test)
State

Valuation Date July 1,	Actuarial Accrued Liabilities For: Contributing Active & Non-Contributing Member Contributions[1] (1)	Retirees, Beneficiaries & Deferred Vesteds[2] (2)	Contributing Active & Non-Contributing Member Benefits Financed by Employer[1,2] (3)	Actuarial Value of Assets[3]	Portion of Actuarial Accrued Liabilities Covered by Actuarial Value of Assets (1)	(2)	(3)
2022	$ 6,623,312,348	$ 17,965,645,572	$ 3,596,090,963	$ 9,354,810,560	100.00%	15.20%	0.00%
2021	6,592,343,771	17,328,578,369	3,569,075,118	8,889,754,699	100.00%	13.26%	0.00%
2020	6,381,123,395	16,544,875,478	3,359,138,135	8,045,759,732	100.00%	10.06%	0.00%
2019	6,152,782,465	16,087,603,025	3,426,375,506	8,017,468,579	100.00%	11.59%	0.00%
2018	5,953,378,763	15,070,236,164	2,722,101,704	8,057,092,909	100.00%	13.96%	0.00%
2017	5,727,517,176	14,487,785,677	3,109,558,532	8,208,333,488	100.00%	17.12%	0.00%
2016	5,504,706,131	13,686,116,692	3,220,928,301	8,466,901,791	100.00%	21.64%	0.00%
2015	5,302,732,138	12,797,013,628	3,535,761,532	8,868,254,006	100.00%	27.86%	0.00%
2014	5,169,631,309	11,857,858,226	3,815,201,383	9,128,235,998	100.00%	33.38%	0.00%
2013	4,885,643,785	11,293,634,256	3,814,679,391	9,614,698,050	100.00%	41.87%	0.00%

[1] Includes deferred beneficiaries.
[2] Prior to July 1, 2018, actuarial accrued liability for deferred vesteds included under (3) instead of (2).
[3] Includes receivable amounts. Excludes Special Asset Value.

Historical Data and Required ACFR Exhibits, *continued*

Table D-11
Schedule of Funded Liabilities by Type (Solvency Test)
Local Employers

Valuation Date July 1,	Actuarial Accrued Liabilities For			Actuarial Value of Assets[3]	Portion of Actuarial Accrued Liabilities Covered by Actuarial Value of Assets		
	Contributing Active & Non-Contributing Member Contributions[1] (1)	Retirees, Beneficiaries & Deferred Vesteds[2] (2)	Contributing Active & Non-Contributing Member Benefits Financed by Employer[1,2] (3)		(1)	(2)	(3)
2022	$ 10,018,520,222	$ 23,735,979,687	$ 5,562,639,184	$ 26,694,121,356	100.00%	70.25%	0.00%
2021	9,867,154,217	22,934,745,828	5,591,226,049	25,965,285,547	100.00%	70.19%	0.00%
2020	9,574,866,049	21,680,763,400	5,154,471,301	24,424,654,983	100.00%	68.49%	0.00%
2019	9,234,762,976	20,983,426,083	5,308,021,911	23,928,515,595	100.00%	70.03%	0.00%
2018	8,934,728,567	19,552,684,545	4,616,214,421	23,264,877,618	100.00%	73.29%	0.00%
2017	8,542,088,646	18,737,855,865	4,958,471,769	22,522,697,150	100.00%	74.61%	0.00%
2016	8,168,141,804	17,622,616,344	4,883,177,456	21,900,421,798	100.00%	77.92%	0.00%
2015	7,829,248,004	16,502,540,582	5,100,106,614	21,495,828,937	100.00%	82.82%	0.00%
2014	7,477,372,802	15,523,266,419	5,254,437,999	20,766,663,796	100.00%	85.61%	0.00%
2013	7,060,416,742	14,775,793,049	5,169,572,726	19,978,598,632	100.00%	87.43%	0.00%

[1] Includes deferred beneficiaries.
[2] Prior to July 1, 2018, actuarial accrued liability for deferred vesteds included under (3) instead of (2).
[3] Includes receivable amounts. Excludes Special Asset Value.

Historical Data and Required ACFR Exhibits, *continued*

Table D-12
Schedule of Funded Liabilities by Type (Solvency Test)

Total

Valuation Date July 1,	Actuarial Accrued Liabilities For			Actuarial Value of Assets[3]	Portion of Actuarial Accrued Liabilities Covered by Actuarial Value of Assets		
	Contributing Active & Non-Contributing Member Contributions[1] (1)	Retirees, Beneficiaries & Deferred Vesteds[2] (2)	Contributing Active & Non-Contributing Member Benefits Financed by Employer[1,2] (3)		(1)	(2)	(3)
2022	$ 16,641,832,570	$ 41,701,625,259	$ 9,158,730,147	$ 36,048,931,916	100.00%	46.54%	0.00%
2021	16,459,497,988	40,263,324,197	9,160,301,167	34,855,040,246	100.00%	45.69%	0.00%
2020	15,955,989,444	38,225,638,878	8,513,609,436	32,470,414,715	100.00%	43.20%	0.00%
2019	15,387,545,441	37,071,029,108	8,734,397,417	31,945,984,174	100.00%	44.67%	0.00%
2018	14,888,107,330	34,622,920,709	7,338,316,125	31,321,970,527	100.00%	47.47%	0.00%
2017	14,269,605,822	33,225,641,542	8,068,030,301	30,731,030,638	100.00%	49.54%	0.00%
2016	13,672,847,935	31,308,733,036	8,104,105,757	30,367,323,589	100.00%	53.32%	0.00%
2015	13,131,980,142	29,299,554,210	8,635,868,146	30,364,082,943	100.00%	58.81%	0.00%
2014	12,647,004,111	27,381,124,645	9,069,639,382	29,894,899,794	100.00%	62.99%	0.00%
2013	11,946,060,527	26,069,427,305	8,984,252,117	29,593,296,682	100.00%	67.69%	0.00%

[1] Includes deferred beneficiaries.
[2] Prior to July 1, 2018, actuarial accrued liability for deferred vesteds included under (3) instead of (2).
[3] Includes receivable amounts. Excludes Special Asset Value.

Historical Data and Required ACFR Exhibits, *continued*

Table D-13
Analysis of Financial Experience
Change in Unfunded Actuarial Accrued Liability

State

Valuation Date July 1,	Actuarial Value of Assets Investment (Gain)/Loss	Actuarial Accrued Liability (Gain)/Loss	Assumption & Method Changes	Plan/Policy Changes	Contributions[1]	Changes in Unfunded Actuarial Accrued Liability
2022	$ 217,227,219	$ 377,528,001	$ (100,572,196)	$ 2,886,789	$ (267,074,049)	$ 229,995,764
2021	(56,665,321)	(70,592,801)	798,443,571	4,799,089	(315,119,255)	360,865,283
2020	198,970,917	138,357,335	0	0	252,756,607	590,084,859
2019	140,706,362	461,324,998	1,081,742,399	(6,603,404)	283,498,340	1,960,668,695
2018	130,951,573	93,268,738	(112,274,899)	0	460,150,413	572,095,825
2017	171,949,238	103,170,590	328,696,298	0	567,862,438	1,171,678,564
2016	274,008,949	21,165,025	199,010,114	0	683,411,953	1,177,596,041
2015	162,379,506	164,489,294	53,217,646	0	672,711,926	1,052,798,372
2014	87,486,113	95,327,747	10,733,967	0	1,141,647,711	1,335,195,538
2013	243,785,379	47,279,664	0	0	479,307,797	770,372,840

[1] Change due to contributions (greater)/less than normal cost plus interest on the Unfunded Actuarial Accrued Liability.

Historical Data and Required ACFR Exhibits, *continued*

Table D-14
Analysis of Financial Experience
Change in Unfunded Actuarial Accrued Liability

Local Employers

Valuation Date July 1,	Actuarial Value of Assets Investment (Gain)/Loss	Actuarial Accrued Liability (Gain)/Loss	Assumption & Method Changes	Plan/Policy Changes	Contributions[1]	Changes in Unfunded Actuarial Accrued Liability
2022	$ 234,078,422	$ 202,540,254	$ (150,132,560)	$ 8,219,652	$ (99,528,578)	$ 195,177,190
2021	(590,983,481)	(26,972,346)	1,086,372,117	0	(26,021,510)	442,394,780
2020	383,179,629	(53,231,151)	0	0	57,801,914	387,750,392
2019	169,848,852	207,179,448	1,392,592,722	(6,437,745)	(4,237,817)	1,758,945,460
2018	154,877,626	161,064,936	(176,743,018)	0	(16,168,759)	123,030,785
2017	263,103,187	249,175,903	439,168,994	0	(9,242,760)	942,205,324
2016	536,039,915	28,949,988	251,983,145	0	20,474,495	837,447,543
2015	234,583,215	90,076,858	152,550,941	0	(29,558,175)	447,652,839
2014	129,116,581	303,918,905	12,554,678	0	15,639,375	461,229,539
2013	464,450,689	(49,533,766)	0	0	(20,124,445)	394,792,478

[1] Change due to contributions (greater)/less than normal cost plus interest on the Unfunded Actuarial Accrued Liability.

Table D-15
Analysis of Financial Experience
Change in Unfunded Actuarial Accrued Liability

Total

Valuation Date July 1,	Actuarial Value of Assets Investment (Gain)/Loss	Actuarial Accrued Liability (Gain)/Loss	Assumption & Method Changes	Plan/Policy Changes	Contributions[1]	Changes in Unfunded Actuarial Accrued Liability
2022	$ 451,305,641	$ 580,068,255	$ (250,704,756)	$ 11,106,441	$ (366,602,627)	$ 425,172,954
2021	(647,648,802)	(97,565,147)	1,884,815,688	4,799,089	(341,140,765)	803,260,063
2020	582,150,546	85,126,184	0	0	310,558,521	977,835,251
2019	310,555,214	668,504,446	2,474,335,121	(13,041,149)	279,260,523	3,719,614,155
2018	285,829,199	254,333,674	(289,017,917)	0	443,981,654	695,126,610
2017	435,052,425	352,346,493	767,865,292	0	558,619,678	2,113,883,888
2016	810,048,864	50,115,013	450,993,259	0	703,886,448	2,015,043,584
2015	396,962,721	254,566,152	205,768,587	0	643,153,751	1,500,451,211
2014	216,602,694	399,246,652	23,288,645	0	1,157,287,086	1,796,425,077
2013	708,236,068	(2,254,102)	0	0	459,183,352	1,165,165,318

[1] Change due to contributions (greater)/less than normal cost plus interest on the Unfunded Actuarial Accrued Liability.

CHEIRON Classic Values, Innovative Advice

March 27, 2024

Board of Trustees
Teachers' Pension and Annuity Fund of New Jersey

Re: Actuary's Certification Letter

Dear Board Members:

This is the Actuary's Certification Letter for the Actuarial Section of the Annual Comprehensive Financial Report for the Teachers' Pension and Annuity Fund of New Jersey (TPAF or Fund) as of June 30, 2023. This letter includes references to three documents produced by Cheiron for the Fund: the Actuarial Valuation Report as of July 1, 2022 (transmitted February 3, 2023) and the GASB 67 and 68 Reports as of June 30, 2023 (transmitted February 13, 2024).

Actuarial Valuation Report as of July 1, 2022

The purpose of the annual Actuarial Valuation Report as of July 1, 2022 is to determine the actuarial funding status of TPAF on that date and to calculate the Statutory Contribution amount for the State for the Fiscal Year Ending 2024. The prior review was conducted as of July 1, 2021, and included the Statutory Contribution amount for the Fiscal Year Ending 2023.

Actuarial funding is based on the Projected Unit Credit Cost Method. The Statutory Contribution amounts contain two components: the employer normal cost (cost of benefits for the upcoming year) and an amortization for the unfunded actuarial liability (UAL). The funding methodology prescribed by the N.J. State Statutes does not include a cost component for administrative expenses, and therefore administrative expenses are implicitly covered by the investment rate of return assumption.

In accordance with Chapter 78, P.L. 2011:

- Beginning with the July 1, 2010 actuarial valuation, the amortization amount is calculated to amortize the UAL over an open 30 year period as a level dollar amount.
- Beginning with the July 1, 2019 actuarial valuation, the amortization amount will be calculated to amortize the UAL over a closed 30 year period (i.e., for each subsequent actuarial valuation, the amortization period shall decrease by one year) as a level dollar amount.
- Beginning with the July 1, 2029 actuarial valuation, when the amortization period reaches 20 years, an increase or decrease in the UAL as a result of actuarial losses and gains will increase or decrease, respectively, the amortization period for the UAL, except that the amortization period will not exceed 20 years.

To the extent that the amortization period remains an open period in future years and depending upon the specific circumstances, it should be noted that in the absence of emerging actuarial gains or contributions made in excess of the Statutory Contribution, any existing UAL may not be fully amortized in the future.

Member contributions are set in the N.J. State Statutes.

The non-contributory group life insurance benefit is funded separately through a term cost.

For actuarial valuation purposes, assets are valued at Actuarial Value as prescribed in the N.J. State Statutes. Under this method, the assets used to determine the Statutory Contribution amounts take into account market value by spreading all investment gains and losses (returns above or below expected returns) over a rolling five-year period.

The actuarial value of assets is intended to dampen the volatility in the market value of assets, resulting in a smoother pattern of contributions. Actuarial Standards of Practice (ASOP) No. 44 states that the asset valuation method should produce an actuarial value of assets that falls within a reasonable range of market value, recognizes the difference between the market value and actuarial value of assets within a reasonably short period of time, and is likely to produce actuarial value of assets that are sometimes greater than and sometimes less than the corresponding market values. The asset method required under the N.J. State Statutes does not meet the requirements of ASOP No. 44 because this method has produced actuarial value of assets which have consistently been greater than the market value of assets and recognizes investment losses slowly over time. Additionally, the method may produce an actuarial value of assets that falls outside of a reasonable range of the market value.

We prepared the following schedules, which we understand will be included in the Actuarial Section of the Annual Comprehensive Financial Report, based on the July 1, 2022 actuarial valuation. All historical information prior to the July 1, 2018 actuarial valuation shown in these schedules is based on information reported by the prior actuary, Milliman.

- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Schedule of Active Member Valuation Data
- Schedule of Funding Progress
- Schedule of Funded Liabilities by Type (formerly referred to as the Solvency Test)
- Analysis of Financial Experience: Change in Unfunded Actuarial Accrued Liability
- Summary of Plan Provisions
- Summary of Current Actuarial Assumptions and Methods
- Membership Information (Active, Deferred Vested, and Retired)

The demographic and economic (other than the investment rate of return) actuarial assumptions are based on the recommendations from the July 1, 2018 – June 30, 2021 Experience Study, which was approved by the Board of Trustees on December 1, 2022. As a result of this Experience Study, termination rates, the percentage of members electing a deferred retirement benefit, ordinary disability rates, the mortality improvement scale, salary increase rates, and family composition assumptions were updated.

The assumed investment rate of return of 7.00% was recommended by the State Treasurer.

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices except as noted. In particular, the assumptions and methods (other than the asset method) used for funding purposes meet the requirements of the Actuarial Standards of Practice (ASOP), in particular ASOPs Nos. 4, 27 and 35. As noted above the asset method does not meet the requirements of ASOP No. 44.

GASB 67 and 68 Reports as of June 30, 2023

The purpose of the GASB 67 and 68 Reports as of June 30, 2023 is to provide accounting and financial reporting information under GASB 67 for TPAF and under GASB 68 for the State and Local employers. These reports are not appropriate for other purposes, including the measurement of funding requirements for TPAF.

For financial reporting purposes, the Total Pension Liability is based on the July 1, 2022 actuarial valuation updated to the measurement date of June 30, 2023. We are not aware of any other significant events between the valuation date and the measurement date, so the update procedures only included the addition of service cost and interest cost offset by actual benefit payments.

Please refer to our GASB 67 and 68 Reports as of June 30, 2023 for additional information related to the financial reporting of the Fund. We prepared the following schedules for inclusion in the Financial Section of the Annual Comprehensive Financial Report based on the June 30, 2023 GASB 67 and 68 reports:

- Change in Net Pension Liability

- Sensitivity of Net Pension Liability to Changes in Discount Rate
- Schedule of Changes in Net Pension Liability and Related Ratios
- Schedule of Employer Contributions
- Notes to the Schedule of Employer Contributions

The demographic and economic (other than the investment rate of return) actuarial assumptions are based on the recommendations from the July 1, 2018 – June 30, 2021 Experience Study performed by Cheiron and approved by the Board of Trustees on December 1, 2022. The assumptions used in the most recent reports are intended to produce results that, in the aggregate, reasonably approximate the anticipated future experience of the Plan. The next experience analysis is expected to cover the years through 2024.

Based on the State Treasurer's recommendation, the investment return assumption used to determine the Statutory Contribution amounts is 7.00% per annum.

In accordance with Paragraph 40 of GASB Statement No. 67, the projection of the Plan's fiduciary net position is based on a long-term expected rate of return of 7.00% per annum as recommended by the State Treasurer.

We certify that the reports were performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for disclosure purposes have been prepared in accordance with our understanding of generally accepted accounting principles as promulgated by the GASB.

Disclaimers

In preparing our reports, we relied on information (some oral and some written) supplied by the DPB. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

Cheiron's reports were prepared for TPAF for the purposes described herein and for use by the plan auditor in completing an audit related to matters herein. Other users of these reports are not intended as users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

These reports and their contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinions contained in these reports. These reports do not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Respectfully submitted,

Janet Cranna, FSA, FCA, MAAA, EA
Principal Consulting Actuary

Jonathan B. Chipko, FSA, MAAA, EA
Consulting Actuary

Anu Patel, FSA, MAAA, EA
Principal Consulting Actuary

Justin Runkel, ASA, MAAA, EA
Consulting Actuary

MEMBERSHIP INFORMATION

The data for this valuation was provided by the Division of Pensions and Benefits as of July 1, 2022. Cheiron did not audit any of the data. However, we did perform an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standards of Practice No. 23, Data Quality. The following is a list of data charts contained in this section:

- A-1: Contributing Active Member Data by Tier
- A-2: Non-Contributing Active Member Data by Tier
- A-3: Inactive Member Data by Status
- A-4: Reconciliation of Membership

Table A-1
Contributing Active Member Data by Tier

	July 1, 2022	July 1, 2021	% Change		July 1, 2022	July 1, 2021	% Change
Tier 1				**Tier 2**			
Count	65,416	69,217	-5.5%	Count	9,575	9,796	-2.3%
Average Age	51.1	50.7	0.8%	Average Age	44.5	43.7	2.0%
Average Service	22.0	21.3	3.3%	Average Service	14.5	13.5	7.3%
Average Appropriation Pay	$ 98,776	$ 95,996	2.9%	Average Appropriation Pay	$ 82,379	$ 78,287	5.2%
Total Appropriation Payroll	$ 6,461,532,427	$ 6,644,589,038	-2.8%	Total Appropriation Payroll	$ 788,775,286	$ 766,899,838	2.9%
Tier 3				**Tier 4**			
Count	4,779	4,898	-2.4%	Count	2,795	2,852	-2.0%
Average Age	43.5	42.6	2.0%	Average Age	41.7	40.9	2.2%
Average Service	12.9	11.9	8.3%	Average Service	11.7	10.7	9.2%
Average Appropriation Pay	$ 78,669	$ 74,986	4.9%	Average Appropriation Pay	$ 76,934	$ 73,128	5.2%
Total Appropriation Payroll	$ 375,959,195	$ 367,282,082	2.4%	Total Appropriation Payroll	$ 215,030,332	$ 208,560,958	3.1%
Tier 5				**Total**			
Count	60,506	54,758	10.5%	Count	143,071	141,521	1.1%
Average Age	37.0	36.4	1.5%	Average Age	44.3	44.2	0.1%
Average Service	5.6	5.3	6.2%	Average Service	14.1	14.0	0.2%
Average Appropriation Pay	$ 66,521	$ 64,325	3.4%	Average Appropriation Pay	$ 82,939	$ 81,328	2.0%
Total Appropriation Payroll	$ 4,024,895,111	$ 3,522,321,007	14.3%	Total Appropriation Payroll	$ 11,866,192,351	$ 11,509,652,923	3.1%

Reflects all records for multiple members, which are active members employed by more than one TPAF-participating employer at the same time.

Membership Information, *continued*

Table A-2
Non-Contributing Member Data by Tier

	July 1, 2022	July 1, 2021	% Change		July 1, 2022	July 1, 2021	% Change
Tier 1				**Tier 2**			
Count	7,249	7,433	-2.5%	Count	965	906	6.5%
Average Age	52.0	51.6	0.6%	Average Age	44.5	43.5	2.3%
Average Service	13.6	13.6	0.7%	Average Service	11.4	10.6	7.3%
Average Last Reported Pay	$ 68,970	$ 67,772	1.8%	Average Last Reported Pay	$ 69,485	$ 67,062	3.6%
Total Last Reported Pay	$ 468,578,994	$ 470,877,167	-0.5%	Total Last Reported Pay	$ 65,593,977	$ 59,014,804	11.1%
Tier 3				**Tier 4**			
Count	460	439	4.8%	Count	271	268	1.1%
Average Age	43.6	42.6	2.4%	Average Age	41.8	40.5	3.3%
Average Service	10.6	9.6	10.3%	Average Service	9.6	8.2	17.6%
Average Last Reported Pay	$ 69,625	$ 65,508	6.3%	Average Last Reported Pay	$ 70,023	$ 65,991	6.1%
Total Last Reported Pay	$ 31,539,985	$ 28,299,460	11.5%	Total Last Reported Pay	$ 18,556,187	$ 17,355,593	6.9%
Tier 5				**Total**			
Count	6,140	5,480	12.0%	Count	15,085	14,526	3.8%
Average Age	37.6	37.5	0.2%	Average Age	45.2	45.3	-0.3%
Average Service	4.1	3.6	12.5%	Average Service	9.4	9.4	0.4%
Average Last Reported Pay	$ 63,018	$ 60,991	3.3%	Average Last Reported Pay	$ 66,633	$ 65,075	2.4%
Total Last Reported Pay	$ 362,919,630	$ 312,335,817	16.2%	Total Last Reported Pay	$ 947,188,773	$ 887,882,841	6.7%

Average pay calculations exclude 870 and 882 members with no reported pay information as of July 1, 2022 and July 1, 2021, respectively.

Includes 15 and 17 members reported as deferred beneficiaries as of July 1, 2022 and July 1, 2021, respectively.

Membership Information, *continued*

Table A-3
Inactive Member Data by Status

	July 1, 2022	July 1, 2021	% Change
Retirees			
Count	99,963	98,582	1.4%
Annual Retirement Allowances	$ 4,342,838,831	$ 4,261,814,061	1.9%
Average Retirement Allowance	$ 43,444	$ 43,231	0.5%
Beneficiaries			
Count	7,775	7,418	4.8%
Annual Retirement Allowances	$ 216,563,763	$ 204,475,851	5.9%
Average Retirement Allowance	$ 27,854	$ 27,565	1.0%
Ordinary Disability			
Count	3,401	3,397	0.1%
Annual Retirement Allowances	$ 100,587,516	$ 99,513,291	1.1%
Average Retirement Allowance	$ 29,576	$ 29,294	1.0%
Accidental Disability			
Count	281	280	0.4%
Annual Retirement Allowances	$ 13,392,891	$ 13,090,361	2.3%
Average Retirement Allowance	$ 47,662	$ 46,751	1.9%
In-Pay Total			
Count	**111,420**	**109,677**	1.6%
Annual Retirement Allowances	**$ 4,673,383,001**	**$ 4,578,893,564**	2.1%
Average Retirement Allowance	**$ 41,944**	**$ 41,749**	0.5%
Deferred Vested Members			
Count	316	354	-10.7%
Annual Retirement Allowances	$ 5,745,240	$ 6,566,904	-12.5%
Average Retirement Allowance	$ 18,181	$ 18,551	-2.0%

QDRO benefits included with member records for valuation purposes.

Membership Information, *continued*

Table A-4
Reconciliation of Plan Membership from July 1, 2021 to July 1, 2022

	Contributing Actives	Non-Contributing Members	Deferred Beneficiaries	Deferred Vested	Retired	Disabled	Beneficiaries	Total
1. July 1, 2021	**141,521**	**14,509**	**17**	**354**	**98,582**	**3,677**	**7,418**	**266,078**
2. Additions								
a. New Entrants	8,597	404						9,001
b. New Beneficiaries							154	154
c. Data Corrections		3			11			14
d. Total	8,597	407	0	0	11	0	154	9,169
3. Reductions								
a. Withdrawal/Certain Period End	(655)	(2,180)						(2,763)
b. Died without Beneficiary	(83)	(74)		(1)	(1,951)	(116)	(360)	(2,585)
c. Data Corrections	(4)		(2)			(1)		(7)
d. Total	(742)	(2,182)	(2)	(1)	(1,951)	(117)	(360)	(5,355)
4. Changes in Status								
a. Contributing Actives	2,087	(2,085)		(2)				0
b. Non-Contributing Members	(4,794)	4,794						0
c. Deferred Beneficiary								0
d. Deferred Vested	(3)	(29)		32				0
e. Retired	(3,517)	(263)		(67)	3,487			0
f. Disabled	(70)	(78)				148		0
g Died with beneficiary	(8)	(3)			(526)	(26)	563	0
h. Total	(6,305)	2,336	0	(37)	3,321	122	563	0
5. July 1, 2022	**143,071**	**15,070**	**15**	**316**	**99,963**	**3,682**	**7,775**	**269,892**

Reflects all records for multiple members, which are active members employed by more than one TPAF-participating employer at the same time.

QDRO benefits included with member records for valuation purposes.

ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Investment Rate of Return — 7.00% per annum, compounded annually.

2. Administrative Expenses — No explicit assumption is made for administrative expenses for funding purposes per the funding methodology prescribed by NJ State Statute.

3. Interest Crediting Rate on Accumulated Deductions — 7.00% per annum, compounded annually. Interest credits are assumed to end upon termination.

4. Cost-of-Living Adjustments (COLAs) — No future COLAs are assumed. Previously granted COLAs are included in the data.

5. Salary Increases — Salary increases vary by years of service and time period. Annual salary increases are shown below.

Years of Service	Salary Increase
0-2	4.25%
3	4.40
4	4.55
5	4.70
6	4.85
7	5.00
8	5.15
9	5.30
10	5.40
11	5.50
12-16	5.65
17	4.90

Years of Service	Salary Increase
18	4.50%
19	4.25
20	4.05
21	3.85
22	3.65
23	3.45
24	3.25
25	3.05
26	2.95
27-28	2.85
29+	2.75

Salary increases are assumed to occur on October 1.

Non-contributing members reported with a salary are assumed to have no future salary increases.

6. 401 (a)(17) Pay Limit — $305,000 in 2022 increasing 2.75% per annum, compounded annually.

7. Social Security Wage Base — $147,000 in 2022 increasing 3.25% per annum, compounded annually.

Actuarial Assumptions and Methods, *continued*

8. Termination

Termination rates are as follows:

Service	Rates
0	6.75%
1	6.75
2	5.50
3	4.50
4	4.00
5	3.00
6	2.75
7	2.50
8	2.50
9	2.25
10	2.25
11	2.10
12	1.95
13	1.65
14	1.35
15	1.05
16	1.00
17	0.90
18	0.70
19	0.55
20	0.55
21	0.50
22	0.40
23	0.30
24-29	0.30

No termination is assumed after attainment of retirement eligibility.

70% of members with 10 or more years of service at termination are assumed to elect a deferred retirement benefit.

All other members are assumed to receive a refund of Accumulated Deductions with credited interest.

Actuarial Assumptions and Methods, *continued*

9. Disability

Representative disability rates are as follows:

Age	Ordinary	Accidental
25	0.005%	0.006%
30	0.005	0.006
35	0.040	0.006
40	0.085	0.006
45	0.110	0.006
50	0.160	0.006
55	0.245	0.006

Accidental disability rates apply at all ages.

Ordinary disability rates apply upon attainment of 10 years of service until the attainment of age 55 with at least 25 years of service.

Members are assumed to receive the greater of the applicable disability benefit or the early or service retirement benefit, depending on eligibility.

Tier 4 and Tier 5 members are not eligible for the Ordinary or Accidental Disability benefits but the disability rates still apply. Such members terminating under the disability decrement are assumed to separate from service and elect a deferred retirement benefit.

10. Mortality

Pre-Retirement Mortality (Non-Annuitants): The Pub-2010 Teachers Above-Median Income Employee mortality table *[PubT-2010(A) Employee]* as published by the Society of Actuaries with a 93.9% adjustment for males and 85.3% adjustment for females, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021. All pre-retirement deaths are assumed to be ordinary deaths.

Healthy Retirees and Beneficiaries (Healthy Annuitants): The Pub-2010 Teachers Above-Median Income Healthy Retiree mortality table *[PubT-2010(A) Healthy Retiree]* as published by the Society of Actuaries with a 114.7% adjustment for males and 99.6% adjustment for females, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

Disabled Retirees (Disabled Annuitants): The Pub-2010 Non-Safety Disabled Retiree mortality table *[PubNS-2010 Disabled Retiree]* as published by the Society of Actuaries with a 106.3% adjustment for males and 100.3% adjustment for females, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

Actuarial Assumptions and Methods, *continued*

11. Retirement

Retirement rates for Tier 1-4 members are as follows:

Age	Less Than 25 Years of Service	25 Years of Service	26 or More Years of Service
<50	N/A	1.5%	1.5%
50	N/A	1.5	1.5
51	N/A	2.0	2.0
52	N/A	3.0	2.5
53	N/A	4.0	3.0
54	N/A	6.0	3.5
55	N/A	10.0	13.0
56	N/A	18.0	17.0
57	N/A	18.0	17.0
58	N/A	20.0	17.0
59	N/A	25.0	17.0
60	4.0	25.0	20.0
61	6.0	25.0	22.0
62	6.0	33.0	27.0
63	8.0	42.0	30.0
64	8.0	42.0	30.0
65	12.0	42.0	30.0
66	18.0	55.0	35.0
67	18.0	55.0	40.0
68	18.0	55.0	30.0
69	18.0	55.0	30.0
70	18.0	55.0	30.0
71	18.0	55.0	30.0
72	18.0	55.0	30.0
73	18.0	55.0	30.0
74	18.0	55.0	30.0
75	100.0	100.0	100.0

Rates apply upon retirement eligibility by tier.

Actuarial Assumptions and Methods, *continued*

Retirement rates for Tier 5 members are as follows:

Age	Less Than 25 Years of Service	25 Years of Service	26 to 29 Years of Service	30 Years of Service	31 or More Years of Service
<50	N/A	N/A	N/A	1.5%	1.5%
50	N/A	N/A	N/A	1.5	1.5
51	N/A	N/A	N/A	2.0	2.0
52	N/A	N/A	N/A	3.0	2.5
53	N/A	N/A	N/A	4.0	3.0
54	N/A	N/A	N/A	6.0	3.5
55	N/A	N/A	N/A	10.0	13.0
56	N/A	N/A	N/A	18.0	17.0
57	N/A	N/A	N/A	18.0	17.0
58	N/A	N/A	N/A	20.0	17.0
59	N/A	N/A	N/A	25.0	17.0
60	N/A	N/A	N/A	25.0	20.0
61	N/A	N/A	N/A	25.0	22.0
62	N/A	N/A	N/A	33.0	27.0
63	N/A	N/A	N/A	42.0	30.0
64	N/A	N/A	N/A	42.0	30.0
65	12.0	42.0	42.0	42.0	30.0
66	18.0	55.0	35.0	35.0	35.0
67	18.0	55.0	40.0	40.0	40.0
68	18.0	55.0	30.0	30.0	30.0
69	18.0	55.0	30.0	30.0	30.0
70	18.0	55.0	30.0	30.0	30.0
71	18.0	55.0	30.0	30.0	30.0
72	18.0	55.0	30.0	30.0	30.0
73	18.0	55.0	30.0	30.0	30.0
74	18.0	55.0	30.0	30.0	30.0
75	100.0	100.0	100.0	100.0	100.0

Actuarial Assumptions and Methods, *continued*

12. Family Composition Assumptions

For members not currently in receipt, 60% of members are assumed married to spouses of the opposite sex. Males are assumed to be two years older than females.

For purposes of the optional form of payment death benefit for members currently in receipt, beneficiary status is based on the beneficiary allowance reported. If no beneficiary date of birth is provided, the beneficiary is assumed to be the member's spouse of the opposite sex with males assumed to be two years older than females.

No additional dependent children or parents are assumed.

13. Form of Payment

Current actives are assumed to elect the Maximum Option.

14. Data

Information provided by the prior actuary was relied upon for the purposes of setting the status of and valuing non-contributing records. For non-contributing terminated members, a deferred retirement benefit is estimated, when applicable, based on the last known salary. For non-contributing members with incomplete information, the benefit is based on the Annuity Savings Fund.

Deferred beneficiaries were reported separately from other non-contributing members for the first time in 2021. The benefit is based on the Annuity Savings Fund.

For current beneficiaries with incomplete information, reasonable assumptions were made based on information available in prior years.

Inactive participants receiving benefits according to the 2021 data but omitted from the 2022 data are assumed to have died without a beneficiary.

Tier 4 and 5 members on long-term disability appeared on the active data for the first time in 2019. The number of members on long-term disability is immaterial for valuation purposes. Therefore, we valued these members as regular contributing and non-contributing members while we gain clarity on what happens with these members.

15. Rationale for Assumptions

The demographic and economic assumptions used in this report, except for the investment return assumption, reflect the results of the July 1, 2018 – June 30, 2021 Experience Study, which was approved by the Board of Trustees on December 1, 2022. The investment return assumption was recommended by the State Treasurer.

16. Changes in Assumptions Since Last Valuation

Termination rates, the percentage of members electing a deferred retirement benefit, ordinary disability rates, the mortality improvement scale, salary increase rates, and family composition assumptions were updated based on the July 1, 2018 – June 30, 2021 Experience Study, which was approved by the Board of Trustees on December 1, 2022. For a detailed description of each of the assumptions before and after the changes reflected in this valuation, please reference the Experience Study.

Actuarial Assumptions and Methods, *continued*

B. Projection Assumptions

1. Investment Rate of Return 7.00% per annum, compounded annually.

2. Appropriation Percentages The State is assumed to appropriate 100% of the Statutory contribution in FYE 2024 and each year thereafter.

3. Administrative Expenses The actual administrative expenses paid in FYE 2022 are assumed to increase by 2.75% per annum, compounded annually.

4. New Entrants

- Contributing active population assumed to remain at 2022 levels.
- Assumed to join mid-year.
- Age/sex distributions based on the last three years of new hires.
- Salary based on salary for most recent hires reported on 2022 data.
- New entrant salary assumed to increase with the salary increase rates applicable for members with 29 or more years of service (i.e., 2.75%).

5. Demographic Assumptions Same as those used for valuation purposes.

6. Projection Basis This report includes projections of future assets, liabilities, funded status and contributions for the purpose of assisting the Board of Trustees with the management of the Fund.

The projections are based on the same census data and financial information as of July 1, 2022 which has been used for the actuarial valuation. The projections assume continuation of the plan provisions and actuarial assumptions in effect as of July 1, 2022 and do not reflect the impact of any changes in benefits or actuarial assumptions that may be adopted after July 1, 2022 unless otherwise indicated. While the assumptions individually are reasonable for the underlying valuation that supports the projections, specifically for projection purposes, they are also considered reasonable in the aggregate.

The projections are based on our proprietary model *PScan* developed by our firm that utilizes the results shown in this valuation report. The projections assume that all future assumptions are met except where indicated with respect to future investment returns and demographic assumptions. The future outcomes become increasingly uncertain over time, and therefore the general trends and not the absolute values should be considered in the review of these projections.

C. Actuarial Methods

The actuarial methods used for determining State contributions are described below.

1. Actuarial Cost Method

The actuarial cost method for funding calculations is the Projected Unit Credit Cost Method. Non-contributing members reported with a salary use the Projected Unit Credit Cost Method without any future projected salary increases.

The actuarial liability is calculated as the actuarial present value of the projected benefits linearly allocated to periods prior to the valuation year based on service. Refunds are valued as the Accumulated Deductions with interest as of the valuation date as provided by the Division of Pensions and Benefits. The unfunded actuarial liability is the actuarial liability on the valuation date less the actuarial value of assets.

Actuarial Assumptions and Methods, *continued*

In accordance with Chapter 78, P.L. 2011:

- Beginning with the July 1, 2010 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars, it will amortize the unfunded accrued liability over an open 30-year period.
- Beginning with the July 1, 2019 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars, it will amortize the unfunded accrued liability over a closed 30-year period (i.e., for each subsequent actuarial valuation the amortization period shall decrease by one year).
- Beginning with the July 1, 2029 actuarial valuation, when the remaining amortization period reaches 20 years, any increase or decrease in the unfunded accrued liability as a result of actuarial losses or gains for subsequent valuation years shall serve to increase or decrease, respectively, the amortization period for the unfunded accrued liability, unless an increase in the amortization period will cause it to exceed 20 years. If an increase in the amortization period as a result of actuarial losses for a valuation year would exceed 20 years, the accrued liability contribution shall be computed for the valuation year using a 20-year amortization period.

To the extent that the amortization period remains an open period in future years and depending upon the specific circumstances, it should be noted that in the absence of emerging actuarial gains or contributions made in excess of the actuarially determined contribution, any existing unfunded accrued liability may not be fully amortized in the future.

The non-contributory group life insurance benefit is funded separately through a term cost.

2. Asset Valuation Method

For the purposes of determining contribution rates, an actuarial value of assets is used that dampens the volatility in the market value of assets, resulting in a smoother pattern of contributions.

The actuarial value of assets is adjusted to reflect actual contributions, benefit payments and administrative expenses, and an assumed rate of return on the previous year's assets and current year's cash flow at the prior year's actuarial valuation interest rate, with a further adjustment to reflect 20% of the difference between the resulting value and the actual market value of Fund assets.

3. Contributions

Chapter 83, P.L. 2016 requires the State to make the required pension contributions on a quarterly basis in each fiscal year according to the following schedule: at least 25% by September 30, at least 50% by December 31, at least 75% by March 31, and at least 100% by June 30. As such, contributions are assumed to be made on a quarterly basis with the first contribution 15 months after the associated valuation date, with the exception of the FYE 2022 contribution. For FYE 2022 only, the entire contribution was made in a single payment on July 1, 2021 based on information provided by the DPB.

Chapter 98, P.L. 2017, the Lottery Enterprise Contribution Act, allows the TPAF to receive 77.78% of the proceeds of the Lottery Enterprise, based upon their members' past or present employment in schools and institutions in the State for a term of 30 years. Revenues from Chapter 98, P.L. 2017, the Lottery Enterprise Contribution Act, are assumed to be contributed to the trust on a monthly basis. The State's pension contribution is reduced by the product of the allocable percentage for the TPAF, the adjustment percentage, and the special asset value.

Contributions payable in the fiscal year starting on the valuation date are included in the actuarial value of assets as receivable contributions, discounted by the applicable valuation interest rate.

Legislation has provided for additional benefits and/or funding requirements which are included in this valuation and are described as follows.

Early Retirement Incentive Programs

State and Local employers which elected to participate in various early retirement incentive programs authorized by NJ Statute make contributions to cover the cost of these programs over amortization periods elected by the employer to the extent permitted by NJ Statute.

Actuarial Assumptions and Methods, *continued*

Chapter 133. P.L. 2001

Chapter 133, P.L. 2001 increased the accrual rate from 1/60 to 1/55. In addition, it lowered the age required for a veteran benefit equal to 1/55 of highest 12-month Compensation for each Year of Service from 60 to 55.

Chapter 133, P.L. 2001 established the Benefit Enhancement Fund (BEF) to fund the additional annual employer normal contribution due to the Statute's increased benefits. (Chapter 353, P.L. 2001 extended this coverage to this Statute's additional annual employer normal contribution.) If the assets in the BEF are insufficient to cover the normal contribution for the increased benefits for a valuation period, the State will pay such amount. As of July 1, 2022, there are no assets in the BEF.

4. Valuation Software

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

5. Changes in Methods Since Last Valuation

None.

SUMMARY OF PLAN PROVISIONS

This summary of Plan provisions provides an overview of the major provisions of the TPAF used in the actuarial valuation. It is not intended to replace the more precise language of the NJ State Statutes, Title 18A, Chapter 66, and if there is any difference between the description of the plan herein and the actual language in the NJ State Statutes, the NJ State Statutes will govern. This valuation is prepared based on plan provisions in effect as of July 1, 2022 and does not reflect the impact of any changes in benefits that may have been approved after the valuation date.

1. Eligibility for Membership

Employees appointed to positions requiring certification by the New Jersey Department of Education as members of a regular teaching or professional staff of a public school system in New Jersey are required to enroll as a condition of employment. Employees of the Department of Education holding unclassified, professional and certificated titles are eligible for membership. Temporary or substitute employees are not eligible. The eligible employee must be scheduled to work at least 32 hours per week effective May 22, 2010, per Chapter 1, P.L. 2010.

a) Class B (or Tier 1) Member: Any member hired prior to July 1, 2007.

b) Class D (or Tier 2) Member: Any member hired on or after July 1, 2007 and before November 2, 2008.

c) Class E (or Tier 3) Member: Any member hired after November 1, 2008 and before May 22, 2010.

d) Class F (or Tier 4) Member: Any member hired after May 21, 2010 and before June 28, 2011.

e) Class G (or Tier 5) Member: Any member hired on or after June 28, 2011.

2. Plan Year

The 12-month period beginning on July 1 and ending on June 30.

3. Years of Service

A year of service for each year an employee is a Member of the Retirement System plus service, if any, covered by a prior service liability. Tier 4 members must be scheduled to work at least 32 hours per week, Tier 3 members must have an annual salary of $7,500 (indexed for inflation) and other members must have an annual salary of $500.

4. Compensation

Base salary upon which contributions by a Member to the Annuity Savings Fund were based. Chapter 113, P.L. 1997 provides that Compensation cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code. Chapter 103, P.L. 2007 provides that for a Tier 2, 3, 4 or 5 Member, Compensation cannot exceed the annual maximum wage contribution base for Social Security, pursuant to the Federal Insurance Contribution Act.

5. Final Compensation

The average annual compensation upon which contributions by a Member are made for the three consecutive years of service immediately preceding retirement, or the highest three fiscal years of service, if greater. Chapter 1, P. L. 2010 provides that for a Tier 4 or Tier 5 Member, Final Compensation is the average annual compensation upon which contributions by a Member are made for the five consecutive years of service immediately preceding retirement, or the highest five fiscal years of service, if greater.

6. Final Year Compensation

The compensation upon which contributions by a Member to the Annuity Savings Fund are based in the last year of service.

Summary of Plan Provisions, *continued*

7. Accumulated Deductions

The sum of all amounts deducted from the compensation of a Member or contributed by the Member or on the Member's behalf without interest.

8. Interest Credits on Accumulated Deductions

Members receive interest credits while contributing and for the first two years of inactivity. The rate depends on the type of benefit. Prior to July 1, 2018, members received interest credits for the entire period of inactivity until retirement or death.

9. Member Contributions

Each Member contributes a percentage of Compensation. Effective October 1, 2011, Chapter 78, P.L. 2011 set the member contribution rate at 6.5% and increased it by 1/7 of 1% each July thereafter until it attained an ultimate rate of 7.5% on July 1, 2018.

10. Benefits

a) Service Retirement: For a Tier 1 or Tier 2 Member, age 60. For a Tier 3 or Tier 4 Member, age 62. For a Tier 5 Member, age 65.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total allowance of:

(1) For a Tier 1, 2 or 3 Member, 1/55 of Final Compensation for each Year of Service.

(2) For a Tier 4 or 5 Member, 1/60 of Final Compensation for each Year of Service.

b) Early Retirement: Prior to eligibility for Service Retirement. For a Tier 1, 2, 3 or 4 Member, 25 Years of Service. For a Tier 5 Member, 30 Years of Service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total allowance of:

(1) For a Tier 1 Member, the Service Retirement benefit reduced by 1/4 of one percent for each month the retirement date precedes age 55.

(2) For a Tier 2 Member, the Service Retirement benefit reduced by 1/12 of one percent for each month the retirement date precedes age 60 through age 55 and by 1/4 of one percent for each month the retirement date precedes age 55.

(3) For a Tier 3 or 4 Member, the Service Retirement benefit reduced by 1/12 of one percent for each month the retirement date precedes age 62 through age 55 and by 1/4 of one percent for each month the retirement date precedes age 55.

(4) For a Tier 5 Member, the Service Retirement benefit reduced by 1/4 of one percent for each month the retirement date precedes age 65.

c) Veteran Retirement: Age 55 with 25 Years of Service or Age 60 with 20 Years of Service for a qualified military veteran who retires directly from active service.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total allowance of the greater of:

(1) 54.5% of highest 12-month Compensation, or

(2) For a member who is at least age 55 with 35 Years of Service, 1/55 of highest 12-month Compensation for each Year of Service.

Veterans may receive a Service Retirement benefit if greater.

Summary of Plan Provisions, *continued*

d) Deferred Retirement: Termination of service prior to eligibility for Service Retirement with 10 Years of Service.

Benefit is either:

(1) A refund of Accumulated Deductions plus, if the member has completed three years of service, interest accumulated at 2.0% per annum; or

(2) A deferred life annuity, commencing at age 60 for a Tier 1 or Tier 2 Member, age 62 for a Tier 3 or Tier 4 Member or age 65 for a Tier 5 Member, comprised of a member annuity plus an employer pension which together will provide a total allowance of the Service Retirement benefit based on Final Compensation and Years of Service at date of termination.

For Members who die during the deferral period, the benefit is a return of Accumulated Deductions with credited interest.

e) Non-Vested Termination: Termination of service prior to eligibility for Service Retirement and less than 10 Years of Service.

Benefit is a refund of Accumulated Deductions plus, if the member has completed three years of service, interest accumulated at 2.0% per annum.

f) Death Benefits

(1) Ordinary Death Before Retirement: Death of an active contributing Member. Benefit is equal to:

a. Lump sum payment equal to 150% of Final Year Compensation, also known as the non-contributory group life insurance benefit, plus

b. Accumulated Deductions with credited interest.

(2) Accidental Death Before Retirement: Death of an active Member resulting from injuries received from an accident during performance of duty and not a result of willful negligence. Benefit is equal to:

a. Lump sum payment equal to 150% of Final Year Compensation, also known as the non-contributory group life insurance benefit, plus

b. Spouse life annuity of 50% of Final Year Compensation payable until spouse's death or remarriage. If there is no surviving spouse or upon death or remarriage, a total of 20% (35%, 50%) of Final Year Compensation payable to one (two, three or more) dependent child(ren). If there is no surviving spouse or dependent child(ren), 25% (40%) of Final Year Compensation to one (two) dependent parent(s). If there is no surviving spouse, dependent child(ren) or parent(s), the benefit is a refund of Accumulated Deductions with credited interest.

(3) Death After Retirement: Death of a retired Member. Benefit is equal to:

a. Lump sum payment equal to 3/16 of Final Year Compensation for a Member retired under service, early, veteran or deferred retirement with 10 Years of Service. For a Member receiving a disability benefit, lump sum payment of 150% of Final Year Compensation if death occurs prior to age 60 and 3/16 of Final Compensation if death occurs after age 60. This benefit is also known as the non-contributory group life insurance benefit, plus

b. Any survivor benefit due under the Member's optional form of payment election. Previously granted COLAs also apply to life annuities.

Members are also eligible for a voluntary, employee-paid life insurance policy, known as the contributory group life insurance policy. This benefit is not paid through the Fund and is not considered for valuation purposes.

g) Disability Retirement

(1) Ordinary Disability Retirement: 10 years of service and totally and permanently incapacitated from the performance of normal or assigned duties. Only available to Tier 1, 2 and 3 Members.

Summary of Plan Provisions, *continued*

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total allowance of:

a. 1.64% of Final Compensation for each Year of Service; or

b. 43.6% of Final Compensation.

(2) Accidental Disability Retirement: Total and permanent incapacitation as a direct result of a traumatic event occurring during and as a result of the performance of regular or assigned duties. Only available to Tier 1, 2 and 3 Members.

Benefit is an annual retirement allowance comprised of a member annuity plus an employer pension which together will provide a total allowance of 72.7% of the Compensation at the date of injury.

The pension portion of the benefit will be offset for any periodic Workers' Compensation benefits.

Tier 4 and Tier 5 Members are eligible for long-term disability coverage. This benefit is not paid through the Fund and is not considered for valuation purposes. Both Member and employer contributions to the Fund continue while on long-term disability, with the policy covering the Member portion. The long-term disability benefit equals 60% of Final Year Compensation and may be offset for other periodic benefits, such as Workers' Compensation, short-term disability or Social Security. The long-term disability benefit may continue through the earlier of age 70 or commencement of a retirement benefit under the Fund.

11. Optional Forms of Payment

The member may elect the following forms of payment:

a) Maximum Option: Single life annuity with a return of the balance of the Accumulated Deductions with credited interest.

b) Option 1: Single life annuity with a return of the balance of the initial reserve.

c) Option 2: 100% joint and survivor annuity.

d) Option 3: 50% joint and survivor annuity.

e) Option 4: Other percentage joint and survivor annuity.

f) Option A: 100% pop-up joint and survivor annuity.

g) Option B: 75% pop-up joint and survivor annuity.

h) Option C: 50% pop-up joint and survivor annuity.

i) Option D: 25% pop-up joint and survivor annuity.

12. Cost-of-Living Adjustments

Also known as Pension Adjustments. Provided annually to retirees and survivors after 24 months of retirement prior to July 1, 2011. Chapter 78, P.L. 2011 eliminated future adjustments effective July 1, 2011. Adjustments may be reinstated in the future subject to certain conditions outlined in Chapter 78, P.L. 2011.

13. Changes in Plan Provisions Since Last Valuation

Chapter 296, P.L. 2021 permits a certified school nurse who is retired from TPAF to return to employment for up to two years without reenrollment in TPAF.

Chapter 408, P.L. 2021 permits teachers and professional staff members who provide special services and retired from TPAF to return to employment for up to two years without reenrollment in TPAF if the return to employment begins during the 2021-2022 or 2022-2023 school years.

HISTORICAL DATA AND REQUIRED ACFR EXHIBITS

In accordance with the Government Finance Officers Association (GFOA) and their recommended checklist for Annual Comprehensive Financial Reports (ACFRs), we have prepared the following schedules for the Fund. The GFOA checklist uses the term Actuarial Accrued Liability, which is the same as the Actuarial Liability used elsewhere in this report.

Table D-1
Schedule of Retirees and Beneficiaries
Added to and Removed from Rolls

Valuation Date July 1,	Added to Rolls		Removed from Rolls		Rolls at End of Year		Average Annual Allowance[1]	% Increase in Average Annual Allowance[1]
	Number	Annual Allowance	Number[1]	Annual Allowance	Number[1]	Annual Allowance		
2022	4,723	$ 202,806,854	2,980	$ 109,642,204	111,420	$ 4,673,383,001	$ 41,944	0.47%
2021	4,838	208,732,721	3,051	109,537,806	109,677	4,578,893,564	41,749	0.58%
2020	4,485	190,920,500	2,983	104,839,770	107,890	4,478,447,877	41,509	0.57%
2019	4,500	190,652,924	2,815	95,949,554	106,388	4,391,260,795	41,276	0.61%
2018	4,634	192,293,599	2,511	82,862,457	104,703	4,295,446,681	41,025	1.50%
2017	4,792	N/A	2,510	N/A	103,528	4,184,662,175	40,421	0.61%
2016	5,460	N/A	2,444	N/A	101,246	4,067,574,984	40,175	0.75%
2015	5,789	N/A	2,381	N/A	98,230	3,916,956,144	39,875	0.81%
2014	5,284	N/A	2,191	N/A	94,822	3,750,680,254	39,555	1.04%
2013	4,614	N/A	2,193	N/A	91,729	3,591,007,462	39,148	0.96%

[1] Beginning with the 2018 valuation, QDRO records excluded from headcounts and QDRO benefits included with member records.
This change resulted in 948 fewer records on the rolls as of July 1, 2018.

Historical Data and Required ACFR Exhibits, *continued*

Table D-2
Schedule of Active Member Valuation Data

Valuation Date July 1,	Number of Contributing Active Members[1]	Annual Compensation[1]	Annual Average Compensation[1]	% Increase in Average Annual Compensation[1]	Number of Participating Employers[2]
2022	143,071	$ 11,866,192,351	$ 82,939	1.98%	678
2021	141,521	11,509,652,923	81,328	2.05%	678
2020	142,283	11,338,928,538	79,693	2.16%	680
2019	141,795	11,061,603,138	78,011	1.72%	677
2018	141,128	10,823,504,797	76,693	1.84%	678
2017	143,092	10,775,872,458	75,307	1.59%	N/A
2016	142,845	10,588,493,706	74,126	1.02%	N/A
2015	142,454	10,453,176,648	73,379	0.82%	N/A
2014	141,874	10,325,972,743	72,783	2.83%	N/A
2013	151,318	10,710,424,746	70,781	1.36%	N/A

[1] Prior to July 1, 2018, includes non-contributing active members reported on active data with compensation.
Prior to July 1, 2014, includes all non-contributing active members.

[2] Number of locations reporting contributing active members. For GASB reporting purposes, the State may be considered the participating employer for multiple locations.

Historical Data and Required ACFR Exhibits, *continued*

Table D-3
Schedule of Funding Progress

Valuation Date July 1,	Actuarial Value of Assets[1] (a)	Actuarial Accrued Liability (b)	(Surplus)/ Unfunded Actuarial Accrued Liability (c) = (b) - (a)	Funded Ratio (a)/(b)	Covered Payroll (d)	(Surplus)/Unfunded Actuarial Accrued Liability as % of Covered Payroll (c)/(d)
2022	$30,555,283,645	$ 72,609,415,596	$ 42,054,131,951	42.08%	$ 11,866,192,351	354.40%
2021	29,103,426,597	70,520,215,914	41,416,789,317	41.27%	11,509,652,923	359.84%
2020	26,582,892,740	66,877,318,975	40,294,426,235	39.75%	11,338,928,538	355.36%
2019	26,375,429,936	65,470,847,885	39,095,417,949	40.29%	11,061,603,138	353.43%
2018	26,308,754,955	60,971,919,315	34,663,164,360	43.15%	10,823,504,797	320.26%
2017	26,549,410,215	59,954,548,700	33,405,138,485	44.28%	10,775,872,458	310.00%
2016	27,169,758,348	57,865,971,163	30,696,212,815	46.95%	10,588,493,706	289.90%
2015	28,301,404,184	55,359,377,071	27,057,972,887	51.12%	10,453,176,648	258.85%
2014	29,044,777,902	53,749,976,641	24,705,198,739	54.04%	10,325,972,743	239.25%
2013	30,469,857,304	52,366,655,055	21,896,797,751	58.19%	10,710,424,746	204.44%

[1] Includes receivable amounts. Excludes Special Asset Value.

Historical Data and Required ACFR Exhibits, *continued*

Table D-4
Schedule of Funded Liabilities by Type (Solvency Test)

Valuation Date July 1,	Actuarial Accrued Liability for			Actuarial Value of Assets[1]	Portion of Actuarial Accrued Liabilities Covered by Actuarial Value of Assets		
	Contributing & Non-Contributing Active Member Contributions (1)	Retirees, Beneficiaries & Deferred Vesteds (2)	Contributing & Non-Contributing Active Member Benefits Financed by Employer (3)		(1)	(2)	(3)
2022	$ 16,635,719,916	$ 44,772,504,693	$ 11,201,190,987	$ 30,555,283,645	100.00%	31.09%	0.00%
2021	15,771,203,493	44,565,286,920	10,183,725,501	29,103,426,597	100.00%	29.92%	0.00%
2020	14,960,290,939	42,958,862,310	8,958,165,726	26,582,892,740	100.00%	27.06%	0.00%
2019	14,079,166,893	42,467,777,887	8,923,903,105	26,375,429,936	100.00%	28.95%	0.00%
2018	13,283,767,530	40,171,903,581	7,516,248,204	26,308,754,955	100.00%	32.42%	0.00%
2017	12,466,587,057	39,224,970,512	8,262,991,131	26,549,410,215	100.00%	35.90%	0.00%
2016	11,709,150,079	38,027,977,392	8,128,843,692	27,169,758,348	100.00%	40.66%	0.00%
2015	11,129,745,608	36,128,130,029	8,101,501,434	28,301,404,184	100.00%	47.53%	0.00%
2014	10,624,778,098	34,587,834,921	8,537,363,622	29,044,777,902	100.00%	53.26%	0.00%
2013	10,079,938,128	33,312,970,535	8,973,746,392	30,469,857,304	100.00%	61.21%	0.00%

[1] Includes receivable amounts. Excludes Special Asset Value.

Historical Data and Required ACFR Exhibits, *continued*

Table D-5
Analysis of Financial Experience
Change in Unfunded Actuarial Accrued Liability

Valuation Date July 1,	Actuarial Value of Assets Investment (Gain)/Loss	Actuarial Accrued Liability (Gain)/Loss	Assumption & Method Changes	Plan/Policy Changes	Contributions[1]	Changes in Unfunded Actuarial Accrued Liability
2022	$ 502,986,803	$ 155,998,253	$ 491,814,993	$ 0	$ (513,457,415)	$ 637,342,634
2021	(381,830,446)	(26,516,157)	2,286,940,239	0	(756,230,554)	1,122,363,082
2020	575,855,892	70,026,855	0	0	553,125,539	1,199,008,286
2019	374,388,860	67,077,019	3,353,517,001	(15,561,490)	652,832,199	4,432,253,589
2018	367,568,407	140,440,865	(286,796,037)	0	1,036,812,640	1,258,025,875
2017	513,526,758	126,550,240	822,620,195	0	1,246,228,477	2,708,925,670
2016	859,296,816	173,672,067	1,144,195,634	0	1,461,075,411	3,638,239,928
2015	495,166,374	398,659,572	0	0	1,458,948,202	2,352,774,148
2014	350,424,947	114,878,752	0	0	2,343,097,289	2,808,400,988
2013	902,561,234	22,121,971	(404,297,149)	0	1,050,981,941	1,571,367,997

[1] Change due to contributions (greater)/less than normal cost plus interest on the Unfunded Actuarial Accrued Liability.

Segal

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January 2, 2024

Police and Firemen's Retirement System of New Jersey – Board of Trustees
Actuary's Certification Letter for GASB 67 and 68 Reports as of June 30, 2023

Dear Board Members:

This letter is being provided for purposes of the Actuarial Section of the Annual Comprehensive Financial Report for the Police and Firemen's Retirement System of New Jersey ("PFRS") as of June 30, 2023. Specifically, this letter certifies the GASB 67 and 68 report as of June 30, 2023 completed by Segal.

The GASB 67 and 68 report as of June 30, 2023, dated December 21, 2023, was prepared by Segal to present certain disclosure information required for accounting and financial reporting purposes for the State and Local Employers. It is not applicable for other purposes, including funding of PFRS. The following exhibits were included in our report:

- Net pension liability
- Determination of discount rate and investment rates of return
- Discount rate sensitivity
- Schedule of changes in Net Pension Liability – Last two fiscal years
- Deferred outflows and inflows of resources
- Schedule of recognition of change in total Net Pension Liability
- Pension expense
- Schedule of reconciliation of Net Pension Liability
- Schedule of contributions – Last ten fiscal years

The valuation is based on the following:

- The benefit provisions of PFRS, as defined in the Statute and as administered by the Board;
- The characteristics of covered active members, terminated vested members, and retired members and beneficiaries as of June 30, 2022, provided by the Division of Pensions and Benefits (DPB);
- The draft assets of the Plan as of June 30, 2023, provided by the DPB;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the July 1, 2023 actuarial funding valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board for the July 1, 2023 funding valuation, unless otherwise noted below.

As noted above, the measurement of the Total Pension Liability (TPL) as of June 30, 2023 is based on the actuarial funding valuation as of July 1, 2022 projected forward to the measurement date. Assumption and plans changes between July 1, 2022 and June 30, 2023 are also reflected, if applicable.

The demographic assumptions and economic assumptions except for the net investment return assumption are based on Actuarial Experience Study for the period July 1, 2018 through June 30, 2021, dated October 14, 2022. These changes were first reflected for GASB 67 and 68 purposes as of June 30, 2022 and with the July 1, 2022 actuarial funding valuation. There were no assumption changes made for GASB 67 and 68 purposes as of June 30, 2023 and with the July 1, 2013 funding valuation.

The net investment return assumption of 7.0% is the same as used for GASB 67 and 68 purposes as of June 30, 2022 and for actuarial funding purposes as of July 1, 2023. The net investment return is determined based on direction from the Chief Financial Officer of PFRS and as adopted by the Board of Trustees.

The following changes to the plan of benefits were made for purposes of determining the Total Pension Liability as of June 30, 2023:

- Senate Bill No. 3090, which changed the latest date that eligible participants may retire under the early retirement window provided by Chapter 52, P.L. 2021 from April 30, 2023 to April 30, 2026.

The actuarial assumptions are the same as those used for purposes of plan funding as of July 1, 2023.

We are not aware of any events, other than those noted above, between the funding valuation date and the GASB measurement date that would be required to be reflected in the Total Pension Liability.

The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that Local employer contributions and State contributions will be made at the statutory pension contribution amounts. The assumption that the State is paying 100% of the statutory pension contribution is based on the State making the full contribution for the fiscal years ended June 30, 2022 and June 30, 2023. For this purpose, only Local employer and State contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected Local employer and State contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Plan Fiduciary Net Position (FNP) was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the TPL.

This letter certifies that the GASB 67 and 68 report as of June 30, 2023 was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist the sponsors in preparing their financial report for their liabilities associated with the Police and Firemen's Retirement System of New Jersey. The census and financial information on which our calculations were based were provided by the Division of Pensions and Benefits. That assistance is gratefully acknowledged.

The measurements as of June 30, 2023 for GASB purposes may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Segal

The blended discount rate used for calculating total pension liability is based on a model developed by our Actuarial Technology and Systems unit, comprised of both actuaries and programmers. The model allows the client team, under the supervision of the responsible actuary, control over the entry of future expected contribution income, benefit payments and administrative expenses. The projection of fiduciary net position and the discounting of benefits is part of the model.

Regards,

Jonathan P. Scarpa, FSA, MAAA, EA
Vice President and Consulting Actuary

Segal

MEMBERSHIP INFORMATION

State Contributing Active Participants

As of June 30,	2022	2021	Change
Active participants	5,887[1]	6,445	-8.7%
Average age	40.6[2]	40.3	0.3
Average years of service	13.5[3]	13.2	0.3
Average compensation	$ 87,556[4]	$ 78,564	11.4%

[1] 3,171, 212, and 2,504, respectively for Tier 1, 2, and 3
[2] 46.8, 38.6, and 32.8, respectively for Tier 1, 2, and 3
[3] 19.7, 11.5, and 5.9, respectively for Tier 1, 2, and 3
[4] $100,655, $90,172, and $70,747, respectively for Tier 1, 2, and 3

Local Employers Contributing Active Participants

As of June 30,	2022	2021	Change
Active participants	34,004[1]	34,031	-0.1%
Average age	39.6[2]	39.8	-0.2
Average years of service	13.3[3]	13.5	-0.2
Average compensation	$ 107,161[4]	$ 104,778	2.3%

[1] 17,430, 482, and 16,092, respectively for Tier 1, 2, and 3
[2] 46.3, 37.9, and 32.4, respectively for Tier 1, 2, and 3
[3] 20.3, 11.8, and 5.8, respectively for Tier 1, 2, and 3
[4] $131,980, $113,780, and $80,079, respectively for Tier 1, 2, and 3

Inactive Participants and Non-Contributory Active Participants

In this year's valuation, there were 60[1] inactive participants with a vested right to a deferred or immediate vested benefit, the same number as in the prior year.

Additionally, this year's valuation includes liabilities for 1,341 Local Employers and 584 State non-contributing active members, as compared to 1,241 and 471 respectively in the prior year. These members are valued as active participants but are assumed to not earn future benefit accruals. The average last reported pay is $81,226 for Local members and $69,582 for State members.

[1] 8 State members with average monthly retirement allowance of $1,701 and 52 Local Employer members with average monthly retirement allowance of $2,117.

Membership Information, *continued*

State Retired Participants and Beneficiaries

As of June 30,	2022	2021	Change
Retired participants[1]	6,404	6,138	4.3%
Average age	62.7	62.5	0.2
Average retirement allowance	$4,252[2]	$4,198	1.3%
Beneficiaries	959	935	2.6%
Total monthly retirement allowance	$ 29,938,241	$ 28,336,037	5.7%

[1] As of June 30, 2022, there are 5,299 retirees and 1,105 disabled pensioners as compared to 5,037 and 1,101 in the prior year.
[2] $4,266 for police and $3,740 for firefighters.

Local Employers Retired Participants and Beneficiaries

As of June 30,	2022	2021	Change
Retired participants[1]	34,267	33,458	2.4%
Average age	64.4	64.1	0.3
Average retirement allowance	$ 5,641[2]	$ 5,539	1.8%
Beneficiaries	7,123	6,987	1.9%
Total monthly retirement allowance	$ 214,634,351	205,736,239	4.3%

[1] As of June 30, 2022, there are 29,241 retirees and 5,026 disabled pensioners as compared to 28,514 and 4,944 in the prior year.
[2] $5,613 for police and $5,872 for firefighters.

Active Liability by Type

The tables below show the Actuarial Liability by Tier for contributing and non-contributing active members, respectively, for State and Local employers as of July 1, 2022.

Contributing Actives by Tier				
	Number of Members	Appropriation Payroll[1]	Actuarial Liability	Gross Normal Cost
State				
Tier 1	3,171	$ 319,078,686	$ 1,571,600,025	$ 73,722,397
Tier 2	212	19,116,401	43,212,880	3,697,307
Tier 3	2,504	177,150,517	219,778,282	35,580,874
Total	5,887	$ 515,345,604	$ 1,834,591,186	$ 113,000,579
Local				
Tier 1	17,430	$ 2,300,418,376	$ 11,812,300,450	$ 524,245,421
Tier 2	482	54,841,948	127,406,339	10,642,857
Tier 3	16,092	1,288,625,700	1,640,467,873	260,081,550
Total	34,004	$ 3,643,886,024	$ 13,580,174,662	$ 794,969,828

[1] Excludes pay for members who attain the mandatory retirement age of 65 prior to midyear for State (Pay is included for Local Employers for this year in order to estimate impact of Chapter 9, P.L. 2022). Tier 1 members limited to the 401(a)(17) pay limit. Tier 2 and Tier 3 members limited to the Social Security Wage Base.

Membership Information, *continued*

Non-Contributing Actives by Tier				
	Number of Members	Last Reported Payroll[1]	Actuarial Liability	Gross Normal Cost
State				
Tier 1	307	$ 23,173,681	$ 95,549,517	$ 0
Tier 2	13	976,634	1,843,151	0
Tier 3	264	14,644,759	11,813,188	0
Total	584	$ 38,795,074	$ 109,205,857	$ 0
Local				
Tier 1	770	$ 68,312,642	$ 258,237,853	$ 0
Tier 2	24	2,276,306	4,963,283	0
Tier 3	547	34,410,594	33,927,521	0
Total	1,341	$ 104,999,542	$ 297,128,657	$ 0

[1] Excludes pay for members who attain the mandatory retirement age of 65 prior to midyear. Tier 1 members limited to the 401(a)(17) pay limit. Tier 2 and Tier 3 members limited to the Social Security Wage Base.

Table of Plan Demographics for State

	Year Ended June 30		
Category	2022	2021	Change From Prior Year
Contributing Active Participants in Valuation:			
Number	5,887	6,445	-8.7%
Average age	40.6	40.3	0.3
Average years of service	13.5	13.2	0.3
Projected total payroll for police	$ 512,070,814	$ 503,120,897	1.8%
Projected average payroll for police	$ 87,700	$ 78,637	11.5%
Projected total payroll for firefighters	$ 3,274,790	$ 3,221,495	1.7%
Projected average payroll for firefighters	$ 69,676	$ 68,542	1.7%
Non-Contributing Active Participants	584	471	24.0%
Inactive Vested Participants	8	10	-20.0%
Average monthly benefit	$ 1,701	$ 1,603	6.1%
Retired Participants:			
Number in pay status	5,299	5,037	5.2%
Average age	63.7	63.5	0.2
Average monthly benefit	$ 4,539	$ 4,488	1.1%

Membership Information, *continued*

Table of Plan Demographics for State, *continued*

Category	Year Ended June 30 2022	2021	Change From Prior Year
Ordinary Disabled Participants:			
Number in pay status	725	721	0.6%
Average age	59.3	59.1	0.2
Average monthly benefit	$ 2,361	$ 2,343	0.8%
Accidental Disabled Participants:			
Number in pay status	380	380	0.0%
Average age	54.4	53.5	0.9
Average monthly benefit	$ 3,865	$ 3,866	-0.3%
Beneficiaries:			
Number in pay status	959	935	2.6%
Average age	67.7	69.4	-1.7%
Average monthly benefit	$ 2,818	$ 2,749	2.5%

Table of Plan Demographics for Local

Category	Year Ended June 30 2022	2021	Change From Prior Year
Contributing Active Participants in Valuation:			
Number	34,004	34,031	-0.1%
Average age	39.6	39.8	-0.2
Average years of service	13.3	13.5	-0.2
Projected total payroll for police	$ 2,929,887,536	$ 2,875,097,908	1.9%
Projected average payroll for police	$ 107,298	$ 105,024	2.2%
Projected total payroll for firefighters	$ 713,998,488	$ 688,845,682	3.7%
Projected average payroll for firefighters	$ 106,599	$ 103,763	2.7%
Non-Contributing Active Participants	1,341	1,241	8.1%
Inactive Vested Participants	52	50	4.0%
Average monthly benefit	$ 2,117	$ 2,085	1.5%
Retired Participants:			
Number in pay status	29,241	28,514	2.5%
Average age	65.6	65.4	0.2
Average monthly benefit	$ 5,953	$ 5,853	1.7%

Membership Information, *continued*

Table of Plan Demographics for Local, *continued*

Category	Year Ended June 30 2022	Year Ended June 30 2021	Change From Prior Year
Ordinary Disabled Participants:			
Number in pay status	2,296	2,242	2.4%
Average age	57.7	57.2	0.5
Average monthly benefit	$ 2,780	$ 2,645	5.1%
Accidental Disabled Participants:			
Number in pay status	2,730	2,702	1.1%
Average age	55.2	54.7	0.5
Average monthly benefit	$ 4,705	$ 4,627	1.7%
Beneficiaries:			
Number in pay status	7,123	6,987	1.9%
Average age	73.6	74.7	-1.1
Average monthly benefit	$ 2,995	$ 2,923	2.5%

Reconciliation of Participant Data

	Contributing Actives	Non-Contributing Actives	Deferred Vested	Retired	Disabled	Beneficiaries	Total
Number as of July 1, 2021	**40,476**	**1,712**	**60**	**33,551**	**6,045**	**7,922**	**89,766**
New or previously unreported participants	1,962	86	0	5	0	156	2,209
Terminations – with vested rights	0	(8)	8	N/A	N/A	N/A	0
Terminations – without vested rights	(192)	(232)	0	N/A	N/A	N/A	(424)
Retirements	(1,716)	(33)	(8)	1,757	0	N/A	0
New disabilities	(88)	(84)	0	(43)	215	N/A	0
Return to work	0	0	0	0	0	N/A	0
Died with beneficiary	(34)	(9)	0	(341)	(59)	443	0
Died without beneficiary	(7)	(17)	0	(389)	(70)	(396)	(879)
Active started contributing	298	(298)	N/A	N/A	N/A	N/A	0
Active stopped contributing	(808)	808	N/A	N/A	N/A	N/A	0
Certain period expired	N/A	N/A	0	0	0	(40)	(40)
Data adjustments	0	0	0	0	0	0	0
Number as of July 1, 2022	**39,891**	**1,925**	**60**	**34,540**	**6,131**	**8,085**	**90,632**

ACTUARIAL ASSUMPTIONS AND METHODS

Rationale for Assumptions:

The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the Actuarial Experience Study for the period July 1, 2018 – June 30, 2021. Current data is reviewed in conjunction with each annual valuation. Based on professional judgment, no assumption changes beyond those recommended in the aforementioned experience study are warranted at this time.

Net Investment Return:

7.00%

The net investment return assumption is chosen based on direction from the Chief Financial Officer and as adopted by the Board of Trustees.

Salary Increases:

Service	Rate (%)
0	16.25
1	14.00
2-4	12.00
5	11.00
6	10.00
7	9.00
8	8.00
9	7.00
10	6.00
11-12	5.00
13-16	4.00
17+	3.25

Salary increases include an assumed inflation rate of 2.75% and assumed non-inflationary increases of 0.50%.

Pay Limits:

401(a)(17) pay limit is assumed to increase 2.75% per year and social security wage base is assumed to increase 3.25% per year.

Cost-of-Living Adjustments:

No future COLAs are assumed. COLAs earned prior to the valuation date are included in the valuation data.

Mortality Rates:

Employee: Pub-2010 Safety Employee amount-weighted mortality tables, projected generationally from 2010 with Scale MP-2021. 5% of deaths are assumed to be accidental.

Healthy Annuitant: Pub-2010 Safety Retiree Below Median amount-weighted mortality tables, projected generationally from 2010 with Scale MP-2021.

Disabled: 144.0% of Safety Disabled Retiree amount-weighted mortality table for males and 100.00% of Safety Disabled Retiree amount-weighted mortality table for females, projected generationally from 2010 with Scale MP-2018.

Contingent Annuitant: Pub-2010 General Retiree Below-Median amount-weighted mortality table projected generationally from 2010 with Scale MP-2018.

Actuarial Assumptions and Methods, *continued*

Termination Rates Before Retirement:

Service	Withdrawal Rate[1]
0-4	2.00
5-6	1.60
7-9	1.00
10-11	0.60
12-13	0.25
14-24	0.20
25+	0.00

[1] Withdrawal rates do not apply at or beyond early retirement age. All future terminating members assumed to elect a refund of contributions.

Age	Ordinary Disability[2]	Accidental Disability
20	0.010%	0.010%
30	0.050%	0.040%
40	0.320%	0.260%
50	0.150%	0.260%
60	0.050%	0.050%

[2] No ordinary disability is assumed prior to ordinary disability eligibility at four years of service.

No members are assumed to receive the involuntary disability retirement benefit.

Retirement Rates for Active Participants:

For those with less than 25 years of service:

Age	Retirement Probability
40-43	1.00%
44-46	2.50
47	3.75
48	4.00
49	5.00
50	6.00
51-56	7.00
57-61	8.00
62-64	13.00
65 and older	100.00

For those with 25 years of service:

Age	Retirement Probability
54 and younger	45.00%
55-57	50.00
58-61	55.00
62-63	70.00
64	90.00
65 and older	100.00

Actuarial Assumptions and Methods, *continued*

For those with 26 or more years of service:

Age	Retirement Probability
53 and younger	22.00%
54-60	24.00
61	28.00
62	30.00
63	20.00
64	60.00
65 and older	100.00

Rates shown do not reflect adjustments for early retirement window under Chapter 52, P.L., 2021 or delayed mandatory retirement available to certain chiefs under Chapter 9, P.L. 2022.

Weighted Average Retirement Age: Age 54, determined as follows: The weighted average retirement age for each participant is calculated as the sum of the product of each potential current or future retirement age times the probability of surviving from current age to that age and then retiring at that age, assuming no other decrements. The overall weighted retirement age is the average of the individual retirement ages based on all the active participants included in the July 1, 2022 actuarial valuation.

Retirement Age for Inactive Vested Participants: 55

Non-Contributory Group Insurance: All benefits paid as lump sums.

Unknown Data for Participants: Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.

Percent Married: 90%

Age of Spouse: Spouses of male participants are female and three years younger and spouses of female participants are male and three years older.

Family Composition: Retirees with a beneficiary allowance reported in the data are assumed to be married. None are assumed to have dependent children or parents.

Current dependents receiving a pre-retirement accidental death benefit under age 24 are assumed to receive a benefit until age 24 while those over age 24 are assumed to receive a benefit for their lifetime.

Current dependents receiving a benefit other than a pre-retirement accidental benefit under age 19 are assumed to receive a benefit until age 19 while those over age 19 are assumed to receive a benefit for their lifetime.

Actuarial Value of Assets: Sum of actuarial value at beginning of year and increase in cost value during year excluding realized appreciation or losses plus 20 percent of market value at end of year in excess of that preliminary value. The asset method provides a degree of conservatism to increase the likelihood that benefits are funded.

Actuarial Assumptions and Methods, *continued*

Actuarial Cost Method:

Projected Unit Credit Actuarial Cost Method. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and allocated linearly by service.

Administrative Expense:

None.

Contribution Timing:

State contributions are assumed to be made on a quarterly basis with the first contribution 15 months after the associated valuation date, in line with the requirements of Chapter 83, P.L. 2016 which requires the State to pay at least 25% by September 30, at least 50% by December 31, at least 75% by March 31, and at least 100% by June 30.

Local employers' contributions are expected to be paid on April 1st, 21 months after the valuation date.

Member's contributions and lottery revenue are expected to be received monthly.

Contributions payable in the fiscal year starting on the valuation date are included in the actuarial value of assets as receivable contributions, discounted by the applicable valuation interest rate.

Models:

Segal valuation results are based on proprietary actuarial modleing software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements.

Determinisitc cost projetions are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Justification for Change in Actuarial Assumptions

This valuation reflects the recommended changes detailed in Segals's Experience Study for the period July 1, 2018 – June 30, 2022 which have been adopted by the Board of Trustees. More information on these changes including justifications is included in that report.

SUMMARY OF PLAN PROVISIONS

This exhibit summarizes the major provisions of the PFRS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Plan Status: Ongoing

Membership Tiers:
Tier 1: Hired on or before May 21, 2010
Tier 2: Hired between May 21, 2010 and June 28, 2011
Tier 3: Hired after June 28, 2011

Compensation: Base salary upon which contributions by a Member were made to the Annuity Savings Fund in the last year of service limited to the compensation limit under IRC Section 401(a)(17) for Tier 1 members and the annual maximum wage base for Social Security for Tier 2 and Tier 3 members.

Final Compensation: Tier 1 members: Annual compensation received by the Member in the last 12 months of Creditable Service preceding their retirement.

Tier 2 and Tier 3 members: Average annual compensation for the three fiscal years of membership providing the largest benefit.

Service Retirement:

- Requirement for Members enrolled as of January 18, 2000: Age 55 or 20 Years of Creditable Service.
- Requirement for Members enrolled after January 18, 2000: Age 55.
- Base Amount: 2% of Final Compensation for each year of creditable service up to 30 years plus 1% of Final Compensation for each year of Creditable Service over 30 years.
- 20-Year Amount: In lieu of the base amount, 50% of Final Compensation if the member has 20 or more years of Creditable Service.
- Special Catch-up Amount: In lieu of the amounts above, members enrolled as of January 18, 2000 who reach mandatory retirement age of 65 and have between 20 and 25 years of Creditable Service will receive 50% of Final Compensation plus 3% of Final Compensation for each year of Creditable Service over 20 years.

Special Retirement:

- Service Requirement: 25 Years of Creditable Service.
- Amount for Tier 1 and Tier 2 members: 65% of Final Compensation plus 1% of Final Compensation for each year of Creditable Service in excess of 25 years with a maximum of 70% of Final Compensation, unless the member had 30 or more years of Creditable Service on June 30, 1979.
- Amount for Tier 3 members: 60% of Final Compensation plus 1% of Final Compensation for each year of Creditable Service in excess of 25 years with a maximum of 65% of Final Compensation.

Deferred Retirement:

- Age Requirement: 55 and terminated service prior to age 55.
- Service Requirement: 10 Years of Creditable Service.
- Amount: At member's election the choice of a refund of aggregate member contributions paid at termination or 2% of Final Compensation for each year of creditable service up to 30 years plus 1% of Final Compensation for each year of Creditable Service over 30 years.

Summary of Plan Provisions, *continued*

Ordinary Disability:

- Service Requirement: Four years of Creditable Service.
- Other Requirement: Totally and permanently incapacitated from the performance of usual or available duties.
- Amount: Greater of 40% of Final Compensation or 1.5% of Final Compensation for each year of Creditable Service.

Involuntary Ordinary Disability:

- Requirement: Same as Ordinary Disability except retirement applied for by employer.
- Amount: Same as Ordinary Disability unless the member has between 20 and 25 years of Creditable Service, in which case, 50% of Final Compensation plus 3% of Final Compensation for each year of Creditable Service over 20 years.

Accidental Disability:

- Requirement: Totally and permanently disabled as a direct result of a traumatic event occurring during and a result of regular or assigned duties and such member is mentally or physically incapacitated for the performance of their usual duties. Special rules may apply to duties regarding World Trade Center rescue, recovery, or cleanup operations.
- Amount: 2/3 of annual compensation at the time of the traumatic event (or at the time of retirement if greater).

Special Disability:

- Age Requirement: Under age 55
- Service Requirement: 5 Years of Creditable Service
- Other Requirement: Received heart transplant
- Amount: 50% of Final Compensation

Ordinary Pre-Retirement Death Benefits (active members or inactive vested members who elected a deferred pension during deferral period):

- Non-Contributory Group Life Insurance Benefit: Lump sum of 350% of Compensation.
- Pension Amount: 50% of Final Compensation payable to surviving spouse or dependent children in equal shares. If no surviving spouse or dependent children, 25% payable to a dependent parent (or 40% payable to two dependent parents). If no surviving spouse, dependent children, or dependent parents, refund of aggregate contributions. Inactive vested participants who die during the deferral period for a deferred pension are only entitled to a refund of aggregate contributions.

Accidental Pre-Retirement Death Benefits (active member who dies in or from performance of duties):

- Non-Contributory Group Life Insurance Benefit: Lump sum of 350% of Compensation.
- Pension Amount: The greater of $50,000 or 70% of Compensation payable to surviving spouse. If no surviving spouse, 70% of Compensation payable to dependent children in equal shares. If no surviving spouse or dependent children, 25% payable to a dependent parent (or 40% payable to two dependent parents). If no surviving spouse, dependent children, or dependent parents, refund of aggregate contributions.

Post-Retirement Death Benefits:

- Non-Contributory Group Life Insurance Benefit: Lump sum of 50% of Compensation except for disabled retirees who die before age 55 in which case a lump sum of 350% of Compensation.

Pension Amount: The greater of $4,500 per year or 50% of Final Compensation plus 15%of Final Compensation for one dependent child (or plus 25% of Final Compensation for two dependent children) payable to surviving spouse. If no surviving spouse, 20% of Final Compensation payable to one dependent child (or 35% for two children or 50% for three children). Previously granted COLAs also apply.

Summary of Plan Provisions, *continued*

Changes in Plan Provisions:

The following plan provisions were changed between July 1, 2021 and July 1, 2022 and are reflected in this valuation:

- Chapter 9, P.L. 2022 allows police chiefs of law enforcement agencies and chiefs of fire departments to remain members of the System until the end of the calendar year in which they turn 67 provided they attain age 65 by April 12, 2024 and that they are approved for this continued service by the appointing authority.

HISTORICAL DATA AND REQUIRED ACFR EXHIBITS

The information on the following tables for State and Local employers is based on the final actuarial valuation reports for the given years. The amounts do not reflect differences between the discounted State appropriations receivable and the actual State contribution amounts that became known after the issuance of the reports.

In accordance with the Government Finance Officers Association (GFOA) and their recommended checklist for Annual Comprehensive Financial Reports (ACFRs), we prepared the following schedules for the System. The GFOA checklist uses the term Actuarial Accrued Liability, which is the same as the Actuarial Liability used elsewhere in the report.

Table 1
Schedule of Retirees and Beneficiaries Added to and Removed From Rolls
State

Valuation Date July 1,	Added to Rolls		Removed From Rolls		Rolls at End of Year		Average Annual Allowance[1,2,3]	% Increase in Average Annual Allowance[1,2,3]
	Number[2,3]	Annual Allowance	Number[1,2,3]	Annual Allowance	Number[1,2,3]	Annual Allowance		
2022	453	$ 25,154,736	163	$ 5,984,844	7,363	$ 359,258,904	$ 48,792	1.50%
2021	286	14,546,292	150	4,944,492	7,073	340,032,444	48,072	0.81%
2020	271	14,487,175	137	5,025,049	6,937	330,805,742	47,687	1.02%
2019	249	12,168,447	119	4,338,355	6,803	321,147,218	47,207	0.55%
2018	256	12,439,023	131	4,867,322	6,673	313,277,156	46,947	7.64%
2017	372	17,056,592	172	5,162,512	7,007	305,608,112	43,615	1.07%
2016	407	17,916,150	188	5,868,202	6,807	293,751,067	43,154	0.84%
2015	597	27,506,231	136	4,428,009	6,588	281,941,189	42,796	1.24%
2014	411	18,319,747	125	3,624,098	6,127	259,008,914	42,273	1.08%
2013	562	25,376,310	144	3,961,938	5,841	244,287,186	41,823	1.68%

[1] Beginning with the 2018 valuation, QDRO records excluded from headcounts and QDRO benefits included with member records. The change resulted in 459 fewer records on the rolls as of July 1, 2018.

[2] Location 91999 was reclassified as a Local employer beginning with 2016 valuation; 30 retirees receiving $1,361,259 and 6 beneficiaries receiving $168,613 were removed from the State rolls in 2016.

[3] Location 91999 was reclassified as a State employer beginning with the 2018 valuation; 29 retirees receiving $1,398,446 and 5 beneficiaries receiving $123,147 were added to the State rolls in 2018.

Historical Data and Required ACFR Exhibits, *continued*

Table 2
Schedule of Retirees and Beneficiaries Added to and Removed From Rolls
Local Employers

Valuation Date July 1,	Added to Rolls		Removed From Rolls		Rolls at End of Year		Average Annual Allowance[1,2,3]	% Increase in Average Annual Allowance[1,2]
	Number[2]	Annual Allowance	Number[1,3]	Annual Allowance	Number[1,2,3]	Annual Allowance		
2022	2,080	$ 154,982,280	1,135	$ 48,819,720	41,390	$ 2,575,612,212	$ 62,232	1.95%
2021	1,838	139,907,988	1,027	37,150,128	40,445	2,468,834,868	61,044	1.88%
2020	2,051	151,159,484	1,151	47,184,702	39,634	2,374,772,652	59,918	2.26%
2019	1,890	134,104,687	1,050	42,654,216	38,734	2,269,658,558	58,596	1.99%
2018	1,740	121,278,555	1,169	45,359,799	37,894	2,177,011,512	57,450	8.15%
2017	1,879	119,494,770	1,157	41,177,074	39,540	2,100,385,456	53,121	1.97%
2016	2,131	127,903,000	977	33,478,631	38,818	2,022,136,965	52,093	1.77%
2015	2,223	137,472,290	1,008	34,566,655	37,664	1,927,850,322	51,185	2.23%
2014	2,157	125,562,304	1,061	37,217,915	36,449	1,824,960,208	50,069	2.01%
2013	2,126	123,863,237	1,062	34,299,782	35,353	1,735,172,993	49,081	2.32%

[1] Beginning with the 2018 valuation, QDRO records excluded from headcounts and QDRO benefits included with member records. This change resulted in 2,217 fewer records on the rolls as of July 1, 2018.

[2] Location 91999 was reclassified as a Local employer beginning with 2016 valuation; 30 retirees receiving $1,361,259 and 6 beneficiaries receiving $168,613 were added to the Local employer rolls in2016.

[3] Location 91999 was reclassified as a State employer beginning with the 2018 valuation; 29 retirees receiving $1,398,446 and 5 beneficiaries receiving $123,147 were removed from the Local employer rolls in 2018.

Historical Data and Required ACFR Exhibits, *continued*

Table 3
Schedule of Retirees and Beneficiaries Added to and Removed From Rolls
Total

Valuation Date July 1,	Added to Rolls		Removed From Rolls		Rolls at End of Year		Average Annual Allowance[1,2,3]	% Increase in Average Annual Allowance[1, 2, 3]
	Number[2, 3]	Annual Allowance	Number[1, 2, 3]	Annual Allowance	Number[1,2,3]	Annual Allowance		
2022	2,533	$ 180,137,016	1,298	$ 54,804,564	48,753	$ 2,934,871,104	$ 60,204	1.85%
2021	2,124	155,001,084	1,175	42,094,620	47,518	2,808,867,312	59,112	1.76%
2020	2,322	165,646,659	1,288	52,209,751	46,571	2,705,578,394	58,096	2.11%
2019	2,139	146,273,134	1,169	46,992,571	45,537	2,590,805,776	56,895	1.82%
2018	1,996	133,717,578	1,300	50,227,121	44,567	2,490,288,668	55,877	8.10%
2017	2,251	136,551,362	1,329	46,339,586	46,547	2,405,993,568	51,690	1.83%
2016	2,538	145,819,150	1,165	39,346,833	45,625	2,315,888,032	50,759	1.65%
2015	2,820	164,978,521	1,144	38,994,664	44,252	2,209,791,511	49,937	2.02%
2014	2,568	143,882,051	1,186	40,842,013	42,576	2,083,969,122	48,947	1.86%
2013	2,688	149,239,547	1,206	38,261,720	41,194	1,979,460,179	48,052	2.17%

[1] Beginning with the 2018 valuation, QDRO records excluded from headcounts and QDRO benefits included with member records. This change resulted in 2,676 fewer records on the rolls as of July 1, 2018.

[2] Location 91999 was reclassified as a Local employer beginning with the 2016 valuation; 30 retirees receiving $1,361,259 and 6 beneficiaries receiving $168,613 were added to the Local employers rolls and removed from the State rolls in 2016.

[3] Location 91999 was reclassified as a State employer beginning with the 2018 valuation; 29 retirees receiving $1,398,446 and 5 beneficiaries receiving $123,147 were added to the State rolls and removed from the Local employers rolls in 2018.

Historical Data and Required ACFR Exhibits, *continued*

Table 4
Schedule of Active Member Valuation Data
State

Valuation Date July 1,	Number of Contributing Active Members[1]	Annual Compensation[1]	Annual Average Compensation[1]	% Increase in Average Annual Compensation[1]	Number of Participating Employers[2]
2020	6,688	$ 511,392,879	$ 76,464	7.94%	38
2019	6,875	487,025,462	70,840	0.47%	38
2018	6,807	479,941,514	70,507	-1.07%	40
2017	7,072	504,025,065	71,271	-3.00%	N/A
2016	6,911	507,802,380	73,477	-2.38%	N/A
2015	6,883	518,087,705	75,271	-0.14%	N/A
2014	7,025	529,501,284	75,374	0.54%	N/A
2013	7,098	532,147,062	74,971	-0.65%	N/A
2012	7,187	542,344,707	75,462	-0.31%	N/A

[1] Prior to July 1, 2018, includes non-contributing active members.

[2] Number of locations reporting contributing active members. For GASB reporting purposes, the State may be considered the participating employer for multiple locations.

Table 5
Schedule of Active Member Valuation Data
Local Employers

Valuation Date July 1,	Number of Contributing Active Members[1]	Annual Compensation[1]	Annual Average Compensation[1]	% Increase in Average Annual Compensation[1]	Number of Participating Employers[2]
2020	34,150	$ 3,505,375,030	$ 102,646	1.62%	574
2019	34,164	3,450,951,747	101,011	1.32%	575
2018	34,013	3,390,777,193	99,691	1.01%	576
2017	34,447	3,399,605,586	98,691	0.68%	N/A
2016	33,878	3,320,721,980	98,020	0.27%	N/A
2015	33,476	3,272,560,644	97,758	-0.38%	N/A
2014	33,081	3,246,344,549	98,133	0.99%	N/A
2013	33,274	3,233,135,473	97,167	1.52%	N/A
2012	33,632	3,218,932,891	95,710	3.85%	N/A

[1] Prior to July 1, 2018, includes non-contributing active members.

[2] Number of locations reporting contributing active members.

Historical Data and Required ACFR Exhibits, *continued*

Table 6
Schedule of Active Member Valuation Data
Total

Valuation Date July 1,	Number of Contributing Active Members[1]	Annual Compensation[1]	Annual Average Compensation[1]	% Increase in Average Annual Compensation[1]	Number of Participating Employers[2]
2020	40,838	$ 4,016,767,909	$ 98,359	2.50%	612
2019	41,039	3,937,977,209	95,957	1.19%	613
2018	40,820	3,870,718,707	94,824	0.85%	616
2017	41,519	3,903,630,651	94,020	0.17%	N/A
2016	40,789	3,828,524,360	93,861	-0.07%	N/A
2015	40,359	3,790,648,349	93,923	-0.24%	N/A
2014	40,106	3,775,845,833	94,147	0.95%	N/A
2013	40,372	3,765,282,535	93,265	1.22%	N/A
2012	40,819	3,761,277,598	92,145	3.16%	N/A

[1] Prior to July 1, 2018, includes non-contributing active members.

[2] Number of locations reporting contributing active members. For GASB reporting purposes, the State may be considered the participating employer for multiple locations.

Table 7
Schedule of Funding Progress
State

Valuation Date July 1,	Actuarial Value of Assets[1] (a)	Actuarial Accrued Liability (b)	(Surplus)/Unfunded Actuarial Accrued Liability (c) = (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll[2] (d)	(Surplus)/Unfunded Actuarial Accrued Liability as % of Covered Payroll (c) / (d)
2022	$ 2,267,954,515	$ 6,055,686,895	$ 3,787,732,380	37.45%	$ 515,345,604	734.99%
2021	2,103,993,000	5,814,553,891	3,710,560,891	36.18%	506,255,584	732.94%
2020	1,935,340,424	5,449,871,027	3,514,530,603	35.51%	511,392,879	687.25%
2019	1,896,362,754	5,261,107,456	3,364,744,702	36.04%	487,025,462	690.88%
2018	1,872,048,766	4,983,733,970	3,111,685,204	37.56%	479,941,514	648.35%
2017	1,887,486,318	4,873,081,731	2,985,595,413	38.73%	504,025,065	592.35%
2016	1,928,447,404	4,676,642,040	2,748,194,636	41.24%	507,802,380	541.19%
2015	2,004,579,109	4,516,438,165	2,511,859,056	44.38%	518,087,705	484.83%
2014	2,062,185,965	4,365,609,664	2,303,423,699	47.24%	529,501,284	435.02%
2013	2,127,491,585	4,188,523,037	2,061,031,452	50.79%	532,147,062	387.30%

[1] Includes receivable amounts.

[2] Prior to July 1, 2018, includes non-contributing active members.

Historical Data and Required ACFR Exhibits, *continued*

Table 8
Schedule of Funding Progress
Local Employers

Valuation Date July 1,	Actuarial Value of Assets[1] (a)	Actuarial Accrued Liability (b)	(Surplus)/Unfunded Actuarial Accrued Liability (c) = (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll[2] (d)	(Surplus)/Unfunded Actuarial Accrued Liability as % of Covered Payroll (c) / (d)
2022	$ 30,451,072,277	$ 42,690,941,416	$ 12,239,869,139	71.33%	$ 3,643,886,024	335.90%
2021	29,499,250,329	41,694,235,840	12,194,985,511	70.75%	3,563,943,590	342.18%
2020	27,723,057,451	38,853,311,601	11,130,254,150	71.35%	3,505,375,030	317.52%
2019	27,023,458,408	37,671,711,185	10,648,252,777	71.73%	3,450,951,747	308.56%
2018	26,109,128,660	35,523,376,524	9,414,247,864	73.50%	3,390,777,193	277.64%
2017	25,183,776,588	34,474,127,537	9,290,350,949	73.05%	3,399,605,586	273.28%
2016	24,420,145,823	32,793,439,210	8,373,293,387	74.47%	3,320,721,980	252.15%
2015	23,935,037,150	31,205,965,303	7,270,928,153	76.70%	3,272,560,644	222.18%
2014	23,066,498,788	30,239,286,907	7,172,788,119	76.28%	3,246,344,549	220.95%
2013	22,170,221,173	28,811,698,272	6,641,477,099	76.95%	3,233,135,473	205.42%

[1] Includes receivable amounts.

[2] Prior to July 1, 2018, includes non-contributing active members.

Table 9
Schedule of Funding Progress
Total

Valuation Date July 1,	Actuarial Value of Assets[1] (a)	Actuarial Accrued Liability (b)	(Surplus)/Unfunded Actuarial Accrued Liability (c) = (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll[2] (d)	(Surplus)/Unfunded Actuarial Accrued Liability as % of Covered Payroll (c) / (d)
2022	$ 32,719,026,792	$ 48,746,628,310	$ 16,027,601,518	67.12%	$ 4,159,231,628	385.35%
2021	31,603,243,329	47,508,789,731	15,905,546,402	66.52%	4,070,199,174	390.78%
2020	29,658,397,875	44,303,182,628	14,644,784,753	66.94%	4,016,767,909	364.59%
2019	28,919,821,162	42,932,818,641	14,012,997,479	67.36%	3,937,977,209	355.84%
2018	27,981,177,426	40,507,110,494	12,525,933,068	69.08%	3,870,718,707	323.61%
2017	27,071,262,906	39,347,209,268	12,275,946,362	68.80%	3,903,630,651	314.48%
2016	26,348,593,227	37,470,081,250	11,121,488,023	70.32%	3,828,524,360	290.49%
2015	25,939,616,259	35,722,403,468	9,782,787,209	72.61%	3,790,648,349	258.08%
2014	25,128,684,753	34,604,896,571	9,476,211,818	72.62%	3,775,845,833	250.97%
2013	24,297,712,758	33,000,221,309	8,702,508,551	73.63%	3,765,282,535	231.12%

[1] Includes receivable amounts.

[2] Prior to July 1, 2018, includes non-contributing active members.

Historical Data and Required ACFR Exhibits, *continued*

Table 10
Schedule of Funded Liabilities by Type (Solvency Test)
State

Valuation Date July 1,	Actuarial Accrued Liabilities For			Actuarial Value of Assets[2]	Portion of Actuarial Liabilities Covered by Actuarial Value of Assets		
	Contributing & Non-Contributing Active Member Contributions (1)	Retirees, Beneficiaries & Deferred Vesteds[1] (2)	Contributing & Non-Contributing Active Member Benefits Financed by Employer[1] (3)		(1)	(2)	(3)
2020	$ 542,459,438	$ 3,733,528,284	$ 1,173,883,305	$ 1,935,340,424	100.00%	37.31%	0.00%
2019	521,602,269	3,646,779,490	1,092,725,697	1,896,362,754	100.00%	37.70%	0.00%
2018	500,503,234	3,483,286,430	999,944,306	1,872,048,766	100.00%	39.38%	0.00%
2017	475,818,046	3,424,967,760	972,295,925	1,887,486,318	100.00%	41.22%	0.00%
2016	463,313,193	3,266,044,658	947,284,189	1,928,447,404	100.00%	44.86%	0.00%
2015	453,476,665	3,068,942,554	994,018,946	2,004,579,109	100.00%	50.54%	0.00%
2014	461,707,703	2,836,126,945	1,067,775,016	2,062,185,965	100.00%	56.43%	0.00%
2013	446,509,394	2,645,278,934	1,096,734,709	2,127,491,585	100.00%	63.55%	0.00%
2012	444,953,351	2,418,803,841	1,163,197,690	2,137,727,566	100.00%	69.98%	0.00%

[1] Prior to July1, 2018, actuarial accrued liability for deferred vesteds included under (3) instead of (2).

[2] Includes receivable amounts.

Historical Data and Required ACFR Exhibits, *continued*

Table 11
Schedule of Funded Liabilities by Type (Solvency Test)
Local Employers

Valuation Date July 1,	Actuarial Accrued Liabilities For: Contributing & Non-Contributing Active Member Contributions (1)	Retirees, Beneficiaries & Deferred Vesteds[1] (2)	Contributing & Non-Contributing Active Member Benefits Financed by Employer[1] (3)	Actuarial Value of Assets[2]	Portion of Actuarial Accrued Liabilities Covered by Actuarial Value of Assets (1)	(2)	(3)
2020	$ 3,498,478,260	$ 26,075,894,477	$ 9,278,938,864	$ 27,723,057,451	100.00%	92.90%	0.00%
2019	3,446,814,312	24,931,997,761	9,292,899,112	27,023,458,408	100.00%	94.56%	0.00%
2018	3,358,899,795	23,292,240,823	8,872,235,906	26,109,128,660	100.00%	97.67%	0.00%
2017	3,247,943,768	22,521,319,267	8,704,864,502	25,183,776,588	100.00%	97.40%	0.00%
2016	3,131,241,592	21,445,939,675	8,216,257,943	24,420,145,823	100.00%	99.27%	0.00%
2015	3,028,571,346	19,956,349,181	8,221,044,776	23,935,037,150	100.00%	100.00%	11.56%
2014	2,953,537,557	18,953,799,304	8,331,950,046	23,066,498,788	100.00%	100.00%	13.91%
2013	2,842,256,925	17,710,792,805	8,258,648,542	22,170,221,173	100.00%	100.00%	19.58%
2012	2,726,801.462	16,780,025,399	8,198,341,576	21,549,327,079	100.00%	100.00%	24.91%

[1] Prior to July 1, 2018, actuarial accrued liability for deferred vesteds included under (3) instead of (2)

[2] Includes receivable amounts.

Historical Data and Required ACFR Exhibits, *continued*

Table 12
Schedule of Funded Liabilities by Type (Solvency Test)
Total

Valuation Date July 1,	Actuarial Accrued Liabilities For: Contributing & Non-Contributing Active Member Contributions (1)	Retirees, Beneficiaries & Deferred Vesteds[1] (2)	Contributing & Non-Contributing Active Member Benefits Financed by Employer[1] (3)	Actuarial Value of Assets[2]	Portion of Actuarial Accrued Liabilities Covered by Actuarial Value of Assets (1)	(2)	(3)
2020	$ 4,040,937,698	$ 29,809,422,761	$ 10,452,822,169	$ 29,658,397,875	100.00%	85.94%	0.00%
2019	3,968,416,581	28,578,777,251	10,385,624,809	28,919,821,162	100.00%	87.31%	0.00%
2018	3,859,403,029	26,775,527,253	9,872,180,212	27,981,177,426	100.00%	90.09%	0.00%
2017	3,723,761,814	25,946,287,027	9,677,160,427	27,071,262,906	100.00%	89.98%	0.00%
2016	3,594,554,785	24,711,984,333	9,163,542,132	26,348,593,227	100.00%	92.08%	0.00%
2015	3,482,048,011	23,025,291,735	9,215,063,722	25,939,616,259	100.00%	97.53%	0.00%
2014	3,415,245,260	21,789,926,249	9,399,725,062	25,128,684,753	100.00%	99.65%	0.00%
2013	3,288,766,319	20,356,071,739	9,355,383,251	24,297,712,758	100.00%	100.00%	6.98%
2012	3,171,754,813	19,198,829,240	9,361,539,266	23,687,054,645	100.00%	100.00%	14.06%

[1] Prior to July 1, 2018, actuarial accrued liability for deferred vesteds included under (3) instead of (2).

[2] Includes receivable amounts.

Historical Data and Required ACFR Exhibits, *continued*

Table 13
Analysis of Financial Experience
Change in Unfunded Actuarial Accrued Liability

State[1]

Valuation Date July 1,	Actuarial Value of Asset Investment (Gain)/Loss	Actuarial Accrued Liability (Gain)/Loss	Assumption & Method Changes	Plan Changes	Contributions[2]	Change in Unfunded Actuarial Accrued Liability
2020	$ 65,538,544	$ 43,904,735	$ 0	$ 0	$ 40,342,622	$ 149,785,901
2019	50,667,502	(1,753,977)	141,225,547	0	62,920,426	253,059,498
2018	47,194,210	(21,317,092)	(918,724)	0	101,131,397	126,089,791
2017	N/A	N/A	N/A	N/A	N/A	237,400,777
2016	N/A	N/A	N/A	N/A	N/A	236,335,580
2015	N/A	N/A	N/A	N/A	N/A	208,435,357
2014	N/A	N/A	N/A	N/A	N/A	242,392,247
2013	N/A	N/A	N/A	N/A	N/A	171,804,136
2012	N/A	N/A	N/A	N/A	N/A	135,957,284

[1] Prior actuary did not provide enough information for the sources of (gain)/loss split by State and Local employers.

[2] Change due to contributions (greater)/less than normal cost plus interest on the Unfunded Actuarial Accrued Liability.

Historical Data and Required ACFR Exhibits, *continued*

Table 14
Analysis of Financial Experience
Change in Unfunded Actuarial Accrued Liability

Local[1]

Valuation Date July 1,	Actuarial Value of Asset Investment (Gain)/Loss	Actuarial Accrued Liability (Gain)/Loss	Assumption & Method Changes	Plan Changes	Contributions[2]	Change in Unfunded Actuarial Accrued Liability
2020	$ 407,764,587	$ 95,550.635	$ 0	$ 0	$ (19,313,849)	$ 482,001,373
2019	154,026,781	92,692,895	980,278,502	0	7,006,735	1,234,004,913
2018	107,152,686	28,336,995	(52,999,153)	0	41,406,387	123,896,915
2017	N/A	N/A	N/A	N/A	N/A	917,057,562
2016	N/A	N/A	N/A	N/A	N/A	1,102,365,234
2015	N/A	N/A	N/A	N/A	N/A	98,140,034
2014	N/A	N/A	N/A	N/A	N/A	531,311,020
2013	N/A	N/A	N/A	N/A	N/A	485,635,741
2012	N/A	N/A	N/A	N/A	N/A	228,890,862

[1] Prior actuary did not provide enough information for the sources of (gain)/loss split by State and Local employers.

[2] Change due to contributions (greater)/less than normal cost plus interest on the Unfunded Actuarial Accrued Liability.

Table 15
Analysis of Financial Experience
Change in Unfunded Actuarial Accrued Liability

Total

Valuation Date July 1,	Actuarial Value of Asset Investment (Gain)/Loss	Actuarial Accrued Liability (Gain)/Loss	Assumption & Method Changes	Plan Changes	Contributions[1]	Change in Unfunded Actuarial Accrued Liability
2020	$ 471,303,131	$ 139,455,370	$ 0	$ 0	$ 21,028,773	$ 631,787,274
2019	204,694,283	90,938,917	1,121,504,049	0	69,927,161	1,487,064,411
2018	154,346,896	7,019,903	(53,917,877)	0	142,537,784	249,986,706
2017	259,929,381	58,991,642	657,629,731	0	177,907,585	1,154,458,339
2016	558,181,587	110,733,636	432,218,931	0	237,566,660	1,338,700,814
2015	187,148,126	101,636,627	(179,494,261)	0	197,284,899	306,575,391
2014	8,564,819	85,366,939	359,942,089	0	319,829,420	773,703,267
2013	416,678,002	101,967,970	0	0	138,793,905	657,439,877
2012	640,359,684	(279,145,857)	(150,622,578)	0	154,256,897	364,848,146

[1] Change due to contributions (greater)/less than normal cost plus interest on the Unfunded Actuarial Accrued Liability.

CHEIRON Classic Values, Innovative Advice

March 27, 2024

Board of Trustees
State Police Retirement System of New Jersey

Re: Actuary's Certification Letter

Dear Board Members:

This is the Actuary's Certification Letter for the Actuarial Section of the Annual Comprehensive Financial Report for the State Police Retirement System of New Jersey (SPRS or System) as of June 30, 2023. This letter includes references to three documents produced by Cheiron for the System: the Actuarial Valuation Report as of July 1, 2022 (transmitted February 3, 2023) and the GASB 67 and 68 Reports as of June 30, 2023 (transmitted February 13, 2024).

Actuarial Valuation Report as of July 1, 2022

The purpose of the annual Actuarial Valuation Report as of July 1, 2022 is to determine the actuarial funding status of SPRS on that date and to calculate the Statutory Contribution amount for the State for the Fiscal Year Ending 2024. The prior review was conducted as of July 1, 2021, and included the Statutory Contribution amount for the Fiscal Year Ending 2023.

Actuarial funding is based on the Projected Unit Credit Cost Method. The Statutory Contribution amounts contain two components: the employer normal cost (cost of benefits for the upcoming year) and an amortization for the unfunded actuarial liability (UAL). The funding methodology prescribed by the N.J. State Statutes does not include a cost component for administrative expenses, and therefore administrative expenses are implicitly covered by the investment rate of return assumption.

In accordance with Chapter 78, P.L. 2011:

- Beginning with the July 1, 2010 actuarial valuation, the amortization amount is calculated to amortize the UAL over an open 30 year period as a level dollar amount.
- Beginning with the July 1, 2019 actuarial valuation, the amortization amount will be calculated to amortize the UAL over a closed 30 year period (i.e., for each subsequent actuarial valuation, the amortization period shall decrease by one year) as a level dollar amount.
- Beginning with the July 1, 2029 actuarial valuation, when the amortization period reaches 20 years, an increase or decrease in the UAL as a result of actuarial losses and gains will increase or decrease, respectively, the amortization period for the UAL, except that the amortization period will not exceed 20 years.

To the extent that the amortization period remains an open period in future years and depending upon the specific circumstances, it should be noted that in the absence of emerging actuarial gains or contributions made in excess of the Statutory Contribution, any existing UAL may not be fully amortized in the future.

Member contributions are set in the N.J. State Statutes.

The non-contributory group life insurance benefit is funded separately through a term cost.

For actuarial valuation purposes, assets are valued at Actuarial Value as prescribed in the N.J. State Statutes. Under this method, the assets used to determine the Statutory Contribution amounts take into account market value by spreading all investment gains and losses (returns above or below expected returns) over a rolling five-year period.

The actuarial value of assets is intended to dampen the volatility in the market value of assets, resulting in a smoother pattern of contributions. Actuarial Standards of Practice (ASOP) No. 44 states that the asset valuation method should produce an actuarial value of assets that falls within a reasonable range of market value, recognizes the difference between the market value and actuarial value of assets within a reasonably short period of time, and is likely to produce actuarial value of assets that are sometimes greater than and sometimes less than the corresponding market values. The asset method required under the N.J. State Statutes does not meet the requirements of ASOP No. 44 because this method has produced actuarial value of assets which have consistently been greater than the market value of assets and recognizes investment losses slowly over time. Additionally, the method may produce an actuarial value of assets that falls outside of a reasonable range of the market value.

We prepared the following schedules, which we understand will be included in the Actuarial Section of the Annual Comprehensive Financial Report, based on the July 1, 2022 actuarial valuation. All historical information prior to the July 1, 2018 actuarial valuation shown in these schedules is based on information reported by the prior actuary, Buck Global, LLC.

- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Schedule of Active Member Valuation Data
- Schedule of Funding Progress
- Schedule of Funded Liabilities by Type (formerly referred to as the Solvency Test)
- Analysis of Financial Experience: Change in Unfunded Actuarial Accrued Liability
- Summary of Plan Provisions
- Summary of Current Actuarial Assumptions and Methods
- Membership Information (Active, Deferred Vested, and Retired)

The demographic and economic (other than the investment rate of return) actuarial assumptions are based on the recommendations from the July 1, 2018 – June 30, 2021 Experience Study, which was approved by the Board of Trustees on November 22, 2022. As a result of this Experience Study, the ordinary disability rates, the salary increase rates, the mortality improvement scale, and the age difference between male and female spouses were updated.

The assumed investment rate of return of 7.00% was recommended by the State Treasurer.

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices except as noted. In particular, the assumptions and methods (other than the asset method) used for funding purposes meet the requirements of the Actuarial Standards of Practice (ASOP), in particular ASOPs Nos. 4, 27 and 35. As noted above the asset method does not meet the requirements of ASOP No. 44.

GASB 67 and 68 Reports as of June 30, 2023

The purpose of the GASB 67 and 68 Reports as of June 30, 2023 is to provide accounting and financial reporting information under GASB 67 for SPRS and under GASB 68 for the State. These reports are not appropriate for other purposes, including the measurement of funding requirements for SPRS.

For financial reporting purposes, the Total Pension Liability is based on the July 1, 2022 actuarial valuation updated to the measurement date of June 30, 2023. We are not aware of any other significant events between the valuation date and the measurement date that are measurable at this time, so the update procedures only included the addition of service cost and interest cost offset by actual benefit payments.

Please refer to our GASB 67 and 68 Reports as of June 30, 2023 for additional information related to the financial reporting of the System. We prepared the following schedules for inclusion in the Financial Section of the Annual Comprehensive Financial Report based on the June 30, 2023 GASB 67 and 68 reports:

- Change in Net Pension Liability
- Sensitivity of Net Pension Liability to Changes in Discount Rate
- Schedule of Changes in Net Pension Liability and Related Ratios
- Schedule of Employer Contributions
- Notes to the Schedule of Employer Contributions

The demographic and economic (other than the investment rate of return) actuarial assumptions are based on the recommendations from the July 1, 2018 – June 30, 2021 Experience Study performed by Cheiron and approved by the Board of Trustees on November 22, 2022. The assumptions used in the most recent reports are intended to produce results that, in the aggregate, reasonably approximate the anticipated future experience of the Plan. The next experience analysis is expected to cover the years through 2024.

Based on the State Treasurer's recommendation, the investment return assumption used to determine the Statutory Contribution amounts is 7.00% per annum.

In accordance with Paragraph 40 of GASB Statement No. 67, the projection of the Plan's fiduciary net position is based on a long-term expected rate of return of 7.00% per annum as recommended by the State Treasurer.

We certify that the reports were performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for disclosure purposes have been prepared in accordance with our understanding of generally accepted accounting principles as promulgated by the GASB.

Disclaimers

In preparing our reports, we relied on information (some oral and some written) supplied by the DPB. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

Cheiron's reports were prepared for SPRS for the purposes described herein and for use by the plan auditor in completing an audit related to matters herein. Other users of these reports are not intended as users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

These reports and their contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinions contained in these reports. These reports do not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

Respectfully submitted,

Janet Cranna, FSA, FCA, MAAA, EA
Principal Consulting Actuary

Jonathan B. Chipko, FSA, MAAA, EA
Consulting Actuary

Anu Patel

Anu Patel, FSA, MAAA, EA
Principal Consulting Actuary

Justin Runkel, ASA, MAAA, EA
Consulting Actuary

CHEIRON

MEMBERSHIP INFORMATION

The data for this valuation was provided by the New Jersey Division of Pensions and Benefits as of July 1, 2022. Cheiron did not audit any of the data. However, we did perform an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality. The following is a list of data charts contained in this section:

- A-1: Contributing Active Member Data by Tier
- A-2: Non-Contributing Active Member Data by Tier
- A-3: Inactive Member Data, Total Annual and Average Retirement Allowances by Status
- A-4: Reconciliation of Plan Membership

Table A-1
Contributing Active Member Data by Tier

	July 1, 2022	July 1, 2021	% Change
Tier 1			
Count	1,500	1,604	-6.5%
Average Age	45.1	44.6	1.2%
Average Service	19.0	18.4	3.1%
Average Appropriation Pay	$ 135,732	$ 132,345	2.6%
Total Appropriation Payroll	$ 203,598,296	$ 212,281,375	-4.1%
Tier 2			
Count	1,494	1,353	10.4%
Average Age	32.2	31.7	1.7%
Average Service	5.5	5.0	11.4%
Average Appropriation Pay	$ 94,774	$ 88,501	7.1%
Total Appropriation Payroll	$ 141,593,100	$ 119,741,423	18.2%
Total			
Count	2,994	2,957	1.3%
Average Age	38.7	38.7	0.0%
Average Service	12.3	12.3	0.1%
Average Appropriation Pay	$ 115,294	$ 112,284	2.7%
Total Appropriation Payroll	$ 345,191,396	$ 332,022,798	4.0%

Membership Information, *continued*

Table A-2 Non-Contributing Active Member Data by Tier			
	July 1, 2022	July 1, 2021	% Change
Tier 1			
Count	32	29	10.3%
Average Age	49.9	48.9	2.0%
Average Service	13.4	12.0	11.5%
Average Last Reported Pay	$ 102,328	$ 97,525	4.9%
Total Last Reported Pay	$ 3,274,480	$ 2,828,222	15.8%
Tier 2			
Count	33	32	3.1%
Average Age	33.7	33.4	0.8%
Average Service	2.9	3.5	-16.7%
Average Last Reported Pay	$ 80,458	$ 80,315	0.2%
Total Last Reported Pay	$ 2,655,101	$ 2,570,093	3.3%
Total			
Count	65	61	6.6%
Average Age	41.7	40.8	2.2%
Average Service	8.1	7.5	7.1%
Average Last Reported Pay	$ 91,224	$ 88,497	3.1%
Total Last Reported Pay	$ 5,929,581	$ 5,398,315	9.8%

Membership Information, *continued*

Table A-3
Inactive Member Data by Status

	July 1, 2022	July 1, 2021	% Change
Retirees			
Count	2,809	2,770	1.4%
Annual Retirement Allowances	$ 211,770,278	$ 204,606,252	3.5%
Average Retirement Allowance	$ 75,390	$ 73,865	2.1%
Beneficiaries			
Count	514	484	6.2%
Annual Retirement Allowances	$ 20,405,387	$ 18,810,600	8.5%
Average Retirement Allowance	$ 39,699	$ 38,865	2.1%
Ordinary Disability			
Count	123	125	-1.6%
Annual Retirement Allowances	$ 5,041,118	$ 5,076,997	-0.7%
Average Retirement Allowance	$ 40,985	$ 40,616	0.9%
Accidental Disability			
Count	166	165	0.6%
Annual Retirement Allowances	$ 10,342,781	$ 10,197,110	1.4%
Average Retirement Allowance	$ 62,306	$ 61,801	0.8%
In-Pay Total			
Count	**3,612**	**3,544**	**1.9%**
Annual Retirement Allowances	**$ 247,559,564**	**$ 238,690,959**	**3.7%**
Average Retirement Allowance	**$ 68,538**	**$ 67,351**	**1.8%**
Deferred Vested Members			
Count	0	0	N/A
Annual Retirement Allowances	$ 0	$ 0	N/A
Average Retirement Allowance	$ 0	$ 0	N/A

QDRO benefits included with member records for valuation purposes.

Membership Information, *continued*

Table A-4
Reconciliation of Plan Membership from July 1, 2021 to July 1, 2022

	Contributing Actives	Non-Contributing Actives	Deferred Vested	Retired	Disabled	Beneficiaries	Total
1. July 1, 2021	**2,957**	**61**	**0**	**2,770**	**290**	**484**	**6,562**
2. Additions							
a. New entrants	150						150
b. New beneficiaries						17	17
c. Data correction							0
d. Total	150	0	0	0	0	17	167
3. Reductions							
a. Withdrawal	(2)	(6)					(8)
b. Died without beneficiary				(24)	(1)	(23)	(48)
c. Payments ceased						(2)	(2)
d. Total	(2)	(6)	0	(24)	(1)	(25)	(58)
4. Changes in Status							
a. Contributing Active	1	(1)					0
b. Non-Contributing Active	(12)	12					0
c. Deferred Vested							0
d. Retired	(93)	(1)		94			0
e. Disabled	(4)				4		0
f. Died with beneficiary	(3)			(31)	(4)	38	0
g. Total	(111)	10	0	63	0	38	0
5. July 1, 2022	**2,994**	**65**	**0**	**2,809**	**289**	**514**	**6,671**

QDRO benefits included with member records for valuation purposes.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Investment Rate of Return

7.00% per annum, compounded annually.

2. Administrative Expenses

No explicit assumption is made for administrative expenses for funding purposes per the funding methodology prescribed by NJ State Statute.

3. Cost-of-Living Adjustments (COLAs)

No future COLAs are assumed. Previously granted COLAs are included in the data.

4. Salary Increases

Salaries are assumed to increase annually as follows:

Service	Rates
0-11	6.75%
12-25	3.75
26+	2.75

Salary increases are assumed to occur on January 1.

5. 401 (a)(17) Pay Limit

$305,000 in 2022 increasing 2.75% per annum, compounded annually.

6. Social Security Wage Base

$147,000 in 2022 increasing 3.25% per annum, compounded annually.

7. Termination

Termination rates are as follows:

Service	Rates
0-3	0.450%
4	0.300
5	0.225
6	0.200
7	0.175
8	0.150
9	0.125
10	0.100
11-19	0.075
20	0.000

No termination is assumed after attainment of retirement eligibility.

All members with 10 or more years of service at termination are assumed to elect a deferred retirement benefit.

Summary of Actuarial Assumptions and Methods, *continued*

8. Disability

Representative disability rates are as follows:

Age	Ordinary Disability	Accidental Disability
20	0.009%	0.015%
25	0.015	0.025
30	0.032	0.053
35	0.116	0.194
40	0.125	0.208
45	0.128	0.214
50	0.132	0.220
54	0.177	0.295

No ordinary disability is assumed prior to attainment of ordinary disability retirement eligibility at four years of service or after attainment of special retirement eligibility at 25 years of service.

Accidental disability rates apply at all ages until the mandatory retirement age of 55.

Members retiring under the ordinary disability decrement with 20 or more years of service are assumed to receive the involuntary disability retirement benefit.

Members are assumed to receive the greater of the applicable disability benefit or the service or special retirement benefit, depending on eligibility.

9. Mortality

Pre-Retirement (Non-Annuitant): The Pub-2010 Public Safety Above-Median Income Employee mortality table *[PubS-2010(A) Employee]* as published by the Society of Actuaries (SOA), unadjusted, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

35% of the deaths are assumed to be accidental.

For purposes of pre-retirement accidental death benefits based on Adjusted Final Compensation, the benefit is assumed to increase at 3.75% per year, consistent with the assumed salary increases for members with 12 to 25 years of service.

Healthy Retirees (Healthy Annuitants): The Pub-2010 Public Safety Above-Median Income Healthy Retiree Mortality table *[PubS-2010(A) Healthy Retiree]* as published by the Society of Actuaries, unadjusted, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

Beneficiaries (Contingent Annuitants): The Pub-2010 General Above-Median Income Healthy Retiree mortality table *[PubG-2010(A) Healthy Retiree]* as published by the Society of Actuaries, unadjusted, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

Disabled Retirees (Disabled Annuitants): The Pub-2010 Public Safety Disabled Retiree mortality table *[PubS-2010 Disabled Retiree]* as published by the Society of Actuaries, unadjusted, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

Summary of Actuarial Assumptions and Methods, *continued*

10. Retirement

For those with 24 years of service or less: 0.50%

For those with 25 years of service:

Age	Rates
48 or younger	25.00%
49-54	50.00

For those with 26 or more years of service: 35.00%

Mandatory retirement at age 55.

11. Family Composition Assumptions

For members not currently in receipt, 83.3% of members are assumed married to spouses of the opposite sex. Males are assumed to be two years older than females.

For purposes of the post-retirement death benefit for members currently in receipt, beneficiary status is based on the beneficiary allowance reported. If no beneficiary date of birth is provided, the beneficiary is assumed to be the member's spouse of the opposite sex with males assumed to be two years older than females.

No additional dependent children or parents are assumed.

For current dependents receiving a pre-retirement accidental death benefit, those under age 24 are assumed to receive a benefit until age 24 while those over age 24 are assumed to receive a benefit for the remainder of their lifetime.

For current dependents receiving a benefit other than a pre-retirement accidental death benefit, those under age 18 are assumed to receive a benefit until age 18 while those over age 18 are assumed to receive a benefit for the remainder of their lifetime.

12. Data

Information provided by the prior actuary was relied upon for the purposes of setting the status of and valuing non-contributing active records.

For current beneficiaries with missing data, reasonable assumptions were made based on the information available in prior years.

Inactives receiving benefits according to the 2021 data but omitted from the 2022 data are assumed to have died without a beneficiary.

The maintenance amount reported in the 2022 active data was unchanged from the prior year. This amount was expected to increase by 8.75% in accordance with the recent contract between the State and State Troopers Fraternal Associations covering Fiscal Years 2020-2023. We reflected the 8.75% increase in the maintenance amount in the 2022 valuation data.

13. Rationale for Assumptions

The demographic and economic assumptions used in this report, except for the investment return assumption, reflect the results of the July 1, 2018 - June 30, 2021 Experience Study, which was approved by the Board of Trustees on November 22, 2022.

The investment return assumption was recommended by the State Treasurer.

Summary of Actuarial Assumptions and Methods, *continued*

14. Changes in Assumptions Since Last Valuation The ordinary disability rates, the salary increase rates, the mortality improvement scale, and the age difference between male and female spouses were updated based on the July 1, 2018 - June 30, 2021 Experience Study, approved by the Board of Trustees on November 22, 2022. For a detailed description of each of the assumptions before and after the changes reflected in this valuation, please reference the Experience Study.

B. Projection Assumptions

1. Investment Rate of Return 7.00% per annum, compounded annually.

2. Appropriation Percentages The State is assumed to appropriate 100% of the Statutory contribution in FYE 2024 and each year thereafter.

3. Administrative Expenses The actual administrative expenses paid in FYE 2022 are assumed to increase by 2.75% per annum, compounded annually.

4. New Entrants

- Contributing active population assumed to remain at 2022 levels.
- Assumed to join mid-year.
- Age/sex distributions based on the last three years of new hires.
- Salary based on salary for most recent hires reported on 2022 data.
- New entrant salary assumed to increase with the salary increase rates applicable for members with 26 or more years of service.

5. Demographic Assumptions Same as those used for valuation purposes.

6. Projection Basis This report includes projections of future assets, liabilities, funded status and contributions for the purpose of assisting the Board of Trustees with the management of the System.

The projections are based on the same census data and financial information as of July 1, 2022 which has been used for the actuarial valuation. The projections assume continuation of the plan provisions and actuarial assumptions in effect as of July 1, 2022 and do not reflect the impact of any changes in benefits or actuarial assumptions that may be adopted after July 1, 2022 unless otherwise indicated. While the assumptions individually are reasonable for the underlying valuation that supports the projections, specifically for projection purposes, they are also considered reasonable in the aggregate.

The projections are based on our proprietary model *PScan* developed by our firm that utilizes the results shown in this valuation report. The projections assume that all future assumptions are met except where indicated with respect to future investment returns and demographic assumptions. The future outcomes become increasingly uncertain over time, and therefore the general trends and not the absolute values should be considered in the review of these projections.

C. Actuarial Methods

The actuarial methods used for determining State contributions are described as follows.

1. Actuarial Cost Method

The actuarial cost method for funding calculations is the Projected Unit Credit Cost Method.

Summary of Actuarial Assumptions and Methods, *continued*

The actuarial liability is calculated as the actuarial present value of the projected benefits linearly allocated to periods prior to the valuation year based on service. The unfunded actuarial liability is the actuarial liability on the valuation date less the actuarial value of assets.

In accordance with Chapter 78, P.L. 2011:

- Beginning with the July 1, 2010 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars, it will amortize the unfunded accrued liability over an open 30 year period.
- Beginning with the July 1, 2019 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars, it will amortize the unfunded accrued liability over a closed 30 year period (i.e., for each subsequent actuarial valuation the amortization period shall decrease by one year).
- Beginning with the July 1, 2029 actuarial valuation, when the remaining amortization period reaches 20 years, any increase or decrease in the unfunded accrued liability as a result of actuarial losses or gains for subsequent valuation years shall serve to increase or decrease, respectively, the amortization period for the unfunded accrued liability, unless an increase in the amortization period will cause it to exceed 20 years. If an increase in the amortization period as a result of actuarial losses for a valuation year would exceed 20 years, the accrued liability contribution shall be computed for the valuation year using a 20 year amortization period.

To the extent that the amortization period remains an open period in future years and depending upon the specific circumstances, it should be noted that in the absence of emerging actuarial gains or contributions made in excess of the actuarially determined contribution, any existing unfunded accrued liability may not be fully amortized in the future.

2. Asset Valuation Method

For the purposes of determining contribution rates, an actuarial value of assets is used that dampens the volatility in the market value of assets, resulting in a smoother pattern of contributions.

The actuarial value of assets is adjusted to reflect actual contributions, benefit payments and administrative expenses and an assumed return on the previous year's assets and the current year's cash flow at the prior year's actuarial valuation interest rate, with a further adjustment to reflect 20% of the difference between the resulting value and the actual market value of Plan assets.

3. State Contribution Payable Dates

Chapter 83, P.L. 2016 requires the State to make the required pension contributions on a quarterly basis in each fiscal year according to the following schedule: at least 25% by September 30, at least 50% by December 31, at least 75% by March 31, and at least 100% by June 30. As such, contributions are assumed to be made on a quarterly basis with the first contribution 15 months after the associated valuation date, with the exception of the FYE 2022 contribution. For FYE 2022 only, we assumed that the entire contribution was made in a single payment on July 1, 2021 based on information provided by the DPB.

4. Valuation Software

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

5. Changes in Actuarial Methods Since Last Valuation

None.

SUMMARY OF PLAN PROVISIONS

This summary of Plan provisions provides an overview of the major provisions of the SPRS used in the actuarial valuation. It is not intended to replace the more precise language of the NJ State Statutes, Title 53, Chapter 5A, and if there is any difference between the description of the plan herein and the actual language in the NJ State Statutes, the NJ State Statutes will govern. This valuation is prepared based on plan provisions in effect as of July 1, 2022 and does not reflect the impact of any changes in benefits that may have been approved after the valuation date.

1. Eligibility of Membership

All members of the former State Police and Benevolent Fund and full-time commissioned officers, non-commissioned officers or troopers of the Division of State Police. Membership is a condition of employment.

a) Tier 1 Member: Any member hired on or before May 21, 2010.

b) Tier 2 Member: Any member hired after May 21, 2010.

The hiring, rehiring, retention, and benefits of certain public employees during the COVID-19 Public Health Emergency was modified under Executive Order No. 103 of 2020, as extended.

2. Plan Year

The 12-month period beginning on July 1 and ending on June 30.

3. Service Credit

Service rendered while a member as described above. Chapter 399, P.L. 2021 permits members to purchase service credit earned from public employment in another state or with the United States Government.

4. Credited Service

A year is credited for each year of service as an officer or trooper in the State Police.

5. Compensation

Base salary in accordance with established salary policies of the state for all employees in the same position. Compensation does not include individual salary adjustments granted primarily in anticipation of the retirement or for temporary or extracurricular duties beyond the regular work day or shift. Effective June 30, 1996, Chapter 113, P. L. 1997 provided that the amount of compensation used for employer and member contributions and benefits under the program cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code. Chapter 1, P. L. 2010 provides that for members hired on or after May 22, 2010, the amount of compensation used for employer and member contributions and benefits under the System cannot exceed the annual maximum wage contribution base for Social Security, pursuant to the Federal Insurance Contributions Act.

6. Final Compensation

Average compensation received by the member in the last 12 months of credited service preceding retirement or death. Such term includes the value of the member's maintenance allowance for the same period. Chapter 1, P. L. 2010 provides that for members hired on or after May 22, 2010, Final Compensation means the average annual compensation for service for which contributions are made during any three fiscal years of membership providing the largest possible benefit to the member or the member's beneficiary.

7. Aggregate Contributions

The sum of all amounts deducted from the compensation of a member or contributed by him or on his behalf.

Summary of Plan Provisions, *continued*

8. Member Contributions

Each member contributes 9.0% of base salary. For contribution purposes, compensation does not include overtime, bonuses, maintenance or any adjustments before retirement.

9. Adjusted Final Compensation

For purposes of the pre-retirement accidental death benefit, the amount of compensation or compensation as adjusted, as the case may be, increased by the same percentage increase which is applied in any adjustments of the compensation schedule of active members after the member's death and before the date on which the deceased member of the retirement system would have accrued 25 years of service under an assumption of continuous service, at which time that amount will become fixed. Adjustments to compensation or adjusted compensation shall take effect at the same time as any adjustments in the compensation schedule of active members.

10. Benefits

a) Service and Special Retirement

Mandatory retirement at age 55. Voluntary retirement prior to age 55.

(1) Service Retirement: 20 years of service credit, or members as of August 29, 1985 who would not have 20 years of service credit at age 55.

Benefit is an annual retirement allowance equal to 50% of final compensation.

(2) Special Retirement: 25 years of service credit.

Benefit is an annual retirement allowance equal to 65% of final compensation, plus 1% for each year of service credit in excess of 25 years, to a maximum of 70% of final compensation.

(3) Members as of August 29, 1985 who would have 20 years of service credit but not 25 years at age 55.

Benefit is an annual retirement allowance equal to 50% of final compensation, plus 3% for each year of service credit in excess of 20 years.

b) Deferred Retirement

Termination of service prior to age 55 with 10 years of service credit.

Benefit is either a refund of aggregate contributions, or a deferred life annuity beginning at age 55 equal to 2% of final compensation for each year of service credit up to 25 years.

For members who die during the deferral period, the benefit is a return of aggregate contributions.

c) Non-Vested Termination

Termination of service prior to age 55 and less than 10 years of service credit.

Benefit is a return of aggregate contributions.

d) Death Benefits

(1) Ordinary Death Before Retirement: Death of an active member of the plan. Benefit is equal to:

a. Lump sum payment equal to 350% of final compensation, also known as the noncontributory group life insurance benefit, plus

Summary of Plan Provisions, *continued*

b. Spousal life annuity of 50% of final compensation payable until spouse's death or remarriage. If there is no surviving spouse, or upon death or remarriage, 50% of final compensation payable to surviving children in equal shares. If there is no surviving spouse or dependent child(ren), 25% (40%) of final compensation to one (two) dependent parent(s). If there is no surviving spouse, dependent child(ren) or parent(s), the benefit is a refund of accumulated contributions.

(2) Accidental Death Before Retirement: Death of an active member of the plan resulting during performance of duties. Benefit is equal to:

a. Lump sum payment equal to 350% of final compensation, also known as the non-contributory group life insurance benefit, plus

b. Spousal life annuity of 70% of final compensation or adjusted final compensation (if appropriate) payable until spouse's death. If there is no surviving spouse, or upon death of the surviving spouse, 70% of final compensation or adjusted final compensation (if appropriate) payable to surviving children in equal shares. If there is no surviving spouse or dependent children, 25% (40%) of final compensation or adjusted final compensation (if appropriate) to one (two) dependent parents. If there is no surviving spouse, dependent child(ren) or parent(s), the benefit is a refund of accumulated contributions.

(3) Death After Retirement: Death of a retired member of the plan. Accidental death benefits in certain circumstances are provided to surviving spouses and children of SPRS retirees who participated in the World Trade Center rescue, recovery or cleanup operations and died prior to July 8th, 2019.

Benefit is equal to:

a. Lump sum payment equal to 50% of final compensation for a member retired under service, special or deferred retirement. For a member receiving a disability benefit, lump sum payment of 350% of final compensation if death occurs prior to age 55 and 50% of final compensation if death occurs after age 55. This benefit is also known as the noncontributory group life insurance benefit, plus

b. Spousal life annuity of 50% of final compensation payable until spouse's death or remarriage. If there is no surviving spouse, or upon death or remarriage, a total of 20% (35%, 50%) of final compensation payable to one (two, three or more) dependent child(ren). Previously granted COLAs also apply.

e) Disability Retirement

(1) Ordinary Disability Retirement: Four years of service credit and mentally or physically incapacitated for the performance of his usual duty and of any other available duty in the Division of State Police and such incapacity is likely to be permanent.

Benefit is an immediate life annuity equal to the greater of:

a. 40% of final compensation, or

b. 1.5% of final compensation for each year of service credit.

(2) Involuntary Ordinary Disability Retirement: Ordinary Disability Retirement applied for by the employer.

Benefit is an immediate life annuity equal to:

a. For members with 20 years of service credit but less than 25 years, 50% of final compensation plus 3% of final compensation for each year of service credit in excess of 20 years, to a maximum of 65% of final compensation.

b. For all other members, the Ordinary Disability benefit.

(3) Accidental Disability Retirement: Totally and permanently disabled as a direct result of a traumatic event occurring during and as a result of his regular or assigned duties and such member is mentally or physically incapacitated for the performance of his usual

Summary of Plan Provisions, *continued*

duties in the Division of State Police. Under certain conditions, regular or assigned duties may include the World Trade Center (WTC) rescue, recovery, or cleanup operations between September 11, 2001 and October 11, 2001. For such member who participated in the WTC rescue, recovery, or cleanup operations, the total and permanent disability may occur after retirement on a service retirement or an ordinary disability retirement.

Benefit is an immediate life annuity equal to 2/3 of annual rate of compensation, including the maintenance allowance, at the time of the traumatic event or retirement, whichever is greater.

11. Forms of Payment

No optional forms of payment available.

12. Changes in Plan Provisions Since Last Valuation

Chapter 399, P.L. 2021 permits members to purchase service credit earned from public employment in another state or with the United States Government.

Chapter 428, P.L. 2021 limits to 90 days the period during which members can be kept past their mandatory retirement during a public health emergency or state of emergency.

HISTORICAL DATA AND REQUIRED ACFR EXHIBITS

In accordance with the Government Finance Officers Association (GFOA) and their recommended checklist for Annual Comprehensive Financial Reports (ACFRs), we prepared the following schedules for the System. The GFOA checklist uses the term Actuarial Accrued Liability, which is the same as the Actuarial Liability used elsewhere in this report.

Table D-1
Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

Valuation Date July 1,	Added to Rolls		Removed from Rolls		Rolls at End of Year		Average Annual Allowance[1]	% Increase in Average Annual Allowance[1]
	Number	Annual Allowance	Number[1]	Annual Allowance	Number[1]	Annual Allowance		
2022	153	$ 11,561,892	85	$ 3,902,361	3,612	$ 247,559,564	$ 68,538	1.76%
2021	142	10,977,530	77	3,625,235	3,544	238,690,959	67,351	1.30%
2020	161	11,682,136	82	3,767,812	3,479	231,316,330	66,489	1.19%
2019	79	5,012,378	83	3,855,314	3,400	223,394,278	65,704	0.66%
2018	127	9,003,637	64	2,802,076	3,404	222,196,734	65,275	8.54%
2017	101	5,551,153	79	3,074,257	3,588	215,773,680	60,138	0.54%
2016	137	8,351,556	82	3,165,408	3,566	213,292,784	59,813	0.91%
2015	160	10,330,374	58	2,732,284	3,511	208,106,636	59,273	0.77%
2014	201	14,131,655	45	1,563,031	3,409	200,508,546	58,817	1.81%
2013	291	20,641,305	68	2,192,736	3,253	187,939,922	57,774	3.28%

[1] Beginning with the 2018 valuation. QDRO records excluded from headcounts and QDRO benefits included with member records. This change resulted in 247 fewer records on the rolls as of July 1, 2018.

Table D-2
Schedule of Active Member Valuation Data

Valuation Date July 1,	Number of Contributing Active Members[1]	Annual Compensation[1]	Annual Average Compensation[1]	% Increase /(Decrease) in Average Annual Compensation[1]
2022	2,994	$ 345,191,396	$ 115,294	2.68%
2021	2,957	332,022,798	112,284	3.98%
2020	2,762	298,254,514	107,985	0.84%
2019	2,766	296,189,926	107,082	3.32%
2018	2,661	275,790,087	103,642	0.84%
2017	2,812	289,022,222	102,782	0.83%
2016	2,725	277,771,135	101,934	(0.98%)
2015	2,676	275,477,457	102,944	(1.09%)
2014	2,522	262,496,289	104,083	(1.46%)
2013	2,481	262,063,829	105,628	1.48%

[1] Prior to July 1, 2018, includes non-contributing active members.

Historical Data and Required ACFR Exhibits, *continued*

Table D-3
Schedule of Funding Progress

Valuation Date July 1,	Actuarial Value of Assets [1] (a)	Actuarial Accrued Liability (b)	(Surplus)/Unfunded Actuarial Accrued Liability (c) = (b) - (a)	Funded Ratio (a)/(b)	Covered Payroll[2] (d)	(Surplus)/Unfunded Actuarial Accrued Liability as % of Covered Payroll (c)/(d)
2022	$ 2,265,019,950	$ 4,150,668,450	$ 1,885,648,500	54.57%	$ 345,191,396	546.26%
2021	2,173,817,051	3,994,414,280	1,820,597,229	54.42%	332,022,798	548.34%
2020	2,001,925,624	3,692,501,511	1,690,575,887	54.22%	298,254,514	566.82%
2019	1,971,653,600	3,595,361,713	1,623,708,113	54.84%	296,189,926	548.20%
2018	1,939,304,839	3,430,821,762	1,491,516,923	56.53%	275,790,087	540.82%
2017	1,923,127,122	3,346,082,274	1,422,955,152	57.47%	289,022,222	492.33%
2016	1,931,131,875	3,209,386,033	1,278,254,158	60.17%	277,771,135	460.18%
2015	1,969,239,472	3,090,220,484	1,120,981,012	63.72%	275,477,457	406.92%
2014	1,981,376,495	2,963,182,120	981,805,625	66.87%	262,496,289	374.03%
2013	1,990,797,312	2,870,590,700	879,793,388	69.35%	262,063,829	335.72%

[1] Includes receivable amounts.

[2] Prior to July 1, 2018, includes non-contributing active members.

Table D-4
Schedule of Funded Liabilities by Type (Solvency Test)

Valuation Date July 1,	Actuarial Accrued Liabilities for			Actuarial Value of Assets[1]	Portion of Actuarial Accrued Liabilities Covered by Actuarial Value of Assets		
	Contributing & Non-Contributing Active Member Contributions (1)	Retirees, Beneficiaries & Deferred Vesteds (2)	Contributing & Non-Contributing Active Member Benefits Financed by Employer (3)		(1)	(2)	(3)
2022	$ 255,374,601	$ 2,877,652,250	$ 1,017,641,599	$ 2,265,019,950	100.00%	69.84%	0.00%
2021	244,835,739	2,799,992,676	949,585,865	2,173,817,051	100.00%	68.89%	0.00%
2020	237,863,129	2,647,423,561	807,214,821	2,001,925,624	100.00%	66.63%	0.00%
2019	232,360,668	2,562,244,073	800,756,972	1,971,653,600	100.00%	67.88%	0.00%
2018	215,026,809	2,512,523,540	703,271,413	1,939,304,839	100.00%	68.63%	0.00%
2017	206,680,622	2,445,366,686	694,034,966	1,923,127,122	100.00%	70.19%	0.00%
2016	190,955,019	2,401,980,284	616,450,730	1,931,131,875	100.00%	72.45%	0.00%
2015	181,536,046	2,289,865,821	618,818,617	1,969,239,472	100.00%	78.07%	0.00%
2014	173,529,948	2,173,442,158	616,210,014	1,981,376,495	100.00%	83.18%	0.00%
2013	171,462,709	2,034,551,263	664,576,728	1,990,797,312	100.00%	89.42%	0.00%

[1] Includes receivable amounts.

Historical Data and Required ACFR Exhibits, *continued*

Table D-5
Analysis of Financial Experience
Change in Unfunded Actuarial Accrued Liability

Valuation Date July 1,	Actuarial Value of Asset Investment (Gain)/Loss	Actuarial Accrued Liability (Gain)/Loss	Assumption & Method Change	Plan Changes	Contributions[1]	Change in Unfunded Actuarial Accrued Liability
2022	$ 30,314,524	$ 35,857,942	$ 14,109,636	$ 0	$ (15,230,831)	$ 65,051,271
2021	(40,856,964)	70,169,384	137,855,533	0	(37,146,611)	130,021,342
2020	35,163,723	3,355,504	0	0	28,348,547	66,867,774
2019	17,233,108	(2,412,105)	79,849,779	0	37,520,408	132,191,190
2018	14,491,075	(3,282,548)	2,791,271	0	54,561,973	68,561,771
2017	23,174,471	1,508,647	55,934,385	239,606	63,843,885	144,700,994
2016	46,667,367	(8,038,512)	45,696,315	0	72,947,976	157,273,146
2015	17,135,937	71,841	52,383,620	0	69,583,989	139,175,387
2014	3,558,670	16,454,524	1,252,085	0	80,746,958	102,012,237
2013	39,486,464	15,629,542	0	0	52,296,702	107,412,708

[1] Change due to contributions (greater)/less than normal cost plus interest on the Unfunded Actuarial Accrued Liability.

CHEIRON Classic Values, Innovative Advice

March 27, 2024

State House Commission
Judicial Retirement System of New Jersey

Re: Actuary's Certification Letter

Dear Commission Members:

This is the Actuary's Certification Letter for the Actuarial Section of the Annual Comprehensive Financial Report for the Judicial Retirement System of New Jersey (JRS or System) as of June 30, 2023. This letter includes references to three documents produced by Cheiron for the System: the Actuarial Valuation Report as of July 1, 2022 (transmitted February 3, 2023) and the GASB 67 and 68 Reports as of June 30, 2023 (transmitted February 13, 2024).

Actuarial Valuation Report as of July 1, 2022

The purpose of the annual Actuarial Valuation Report as of July 1, 2022 is to determine the actuarial funding status of JRS on that date and to calculate the Statutory Contribution amount for the State for the Fiscal Year Ending 2024. The prior review was conducted as of July 1, 2021, and included the Statutory Contribution amount for the Fiscal Year Ending 2023.

Actuarial funding is based on the Projected Unit Credit Cost Method. The Statutory Contribution amounts contain two components: the employer normal cost (cost of benefits for the upcoming year) and an amortization for the unfunded actuarial liability (UAL). The funding methodology prescribed by the N.J. State Statutes does not include a cost component for administrative expenses, and therefore administrative expenses are implicitly covered by the investment rate of return assumption.

In accordance with Chapter 78, P.L. 2011:

- Beginning with the July 1, 2010 actuarial valuation, the amortization amount is calculated to amortize the UAL over an open 30 year period as a level dollar amount.
- Beginning with the July 1, 2019 actuarial valuation, the amortization amount will be calculated to amortize the UAL over a closed 30 year period (i.e., for each subsequent actuarial valuation, the amortization period shall decrease by one year) as a level dollar amount.
- Beginning with the July 1, 2029 actuarial valuation, when the amortization period reaches 20 years, an increase or decrease in the UAL as a result of actuarial losses and gains will increase or decrease, respectively, the amortization period for the UAL, except that the amortization period will not exceed 20 years.

To the extent that the amortization period remains an open period in future years and depending upon the specific circumstances, it should be noted that in the absence of emerging actuarial gains or contributions made in excess of the Statutory Contribution, any existing UAL may not be fully amortized in the future.

Member contributions are set in the N.J. State Statutes.

The non-contributory group life insurance benefit is funded separately through a term cost.

For actuarial valuation purposes, assets are valued at Actuarial Value as prescribed in the N.J. State Statutes. Under this method, the assets used to determine the Statutory Contribution amounts take into account market value by spreading all investment gains and losses (returns above or below expected returns) over a rolling five-year period.

The actuarial value of assets is intended to dampen the volatility in the market value of assets, resulting in a smoother pattern of contributions. Actuarial Standards of Practice (ASOP) No. 44 states that the asset valuation method should produce an actuarial value of assets that falls within a reasonable range of market value, recognizes the difference between the market value and actuarial value of assets within a reasonably short period of time, and is likely to produce actuarial value of assets that are sometimes greater than and sometimes less than the corresponding market values. The asset method required under the N.J. State Statutes does not meet the requirements of ASOP No. 44 because this method has produced actuarial value of assets which have consistently been greater than the market value of assets and recognizes investment losses slowly over time. Additionally, the method may produce an actuarial value of assets that falls outside of a reasonable range of the market value.

We prepared the following schedules, which we understand will be included in the Actuarial Section of the Annual Comprehensive Financial Report, based on the July 1, 2022 actuarial valuation. All historical information prior to the July 1, 2018 actuarial valuation shown in these schedules is based on information reported by the prior actuary, Buck Global, LLC.

- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Schedule of Active Member Valuation Data
- Schedule of Funding Progress
- Schedule of Funded Liabilities by Type (formerly referred to as the Solvency Test)
- Analysis of Financial Experience: Change in Unfunded Actuarial Accrued Liability
- Summary of Plan Provisions
- Summary of Current Actuarial Assumptions and Methods
- Membership Information (Active, Deferred Vested, and Retired)

The demographic and economic (other than the investment rate of return) actuarial assumptions are based on the recommendations from the July 1, 2018 – June 30, 2021 Experience Study, approved by the State House Commission on January 9, 2023. As a result of this Experience Study, the assumed retirement rates, the mortality improvement scale, and the age difference between male and female spouses were updated.

The assumed investment rate of return of 7.00% was recommended by the State Treasurer.

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices except as noted. In particular, the assumptions and methods (other than the asset method) used for funding purposes meet the requirements of the Actuarial Standards of Practice (ASOP), in particular ASOPs Nos. 4, 27 and 35. As noted above the asset method does not meet the requirements of ASOP No. 44.

GASB 67 and 68 Reports as of June 30, 2023

The purpose of the GASB 67 and 68 Reports as of June 30, 2023 is to provide accounting and financial reporting information under GASB 67 for JRS and under GASB 68 for the State. These reports are not appropriate for other purposes, including the measurement of funding requirements for JRS.

For financial reporting purposes, the Total Pension Liability is based on the July 1, 2022 actuarial valuation updated to the measurement date of June 30, 2023. We are not aware of any other significant events between the valuation date and the measurement date that are measurable at this time, so the update procedures only included the addition of service cost and interest cost offset by actual benefit payments.

Please refer to our GASB 67 and 68 Reports as of June 30, 2023 for additional information related to the financial reporting of the System. We prepared the following schedules for inclusion in the Financial Section of the Annual Comprehensive Financial Report based on the June 30, 2023 GASB 67 and 68 reports:

- Change in Net Pension Liability
- Sensitivity of Net Pension Liability to Changes in Discount Rate

- Schedule of Changes in Net Pension Liability and Related Ratios
- Schedule of Employer Contributions
- Notes to the Schedule of Employer Contributions

The demographic and economic (other than the investment rate of return) actuarial assumptions are based on the recommendations from the July 1, 2018 – June 30, 2021 Experience Study performed by Cheiron and approved by the State House Commission on January 9, 2023. The assumptions used in the most recent reports are intended to produce results that, in the aggregate, reasonably approximate the anticipated future experience of the Plan. The next experience analysis is expected to cover the years through 2024.

Based on the State Treasurer's recommendation, the investment return assumption used to determine the Statutory Contribution amounts is 7.00% per annum.

In accordance with Paragraph 40 of GASB Statement No. 67, the projection of the Plan's fiduciary net position is based on a long-term expected rate of return of 7.00% per annum as recommended by the State Treasurer.

We certify that the reports were performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for disclosure purposes have been prepared in accordance with our understanding of generally accepted accounting principles as promulgated by the GASB.

Disclaimers

In preparing our reports, we relied on information (some oral and some written) supplied by the DPB. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

Cheiron's reports were prepared for JRS for the purposes described herein and for use by the plan auditor in completing an audit related to matters herein. Other users of these reports are not intended as users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

These reports and their contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinions contained in these reports. These reports do not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Respectfully submitted,

Janet Cranna, FSA, FCA, MAAA, EA
Principal Consulting Actuary

Jonathan B. Chipko, FSA, MAAA, EA
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Anu Patel
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MEMBERSHIP INFORMATION

The data for this valuation was provided by the New Jersey Division of Pensions and Benefits as of July 1, 2022. Cheiron did not audit any of the data. However, we did perform an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality. Tvhe following is a list of data charts contained in this section:

- A-1: Contributing Active Member Data
- A-2: Non-Contributing Active Member Data
- A-3: Inactive Member Data, Total Annual and Average Retirement Allowances by Status
- A-4: Reconciliation of Plan Membership

Table A-1
Contributing Active Member Data

	July 1, 2022	July 1, 2021	% Change
Count	390	394	-1.0%
Average Age	59.0	59.2	-0.4%
Average Judicial Service	8.7	9.3	-5.7%
Average Appropriation Pay	$ 197,528	$ 193,912	1.9%
Total Appropriation Payroll	$ 77,035,971	$ 76,401,342	0.8%

Table A-2
Non-Contributing Active Member Data

Members Eligible for Annuity	July 1, 2022	July 1, 2021	% Change
Count	0	1	-100.0%
Average Age	0	63.2	-100.0%
Average Judicial Service	0	4.9	-100.0%
Average Last Reported Pay	$ 0	$ 192,289	-100.0%
Total Last Reported Pay	$ 0	$ 192,289	-100.0%
Members Only Eligible for Refund			
Count	4	9	-55.6%
Last Reported Annuity Savings Fund	$ 189,332	$ 476,587	-60.3%
Total			
Count	4	10	-60.0%

Membership Information, *continued*

Table A-3
Inactive Member Data by Status

	July 1, 2022	July 1, 2021	% Change
Retirees			
Count	484	465	4.1%
Annual Retirement Allowances	$ 53,526,445	$ 50,500,191	6.0%
Average Retirement Allowance	$ 110,592	$ 108,603	1.8%
Beneficiaries			
Count	185	180	2.8%
Annual Retirement Allowances	$ 10,688,313	$ 10,263,291	4.1%
Average Retirement Allowance	$ 57,775	$ 57,018	1.3%
Disabled			
Count	9	10	-10.0%
Annual Retirement Allowances	$ 1,106,659	$ 1,175,655	-5.9%
Average Retirement Allowance	$ 122,962	$ 117,566	4.6%
In-Pay Total			
Count	**678**	**655**	**3.5%**
Annual Retirement Allowances	**$ 65,321,417**	**$ 61,939,137**	**5.5%**
Average Retirement Allowance	**$ 96,344**	**$ 94,564**	**1.9%**
Deferred Vested Members			
Count	9	9	0.0%
Annual Retirement Allowances	$ 729,235	$ 660,288	10.4%
Average Retirement Allowance	$ 81,026	$ 73,365	10.4%

QDRO benefits included with member records for valuation purposes.

Membership Information, *continued*

Table A-4
Reconciliation of Plan Membership from July 1, 2021 to July 1, 2022

	Contributing Actives	Non-Contributing Actives	Deferred Vested	Retired	Disabled	Beneficiaries	Total
1. July 1, 2021	**394**	**10**	**9**	**465**	**10**	**180**	**1,068**
2. Additions							
a. New entrants	33						33
b. New dependents						1	1
c. Data corrections						1	1
c. Total	33	0	0	0	0	2	35
3. Reductions							
a. Withdrawal	(1)	(4)	(1)				(6)
b. Died without beneficiary				(8)	(1)	(7)	(16)
c. Payments ceased							0
d. Total	(1)	(4)	(1)	(8)	(1)	(7)	(22)
4. Changes in Status							
a. Contributing Active							0
b. Non-Contributing Active	(1)						0
c. Deferred Vested	(35)		1				0
d. Retired		(1)		36			0
e. Disabled		(1)			1		0
f. Died with beneficiary				(9)	(1)	10	0
g. Total	(36)	(2)	1	27	0	10	0
5. July 1, 2022	**390**	**4**	**9**	**484**	**9**	**185**	**1,081**

QDRO benefits included with member records for valuation purposes.

ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Investment Rate of Return

7.00% per annum, compounded annually.

2. Administrative Expenses

No explicit assumption is made for administrative expenses for funding purposes per the funding methodology prescribed by NJ State Statute.

3. Interest Crediting Rate on Accumulated Deductions

7.00% per annum, compounded annually. Interest credits are assumed to end upon termination.

4. Cost-of-Living Adjustments (COLAs)

No future COLA is assumed. Previously granted COLAs are included in the data.

5. Salary Increases

Salaries are assumed to increase 2.0% per year through FYE 2025 and 2.75% per year thereafter.

Salary increases are assumed to occur on January 1.

6. 401 (a)(17) Pay Limit

$305,000 in 2022 increasing 2.75% per annum, compounded annually.

7. Disability

Representative disability rates are as follows:

Age	Rates
30	0.022%
35	0.026
40	0.033
45	0.064
50	0.114
55	0.197
60	0.326
65	0.473

8. Mortality

Healthy Retirees (Healthy Annuitants): The Pub-2010 Teachers Above-Median Income Healthy Retiree mortality table *[PubT-2010(A) Healthy Retiree]* as published by the Society of Actuaries, unadjusted, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

Disabled Retirees (Disabled Annuitants): The Pub-2010 Non-Safety Disabled Retiree mortality table *[PubNS-2010 Disabled Retiree]* as published by the Society of Actuaries, unadjusted, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

Actuarial Assumptions and Methods, *continued*

Pre-Retirement (Non-Annuitants): The Pub-2010 Teachers Above-Median Income Employee mortality table *[PubT-2010(A) Employee]* as published by the Society of Actuaries, unadjusted, and with future improvement from the base year of 2010 on a generational basis using SOA's Scale MP-2021.

9. Retirement

Retirement rates are as follows:

Age	Less than 15 Years of Judicial Service	15-19 Years of Judicial Service	20 or More Years of Judicial Service
<60	0.0%	0.0%	0.0%
60	2.0	2.0	20.0
61	2.0	2.0	20.0
62	2.0	2.0	20.0
63	2.0	2.0	20.0
64	2.0	2.0	20.0
65	5.0	40.0	30.0
66	2.0	40.0	20.0
67	2.0	40.0	20.0
68	2.0	40.0	20.0
69	2.0	40.0	20.0
70	100.0	100.0	100.0

10. Termination

None assumed.

11. Family Composition Assumptions

For members not currently in receipt, 90% of members are assumed married to spouses of the opposite sex. Males are assumed to be two years older than females.

For purposes of the optional form of payment death benefit for members currently in receipt, beneficiary status is based on the beneficiary allowance reported. If no beneficiary date of birth is provided, the beneficiary is assumed to be the member's spouse of the opposite sex with males assumed to be two years older than females.

Actuarial Assumptions and Methods, *continued*

For purposes of the statutory death benefit for members currently in receipt, 100% of participants are assumed married to spouses of the opposite sex, with the exception of those members who elected Optional Forms A, B, C or D and are currently in receipt of their maximum retirement allowance. The spouse is assumed to be the reported beneficiary. If no beneficiary date of birth is provided, males are assumed to be two years older than females.

No additional dependent children or parents are assumed.

Current dependents under age 21 are assumed to receive a benefit until age 21. Current dependents over age 21 are assumed to receive a benefit for the remainder of their lifetime.

12. Form of Payment

Current actives are assumed to elect the Maximum Option.

13. Data

Information provided by the prior actuary was relied upon for the purposes of valuing the deferred vested members.

For current beneficiaries with missing data, reasonable assumptions were made based on the information available in prior years.

Inactives receiving benefits according to the 2021 data but omitted from the 2022 data are assumed to have died without a beneficiary.

14. Rationale for Assumptions

The demographic and economic assumptions used in this report, except for the investment return assumption, reflect the results of the July 1, 2018 – June 30, 2021 Experience Study, which was approved by the State House Commission on January 9, 2023. The investment return assumption was recommended by the State Treasurer.

15. Changes in Assumptions Since Last Valuation

The assumed retirement rates, the mortality improvement scale, and the age difference between male and female spouses were updated based on the July 1, 2018 – June 30, 2021 Experience Study, which was approved by the State House Commission on January 9, 2023. For a detailed description of each of the assumptions before and after the changes reflected in this valuation, please reference the Experience Study.

B. Projection Assumptions

1. Investment Rate of Return

7.00% per annum, compounded annually.

2. Appropriation Percentages

The State is assumed to appropriate 100% of the Statutory contribution in FYE 2024, and each year thereafter.

3. Administrative Expenses

The actual administrative expenses paid in FYE 2022 are assumed to increase by 2.75% per annum, compounded annually.

4. New Entrants

- Contributing active population assumed to remain at 2022 levels.
- Assumed to join mid-year.
- Age/sex distributions based on the last three years of new hires.
- Salary based on salary for most recent hires reported on 2022 data.
- New entrant salary assumed to increase at the same rate used for current members.

Actuarial Assumptions and Methods, *continued*

5. Demographic Assumptions Same as those used for valuation purposes.

6. Projection Basis This report includes projections of future assets, liabilities, funded status and contributions for the purpose of assisting the Board of Trustees with the management of the System.

The projections are based on the same census data and financial information as of July 1, 2022 which has been used for actuarial valuation. The projections assume continuation of the plan provisions and actuarial assumptions in effect as of July 1, 2022 and do not reflect the impact of any changes in benefits or actuarial assumptions that may be adopted after July 1, 2022 unless otherwise indicated. While the assumptions are individually reasonable for the underlying valuation that supports the projections, specifically for projection purposes, they are also considered reasonable in the aggregate.

The projections assume that all future assumptions are met except where indicated with respect to future investment returns and demographic assumptions. The future outcomes become increasingly uncertain over time, and therefore the general trends and not the absolute values should be considered in the review of these projections.

C. Actuarial Methods

The actuarial methods used for determining State contributions are described as follows.

1. Actuarial Cost Method

The actuarial cost method for funding calculations is the Projected Unit Credit Cost Method.

The actuarial liability is calculated as the actuarial present value of the projected benefits linearly allocated to periods prior to the valuation year based on judicial service. Refunds are valued as the reported Accumulated Deductions as provided by the DPB. The unfunded actuarial liability is the actuarial liability on the valuation date less the actuarial value of assets.

In accordance with Chapter 78, P.L. 2011:

- Beginning with the July 1, 2010 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars, it will amortize the unfunded accrued liability over an open 30 year period.
- Beginning with the July 1 , 2019 actuarial valuation, the accrued liability contribution shall be computed so that if the contribution is paid annually in level dollars, it will amortize the unfunded accrued liability over a closed 30 year period (i.e., for each subsequent actuarial valuation the amortization period shall decrease by one year).
- Beginning with the July 1, 2029 actuarial valuation, when the remaining amortization period reaches 20 years, any increase or decrease in the unfunded accrued liability as a result of actuarial losses or gains for subsequent valuation years shall serve to increase or decrease, respectively, the amortization period for the unfunded accrued liability, unless an increase in the amortization period will cause it to exceed 20 years. If an increase in the amortization period as a result of actuarial losses for a valuation year would exceed 20 years, the accrued liability contribution shall be computed for the valuation year using a 20 year amortization period.

To the extent that the amortization period remains an open period in future years and depending upon the specific circumstances, it should be noted that in the absence of emerging actuarial gains or contributions made in excess of the actuarially determined contribution, any existing unfunded accrued liability may not be fully amortized in the future.

Actuarial Assumptions and Methods, *continued*

2. Asset Valuation Method

For the purposes of determining contribution rates, an actuarial value of assets is used that dampens the volatility in the market value of assets, resulting in a smoother pattern of contributions.

The actuarial value of assets is adjusted to reflect actual contributions, benefit payments and administrative expenses and an assumed return on the previous year's assets and the current year's cash flow at the prior year's actuarial valuation interest rate, with a further adjustment to reflect 20% of the difference between the resulting value and the actual market value of Plan assets.

3. State Contribution Payable Dates

Chapter 83, P.L. 2016 requires the State to make the required pension contributions on a quarterly basis in each fiscal year according to the following schedule: at least 25% by September 30, at least 50% by December 31, at least 75% by March 31, and at least 100% by June 30. As such, contributions are assumed to be made on a quarterly basis with the first contribution 15 months after the associated valuation date, with the exception of the FYE 2022 contribution. For FYE 2022 only, we assumed that the entire contribution was made in a single payment on July 1, 2021 based on information provided by the DPB.

4. Valuation Software

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

5. Changes in Actuarial Methods Since Last Valuation

None.

SUMMARY OF PLAN PROVISIONS

This summary of Plan provisions provides an overview of the major provisions of the JRS used in the actuarial valuation. It is not intended to replace the more precise language of the NJ State Statutes, Title 43, Chapter 6A, and if there is any difference between the description of the plan herein and the actual language in the NJ State Statutes, the NJ State Statutes will govern. This valuation is prepared based on plan provisions in effect as of July 1, 2022 and does not reflect the impact of any changes in the benefits that may have been approved after the valuation date.

1. Eligibility for Membership

Chief Justice and Associate Justices of the State Supreme Court, and judges of the Appellate Court, Superior Court and Tax Court of the State of New Jersey.

2. Plan Year

The 12-month period beginning on July 1 and ending on June 30.

3. Service Credit

A year is credited for each year of service as a public employee in the State of New Jersey. Any service, for which the member did not receive annual salary of at least $500, shall be excluded. Judicial service credit is based on biweekly pay periods for which member contributions are made to JRS.

4. Final Salary

Annual salary received by the member at the time of retirement or other termination of service. (Effective June 30, 1996, Chapter 113, P.L. 1997 provided that the amount of compensation used for employer and member contributions and benefits under the program cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code.)

5. Accumulated Deductions

The sum of all amounts deducted from the compensation of a member or contributed by him or on his behalf.

6. Interest Credits on Accumulated Deductions

Members receive interest credits while contributing and for the first two years of inactivity. Prior to July 1, 2018, members received interest credits for the entire period of inactivity until retirement or death.

7. Employee Contributions

Any member enrolled prior to January 1, 1996 contributes 3% of the difference between current salary and salary for the position on January 18, 1982. Members enrolled on or after January 1, 1996 contribute 3% of their full salary.

Chapter 78, P.L. 2011 increased Member Contributions by 9% of salary phased in over a period of seven years beginning October 2011. (The additional 9% of salary was fully recognized in July 2017.)

a) For members enrolled prior to January 1, 1996:

(1) Member contributes 9% (phased in over a period of seven years beginning October 2011) of the salary for that position on January 18, 1982.

(2) Member contributes 12% (9% of that phased in over a period of seven years beginning October 2011) of the difference between current salary and salary for that position on January 18, 1982.

b) For members enrolled on or after January 1, 1996, Member contributes 12% (9% of that phased in over a period of seven years beginning October 2011) of full salary.

Summary of Plan Provisions, *continued*

8. Retirement Allowance

Benefit comprised of a member annuity plus an employer pension.

9. Benefits

a) Service Retirements

Mandatory retirement at age 70. Voluntary retirement prior to that age.

Chapter 105, P.L. 2021 removed the mandatory retirement at age 70 for a member who has been appointed by the Governor, with the advice and consent of the Senate, to the position of county prosecutor.

(1) Age 70 and 10 years of judicial service; or

Age 65 and 15 years of judicial service; or

Age 60 and 20 years of judicial service.

Benefit is an annual retirement allowance equal to 75% of final salary.

(2) Age 65 while serving as a judge, 5 consecutive years of judicial service and 15 years in the aggregate of public service; or

Age 60 while serving as a judge, 5 consecutive years of judicial service and 20 years in the aggregate of public service.

Benefit is an annual retirement allowance equal to 50% of final salary.

(3) Age 60 while serving as a judge, 5 consecutive years of judicial service and 15 years in the aggregate of public service.

Benefit is an annual retirement allowance equal to 2% of final salary for each year of public service up to 25 years plus 1% of final salary for each year of public service in excess of 25 years.

(4) Age 60 while serving as a judge.

Benefit is an annual retirement allowance equal to 2% of final salary for each year of judicial service up to 25 years plus 1% for each year of public service in excess of 25 years.

b) Early Retirement

Prior to age 60 while serving as a judge, 5 consecutive years of judicial service and 25 or more years in the aggregate of public service.

Benefit is an annual retirement allowance equal to 2% of final salary for each year of public service up to 25 years plus 1% of final salary for each year of public service in excess of 25 years, actuarially reduced for commencement prior to age 60.

c) Deferred Retirement

Termination of service prior to age 60, with 5 consecutive years of judicial service and 10 years in the aggregate of public service.

Benefit is a refund of accumulated deductions, or a deferred life annuity beginning at age 60 equal to 2% of final salary for each year of public service up to 25 years, plus 1% of final salary for each year of public service in excess of 25 years.

Chapter 329, P.L. 2021 amended the retirement provisions to permit a Judge serving as Administrative Director of the Courts to apply for deferred retirement and be appointed as Administrative Director of the Courts, if the member is at least 65 years old and has service for 20 years as a judge in any court in New Jersey.

d) Non-Vested Termination

Termination of service prior to age 60, with less than 5 years of judicial service or less than 10 years in the aggregate of public service.

Benefit is a refund of accumulated deductions.

e) Disability Retirement

Physically or otherwise incapacitated for the full and efficient service to State in his judicial capacity and such incapacity is likely to be

Summary of Plan Provisions, *continued*

permanent.

Benefit is an annual retirement allowance of 75% of final salary.

f) Death Benefits

(1) Before Retirement: Death of an active member of the plan. Benefit is equal to:

a) Lump sum payment equal to 150% of final salary also known as the non-contributory group life insurance benefit, plus

b) Spousal life annuity of 25% of final salary payable until spouse's remarriage plus 10% (15%) to one (two or more) dependent child(ren). If there is no surviving spouse, or upon death or remarriage, a total of 15% (20%, 30%) of final salary payable to one (two, three or more) dependent child(ren). If there is no surviving spouse or dependent child(ren), 20% (30%) of final salary to one (two) dependent parent(s). If there is no surviving spouse, dependent child(ren) or parent(s), the benefit is a refund of accumulated deductions with interest. This is also known as the statutory death benefit.

(2) After Retirement: Death of a retired member of the plan. The benefit is equal to:

a) Lump sum of 25% of final salary for a member retired under service or early retirement. For a member receiving a disability benefit, a lump sum of 150% of final salary if death occurred before the member attained age 60 and 25% of final salary if death occurred after age 60. This is also known as the non-contributory group life insurance benefit, plus

b) Spousal life annuity of 25% of final salary adjusted for any previously granted Cost-of-Living Adjustments, or the salary of an active judge in the member's final position at retirement, if larger, payable until spouse's remarriage plus 10% (15%) to one (two or more) dependent child(ren). If there is no surviving spouse, or upon death or remarriage, a total of 15% (20%, 30%) of final salary payable to one (two, three or more) dependent child(ren). This is also known as the statutory death benefit.

10. Forms of Payment

In addition to the postretirement death benefits listed above, the member may elect the following forms of payment.

a) Maximum Option: Single life annuity with a return of the balance of the member accumulated deductions with credited interest.
b) Option 1: Single life annuity with a return of the balance of the initial reserve.
c) Option 2: 100% joint and survivor annuity.
d) Option 3: 50% joint and survivor annuity.
e) Option 4: Other percentage joint and survivor annuity.
f) Option A: 100% pop-up joint and survivor annuity.
g) Option B: 75% pop-up joint and survivor annuity.
h) Option C: 50% pop-up joint and survivor annuity.
i) Option D: 25% pop-up joint and survivor annuity

11. Changes in Plan Provisions Since Last Valuation

Chapter 329, P.L. 2021 amended the retirement provisions to permit a Judge serving as Administrative Director of the Courts to apply for deferred retirement and be appointed as Administrative Director of the Courts, if the member is at least 65 years old and has service for 20 years as a judge in any court in New Jersey.

HISTORICAL DATA AND REQUIRED ACFR EXHIBITS

In accordance with the Government Finance Officers Association (GFOA) and their recommended checklist for Annual Comprehensive Financial Reports, we prepared the following schedules for the System. The GFOA checklist uses the term Actuarial Accrued Liability, which is the same as the Actuarial Liability used elsewhere in this report.

Table D-1
Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

Valuation Date July 1,	Added to Rolls		Removed from Rolls		Rolls at End of Year		Average Annual Allowance[1]	% Increase in Average Annual Allowance[1]
	Number	Annual Allowance	Number[1]	Annual Allowance	Number[1]	Annual Allowance		
2022	49	$ 5,641,913	26	$ 2,269,532	678	$ 65,321,417	$ 96,344	1.88%
2021	38	3,954,037	23	1,938,703	655	61,939,137	94,564	1.00%
2020	41	3,538,867	34	3,037,320	640	59,923,801	93,631	-0.21%
2019	38	3,911,675	19	1,734,194	633	59,393,303	93,828	0.78%
2018	31	2,668,375	28	1,958,556	614	57,164,048	93,101	2.69%
2017	37	3,058,274	19	1,670,094	623	56,481,444	90,660	-0.44%
2016	41	3,599,047	22	1,471,553	605	55,093,264	91,063	0.75%
2015	43	4,254,340	18	1,234,963	586	52,965,770	90,385	1.52%
2014	34	3,165,378	22	1,456,153	561	49,946,393	89,031	1.33%
2013	48	4,091,470	34	2,021,915	549	48,237,168	87,864	1.82%

[1] Beginning with the 2018 valuation, QDRO records excluded from headcounts and QDRO benefits included with member records. This change resulted in 12 fewer records on the rolls as of July 1, 2018.

Table D-2
Schedule of Active Member Valuation Data

Valuation Date July 1,	Number of Contributing Active Members[1]	Annual Compensation[1]	Annual Average Compensation[1]	% Increase in Average Annual Compensation[1]
2022	390	$ 77,035,971	$ 197,528	1.86%
2021	394	76,401,342	193,912	2.03%
2020	405	76,970,450	190,050	4.42%
2019	421	76,627,036	182,012	4.62%
2018	447	77,763,777	173,968	4.79%
2017	430	71,385,705	166,013	0.00%
2016	410	68,062,584	166,006	-0.05%
2015	404	67,097,166	166,082	-0.14%
2014	397	66,028,491	166,319	0.32%
2013	409	67,810,110	165,795	-0.03%

[1] Prior to July 1, 2018, includes non-contributing active members.

Historical Data and Required ACFR Exhibits, *continued*

Table D-3
Schedule of Funding Progress

Valuation Date July 1,	Actuarial Value of Assets[1] (a)	Actuarial Accrued Liability (b)	(Surplus)/Unfunded Actuarial Accrued Liability (c) = (b) - (a)	Funded Ratio (a) /(b)	Covered Payroll (d)	(Surplus)/Unfunded Actuarial Accrued Liability as % of Covered Payroll (c) / (d)
2022	$ 272,411,612	$ 867,600,332	$ 595,188,720	31.40%	$ 77,035,971	772.61%
2021	249,915,574	854,306,065	604,390,491	29.25%	76,401,342	791.07%
2020	214,861,100	809,796,408	594,935,308	26.53%	76,970,450	772.94%
2019	207,308,308	790,936,136	583,627,828	26.21%	76,627,036	761.65%
2018	209,981,271	670,562,613	460,581,342	31.31%	77,763,777	592.28%
2017	216,952,852	646,507,109	429,554,257	33.56%	71,385,705	601.74%
2016	226,310,119	629,810,812	403,500,693	35.93%	68,062,584	592.84%
2015	243,864,022	602,364,200	358,500,178	40.48%	67,097,166	534.30%
2014	258,101,497	632,679,937	374,578,440	40.79%	66,028,491	567.30%
2013	276,966,331	620,376,292	343,409,961	44.64%	67,810,110	506.43%

[1] Includes receivable amounts.

Table D-4
Schedule of Funded Liabilities by Type (Solvency Test)

Valuation Date July 1,	Actuarial Accrued Liabilities For			Actuarial Value of Assets[2]	Portion of Actuarial Accrued Liabilities Covered by Actuarial Value of Assets		
	Contributing & Non-Active Member Contributions (1)	Retirees, Beneficiaries & Deferred Vesteds[1] (2)	Contributing & Non-Contributing Active Member Benefits Financed by Employer[1] (3)		(1)	(2)	(3)
2022	$ 61,841,483	$ 624,339,081	$ 181,419,768	$ 272,411,612	100.00%	33.73%	0.00%
2021	59,863,926	596,712,989	197,729,150	249,915,574	100.00%	31.85%	0.00%
2020	56,024,212	561,766,393	192,005,803	214,861,100	100.00%	28.27%	0.00%
2019	50,003,665	557,371,419	183,561,052	207,308,308	100.00%	28.22%	0.00%
2018	44,573,503	474,289,256	151,699,854	209,981,271	100.00%	34.87%	0.00%
2017	37,093,233	471,714,228	137,699,648	216,952,852	100.00%	38.13%	0.00%
2016	31,564,870	460,298,517	137,947,425	226,310,119	100.00%	42.31%	0.00%
2015	26,322,768	430,541,499	145,499,933	243,864,022	100.00%	50.53%	0.00%
2014	23,058,086	444,577,573	165,044,278	258,101,497	100.00%	52.87%	0.00%
2013	20,588,967	435,970,958	163,816,367	276,966,331	100.00%	58.81%	0.00%

[1] Prior to July 1, 2018, actuarial accrued liability for deferred vesteds included under (3) instead of (2).
[2] Includes receivable amounts.

Historical Data and Required ACFR Exhibits, *continued*

Table D-5
Analysis of Financial Experience
Change in Unfunded Actuarial Accrued Liability

Valuation Date July 1,	Actuarial Value of Assets Investment (Gain)/Loss	Actuarial Accrued Liability (Gain)/Loss	Assumption & Method Changes	Plan Changes	Contributions[1]	Change in Unfunded Actuarial Accrued Liability
2022	$ 5,971,653	$ 1,169,460	$ (11,123,513)	$ 0	$ (5,219,371)	$ (9,201,771)
2021	(1,254,706)	(94,031)	22,751,668	0	(11,947,748)	9,455,183
2020	4,836,409	(4,390,489)	0	0	10,861,560	11,307,480
2019	3,596,522	11,540,552	95,614,278	0	12,295,134	123,046,486
2018	3,628,245	11,259,223	240,890	0	15,898,727	31,027,085
2017	4,846,305	(4,615,530)	7,782,928	0	18,039,861	26,053,564
2016	7,475,692	6,312,912	7,095,990	0	24,115,921	45,000,515
2015	4,537,795	(2,080,753)	(46,435,820)	0	27,900,516	(16,078,262)
2014	3,383,419	(5,591,539)	550,325	0	32,826,274	31,168,479
2013	8,171,361	(2,041,123)	0	0	22,290,931	28,421,169

[1] Change due to contributions (greater)/less than normal cost plus interest on the Unfunded Actuarial Accrued Liability.

CHEIRON Classic Values, Innovative Advice

March 27, 2024

Board of Trustees
Consolidated Police and Firemen's Pension Fund of New Jersey

Re: Actuary's Certification Letter

Dear Board Members:

This is the Actuary's Certification Letter for the Actuarial Section of the Annual Comprehensive Financial Report for the Consolidated Police and Firemen's Pension Fund of New Jersey (CPFPF or Fund) as of June 30, 2023. This letter includes references to two documents produced by Cheiron for the Fund: the Actuarial Valuation Report as of July 1, 2022 (transmitted February 3, 2023) and the GASB 67 Report as of June 30, 2023 (transmitted February 13, 2024).

Actuarial Valuation Report as of July 1, 2022

The purpose of the annual Actuarial Valuation Report as of July 1, 2022 is to determine the actuarial funding status of CPFPF on that date and to calculate the Statutory Contribution amount for the State for the Fiscal Year Ending 2024. The prior review was conducted as of July 1, 2021, and included the Statutory Contribution amount for the Fiscal Year Ending 2023.

Beginning with the July 1, 2021 Actuarial Valuation Report, the results include assets and liabilities associated with cost-of-living adjustments. The cost-of-living adjustments were previously separately funded on a pay-as-you-go basis through the Pension Adjustment Fund, which was established pursuant to Chapter 143, P.L. 1958. In FYE 2021, a portion of the Pension Adjustment Fund assets related to CPFPF was transferred into the CPFPF and cost-of-living adjustments were paid directly from the CPFPF, instead of through annual contributions from the Pension Adjustment Fund. Effective with FYE 2023, any ongoing contributions required to fund the cost-of-living adjustments are included with the Statutory Contribution.

Actuarial funding is based on the Projected Unit Credit Cost Method. The Statutory Contribution amounts contain two components: the employer normal cost (cost of benefits for the upcoming year) and an amortization for the unfunded actuarial liability (UAL). Since CPFPF does not have any active members, there is no normal cost component. Also, because CPFPF has a surplus (assets in excess of actuarial liability), there is no UAL funding component. The funding methodology prescribed by the N.J. State Statutes does not include a cost component for administrative expenses, and therefore administrative expenses are implicitly covered by the investment rate of return assumption.

The UAL as of June 30, 1990 was amortized over a closed period of nine years. Without additional guidance, we have assumed that any future UAL will be amortized over one year.

For actuarial valuation purposes, assets are valued at market value.

We prepared the following schedules, which we understand will be included in the Actuarial Section of the Annual Comprehensive Financial Report, based on the July 1, 2022 actuarial valuation. All historical information prior to the July 1, 2018 actuarial valuation shown in these schedules is based on information reported by the prior actuary, Buck Global, LLC.

- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

- Schedule of Funding Progress
- Schedule of Funded Liabilities by Type (formerly referred to as the Solvency Test)
- Analysis of Financial Experience: Change in Unfunded Actuarial Accrued Liability
- Summary of Plan Provisions
- Summary of Current Actuarial Assumptions and Methods
- Membership Information (Active, Deferred Vested, and Retired)

The actuarial assumptions and methods are based on the 2022 Experience Study dated November 9, 2022 and approved by the Division of Pensions and Benefits (DPB). As a result of this experience study, the mortality improvement scale was updated.

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices. The assumptions and methods used for funding purposes meet the requirements of the Actuarial Standards of Practice (ASOP), in particular, ASOPs Nos. 4, 27, 35, and 44.

GASB 67 Report as of June 30, 2023

TThe purpose of the GASB 67 Report as of June 30, 2023 is to provide accounting and financial reporting information under GASB 67 for CPFPF. This report is not appropriate for other purposes, including the measurement of funding requirements for CPFPF.

For financial reporting purposes, the Total Pension Liability is based on the July 1, 2022 actuarial valuation updated to the measurement date of June 30, 2023. The assumed discount rate used to measure the Total Pension Liability was changed as of the measurement date, increasing from 3.54% as of June 30, 2022 to 3.65% as of June 30, 2023. We are not aware of any other significant events between the valuation date and the measurement date, so the update procedures only included the addition of service cost and interest cost offset by actual benefit payments, and an adjustment to reflect the change in assumptions.

Please refer to our GASB 67 Report as of June 30, 2023 for additional information related to the financial reporting of the Fund. We prepared the following schedules for inclusion in the Financial Section of the Annual Comprehensive Financial Report based on the June 30, 2023 GASB 67 report:

- Change in Net Pension Liability
- Sensitivity of Net Pension Liability to Changes in Discount Rate
- Schedule of Employer Contributions
- Notes to the Schedule of Employer Contributions

The demographic and economic actuarial assumptions are based on the recommendations from the 2022 Experience Study dated November 9, 2022, performed by Cheiron and approved by the DPB. The assumptions used in the most recent report are intended to produce results that, in the aggregate, reasonably approximate the anticipated future experience of the Plan. The next experience analysis is expected to cover the years through 2024.

The State prescribed the use of an expected long-term rate of return based on the Bond Buyer Go 20-Bond Municipal Bond Index for GASB 67 purposes in lieu of the 2.00% long-term rate of return used for funding.

We certify that the reports were performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for disclosure purposes have been prepared in accordance with our understanding of generally accepted accounting principles as promulgated by the GASB.

Disclaimers

In preparing our reports, we relied on information (some oral and some written) supplied by the DPB. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

Cheiron's reports were prepared for CPFPF for the purposes described herein and for use by the plan auditor in completing an audit related to matters herein. Other users of these reports are not intended as users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

These reports and their contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinions contained in these reports. These reports do not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Respectfully submitted,

Janet Cranna, FSA, FCA, MAAA, EA
Principal Consulting Actuary

Jonathan B. Chipko, FSA, MAAA, EA
Consulting Actuary

Anu Patel

Anu Patel, FSA, MAAA, EA
Principal Consulting Actuary

Justin Runkel, ASA, MAAA, EA
Consulting Actuary

CHEIRON

MEMBERSHIP INFORMATION

The data for this valuation was provided by the New Jersey Division of Pensions and Benefits as of July 1, 2022. Cheiron did not audit any of the data. However, we did perform an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality. The following is a list of data charts contained in this section:

- A-1 and A-2: Inactive Member Data by Age
- A-3: Reconciliation of Plan Membership

Table A-1
Counts by Age
As of July 1, 2022

	Status	
Attained Age	**Beneficiary**	**Total**
Under 45	0	0
45-49	0	0
50-54	0	0
55-59	0	0
60-64	0	0
65-69	1	1
70-74	2	2
75-79	2	2
80-84	1	1
85 & Over	18	18
Total	24	24

Membership Information, *continued*

Table A-2
Annual Retirement Allowances by Age
As of July 1, 2022

Attained Age	Status Beneficiary	Total
Under 45	$ 0	$ 0
45-49	0	0
50-54	0	0
55-59	0	0
60-64	0	0
65-69	7,678	7,678
70-74	21,202	21,202
75-79	10,342	10,342
80-84	15,526	15,526
85 & Over	352,535	352,535
Total	$ 407,282	$ 407,282

Table A-3
Reconciliation of Plan Membership from July 1, 2021 to July 1, 2022

	Retired	Beneficiaries	Total
1. July 1, 2021	**1**	**32**	**33**
2. Reductions			
a. Died without beneficiary	(1)	(8)	(9)
3. Changes in Status			
a. Died with beneficiary			0
4. July 1, 2022	**0**	**24**	**24**

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Investment Rate of Return 2.00% compounded annually.

2. Administrative Expenses No explicit assumption is made for administrative expenses for funding purposes per the funding methodology prescribed by NJ State Statute.

3. Mortality *Healthy retirees:* The Pub-2010 Public Safety Healthy Retiree mortality table *[PubS-2010 Healthy Retiree]* as published by the Society of Actuaries (SOA), unadjusted, and with future improvement from the base year of 2010 on a generational basis using the SOA's Scale MP-2021.

Beneficiaries: The Pub-2010 General Healthy Retiree mortality table *[PubG-2010 Healthy Retiree]* as published by the SOA, unadjusted, and with future improvement from the base year of 2010 on a generational basis using the SOA's Scale MP-2021.

4. Family Composition Assumptions For those participants with listed beneficiaries, the beneficiary allowance was assumed to be the greater of twice the amount contained in the record or the minimum of $4,500/yr. (The information contained in the record has not been updated for the change from 25% to 50% payment to the survivor.)

For those participants without listed beneficiaries, 65% were assumed to be married and the beneficiary amount was assumed to be the minimum benefit payable ($4,500/yr).

Males are assumed to be four years older than females.

No assumption was made for children.

5. Rationale for Assumptions The assumptions are based on the 2022 Experience Study dated November 9, 2022 and approved by the Division of Pensions and Benefits.

6. Changes in Actuarial Assumptions Since Last Valuation The mortality assumptions were updated to use Projection Scale MP-2021 instead of MP-2018. For a detailed description of the assumptions before and after the changes reflected in the valuation, please reference the Experience Study.

B. Actuarial Methods

The actuarial methods used for determining State contributions are described below.

1. Actuarial Cost Method

The actuarial cost method for funding calculations is the Projected Unit Credit Cost Method.

The actuarial liability is calculated as the actuarial present value of the projected benefits allocated to periods prior to the valuation year. The unfunded actuarial liability is the actuarial liability on the valuation date less the actuarial value of assets.

The unfunded actuarial liability as of June 30, 1990 was amortized over a closed period of nine years. Without additional guidance, we assumed that if there is an unfunded actuarial liability in the future it will be amortized over one year.

Summary of Actuarial Assumptions and Methods, *continued*

Beginning with the July 1, 2021 valuation, liabilities associated with cost-of-living adjustments are included in the valuation based on the amounts provided in the census data by the DPB. Previously, the cost-of-living adjustments were separately funded on a pay-as-you-go basis through the Pension Adjustment Fund and the associated liabilities were excluded from the valuation.

2. Asset Valuation Method

The actuarial value of assets is equal to the market value of assets.

In FYE 2021, the Pension Adjustment Fund was transferred into the CPFPF and cost-of-living adjustments are now paid directly from the CPFPF.

3. State Contribution Payable Dates

Chapter 83, P.L. 2016 requires the State to make the required pension contributions on a quarterly basis in each fiscal year according to the following schedule: at least 25% by September 30, at least 50% by December 31, at least 75% by March 31, and at least 100% by June 30. As such, contributions are assumed to be made on a quarterly basis.

4. Valuation Software

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

5. Changes in Actuarial Methods Since Last Valuation

None.

SUMMARY OF PLAN PROVISIONS

This summary of Plan provisions provides an overview of the major provisions of the CPFPF used in the actuarial valuation. It is not intended to replace the more precise language of the NJ State Statutes, Title 43, Chapter 16, and if there is any difference between the description of the plan herein and the actual language in the NJ State Statutes, the NJ State Statutes will govern. This valuation is prepared based on the plan provisions in effect as of July 1, 2022 and does not reflect the impact of any changes in the benefits that may have been approved after the valuation date.

1. Eligibility of Membership

Member of a municipal police department, a municipal paid or part-paid fire department, a county police department, or a paid or part-paid fire department of a fire district located in a township who has contributed to this pension fund and who is not covered by the Police and Firemen's Retirement System, which became effective on July 1, 1944.

2. Active Member

Any member who is a policeman, fireman, detective, lineman, driver of police van, fire alarm operator, or inspector of combustibles, and who is subject to call for active service as such.

3. Employee Member

Any member who is not subject to active service or duty.

4. Plan Year

The 12-month period beginning on July 1 and ending on June 30.

5. Service Credit

Service rendered while a member as described above.

6. Compensation

Base salary, not including individual salary adjustments which are granted primarily in anticipation of retirement or additional remuneration for performing temporary duties beyond the regular workday. (Effective June 30, 1996, Chapter 113, P.L. 1997 provided that the amount of compensation used for employer and member contributions and benefits under the program cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code.)

7. Final Compensation

Compensation received during the last 12 months of service preceding retirement or other termination of service.

8. Average Salary

Salary averaged over the last three years prior to retirement or other termination of service.

9. Contributions

Each active member contributes 7% of his salary to the pension fund.

Summary of Plan Provisions, *continued*

10. Benefits

a) Service Retirements

Mandatory retirement at age 65 with 25 years of service (a municipality may retain the Chief of Police until age 70). Voluntary retirement after 25 years of service for an active member and after age 60 with 25 years of experience for an employee member. Benefit is life annuity equal to 60% of final compensation, plus 1% of final compensation for years of service in excess of 25.

b) Death Benefits

(1) While on Duty

Immediate life annuity equal to 70% of average salary payable to the spouse. If there is no spouse, or if the spouse dies or remarries, 20% of final compensation will be payable to one surviving child, 35% to two surviving children, or 50% to three surviving children. If there is no surviving spouse or child, 25% of the member's average salary will be payable to one dependent parent or 40% to two dependent parents. The minimum spousal benefit is $4,500 per annum.

(2) While not on duty after retirement

Life annuity equal to 50% of the member's average salary payable to the spouse, plus 15% to one surviving child or 25% to two or more surviving children. If there is no surviving spouse or if the surviving spouse dies or remarries, 20% of the member's average salary to one child, 35% to two surviving children, or 50% to three or more surviving children. If there is no surviving spouse or child, 25% of the member's average salary will be payable to one dependent parent or 40% to two dependent parents. The minimum spousal benefit is $4,500 per annum.

c) Ordinary Disability Retirement

Totally and permanently incapacitated from service for any cause other than as a direct result of a traumatic event occurring during the performance of a duty. Benefit is an immediate life annuity equal to 1/2 of average salary.

d) Accidental Disability Retirement

Totally and permanently incapacitated as a direct result of a traumatic event occurring while performing regular or assigned duties. Benefit is an immediate life annuity equal to 2/3 of average salary.

e) Cost-of-Living Adjustments

Cost-of-living increases are granted to retired members and their eligible survivors in accordance with the Pension Adjustment Act. The additional liability due to the pension adjustment was previously paid by the Pension Adjustment Fund, which was established pursuant to Chapter 143, P.L. 1958. Chapter 78, P.L. 2011 suspended the cost-of-living adjustments for current and future retirees and beneficiaries until reactivated as permitted by law. In FYE 2021, the Pension Adjustment Fund was transferred into the CPFPF and cost-of-living adjustments were paid directly from the CPFPF, instead of through annual contributions from the Pension Adjustment Fund.

11. Changes in Plan Provisions Since Last Valuation

None.

HISTORICAL DATA AND REQUIRED ACFR EXHIBITS

In accordance with the Government Finance Officers Association (GFOA) and their recommended checklist for Annual Comprehensive Financial Reports, we prepared the following schedules for the Fund. The GFOA checklist uses the term Actuarial Accrued Liability, which is the same as the Actuarial Liability used elsewhere in this report.

Table D-1
Schedule of Retirees and Beneficiaries Added to and Removed from Rolls[1]

Valuation Date July 1,	Added to Rolls		Removed from Rolls		Rolls at End of Year		Average Annual Allowance	% Increase (Decrease) in Average Annual Allowance
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance		
2022	0	$ 0	9	$ 216,861	24	$ 407,282	$ 16,970	(10.27%)
2021	0	0	10	79,329	33	624,143	18,913	151.34%
2020	0	0	9	63,449	43	323,589	7,525	1.10%
2019	0	0	10	57,040	52	387,038	7,443	3.91%
2018	0	0	15	96,452	62	444,078	7,163	2.04%
2017	0	0	18	117,408	77	540,530	7,020	1.36%
2016	0	0	29	164,935	95	657,938	6,926	4.37%
2015	0	0	25	210,952	124	822,873	6,636	(4.35%)
2014	0	0	36	268,424	149	1,033,825	6,938	(1.43%)
2013	0	0	56	414,903	185	1,302,249	7,039	(1.21%)

[1] Annual allowances do not include cost-of-living adjustments prior to July 1, 2021 valuation.

Table D-2
Schedule of Funding Progress

Valuation Date July 1,	Actuarial Value of Assets[1] (a)	Actuarial Accrued Liability[2] (b)	(Surplus)/Unfunded Actuarial Accrued Liability (c) = (b) - (a)	Funded Ratio (a) /(b)	Covered Payroll (d)	(Surplus)/Unfunded Actuarial Accrued Liability as % of Covered Payroll (c)/(d)
2022	$ 2,748,796	$ 1,916,246	$ (832,550)	143.45%	$ 0	N/A
2021	2,260,738	2,845,637	584,899	79.45%	0	N/A
2020	1,295,217	1,369,932	74,715	94.55%	0	N/A
2019	1,387,550	1,628,242	240,692	85.22%	0	N/A
2018	2,313,665	2,186,581	(127,084)	105.81%	0	N/A
2017	2,721,368	2,674,728	(46,640)	101.74%	0	N/A
2016	3,017,928	3,336,743	318,815	90.45%	0	N/A
2015	3,340,908	4,208,241	867,333	79.39%	0	N/A
2014	4,366,457	4,848,499	482,042	90.06%	0	N/A
2013	6,445,847	6,102,292	(343,555)	105.63%	0	N/A

[1] Includes receivable amounts. Values from valuations prior to July 1, 2021 do not include assets associated with cost-of-living adjustments.
[2] Values from valuations prior to July 1, 2021 do not include liabilities associated with cost-of-living adjustments.

Historical Data and Required ACFR Exhibits, *continued*

Table D-3
Schedule of Funded Liabilities by Type (Solvency Test)

Valuation Date July 1,	Actuarial Accrued Liabilities for: Contributing & Non-Contributing Active Member Contributions (1)	Retirees, Beneficiaries & Deferred Vesteds[1] (2)	Contributing & Non-Contributing Active Member Benefits Financed by Employer (3)	Actuarial Value of Assets[2]	Portion of Actuarial Accrued Liabilities Covered by Actuarial Value of Assets (1)	(2)	(3)
2022	$ 0	$ 1,916,246	$ 0	$ 2,748,796	N/A	100.00%	N/A
2021	0	2,845,637	0	2,260,738	N/A	79.45%	N/A
2020	0	1,369,932	0	1,295,217	N/A	94.55%	N/A
2019	0	1,628,242	0	1,387,550	N/A	85.22%	N/A
2018	0	2,186,581	0	2,313,665	N/A	100.00%	N/A
2017	0	2,674,728	0	2,721,368	N/A	100.00%	N/A
2016	0	3,336,743	0	3,017,928	N/A	90.45%	N/A
2015	0	4,208,241	0	3,340,908	N/A	79.39%	N/A
2014	0	4,848,499	0	4,366,457	N/A	90.06%	N/A
2013	0	6,102,292	0	6,445,847	N/A	100.00%	N/A

[1] Values from valuations prior to July 1, 2021 do not include liabilities associated with cost-of-living adjustments.
[2] Includes receivable amounts. Values from valuations prior to July 1, 2021 do not include assets associated with cost-of-living adjustments.

Table D-4
Analysis of Financial Experience
Change in Unfunded Actuarial Accrued Liability

Valuation Date July 1,	Actuarial Value of Assets Investment (Gain)/Loss	Actuarial Accrued Liability (Gain)/Loss	Assumption & Method Changes	Plan Changes	Contributions[1]	Change in Unfunded Actuarial Accrued Liability
2022	$ 39,018	$ (474,624)	$ (33,532)	$ 0	$ (948,311)	$ (1,417,449)
2021	40,512	(121,005)	667,664	0	(76,987)	510,184
2020	10,163	61,238	0	0	(237,378)	(165,977)
2019	113,583	(31,761)	289,436	0	(3,482)	367,776
2018	137,551	(63,930)	10,670	0	(164,735)	(80,444)
2017	164,069	(154,174)	0	0	(375,350)	(365,455)
2016	194,017	(264,949)	0	0	(477,586)	(548,518)
2015	228,240	(201,179)	348,589	0	9,641	385,291
2014	265,707	(314,561)	0	0	874,451	825,597
2013	306,998	(650,553)	0	0	(847,099)	(1,190,654)

[1] Change due to contributions (greater)/less than normal cost plus interest on the Unfunded Actuarial Accrued Liability.

CHEIRON — Classic Values, Innovative Advice

March 27, 2024

Board of Trustees
Prison Officers' Pension Fund of New Jersey

Re: Actuary's Certification Letter

Dear Board Members:

This is the Actuary's Certification Letter for the Actuarial Section of the Annual Comprehensive Financial Report for the Prison Officers' Pension Fund of New Jersey (POPF or Fund) as of June 30, 2023. This letter includes references to two documents produced by Cheiron for the Fund: the Actuarial Valuation Report as of July 1, 2022 (transmitted February 3, 2023) and the GASB 67 Report as of June 30, 2023 (transmitted February 13, 2024).

Actuarial Valuation Report as of July 1, 2022

The purpose of the annual Actuarial Valuation Report as of July 1, 2022 is to determine the actuarial funding status of POPF on that date and to calculate the Statutory Contribution amount for the State for the Fiscal Year Ending 2024. The prior review was conducted as of July 1, 2021, and included the Statutory Contribution amount for the Fiscal Year Ending 2023.

Beginning with the July 1, 2021 Actuarial Valuation Report, the results include assets and liabilities associated with cost-of-living adjustments. The cost-of-living adjustments were previously separately funded on a pay-as-you-go basis through the Pension Adjustment Fund, which was established pursuant to Chapter 143, P.L. 1958. In FYE 2021, a portion of the Pension Adjustment Fund assets related to POPF was transferred into the POPF and cost-of-living adjustments were paid directly from the POPF, instead of through annual contributions from the Pension Adjustment Fund. Effective with FYE 2023, any ongoing contributions required to fund the cost-of-living adjustments are included with the Statutory Contribution.

Actuarial funding is based on the Projected Unit Credit Cost Method. The Statutory Contribution amounts contain two components: the employer normal cost (cost of benefits for the upcoming year) and an amortization for the unfunded actuarial liability (UAL). Since POPF does not have any active members, there is no normal cost component. Also, because POPF has a surplus (assets in excess of actuarial liability), there is no UAL funding component. The funding methodology prescribed by the N.J. State Statutes does not include a cost component for administrative expenses, and therefore administrative expenses are implicitly covered by the investment rate of return assumption.

The UAL as of July 1, 1988 was amortized over a closed period of 14 years. Without additional guidance, we have assumed that any future UAL will be amortized over one year.

For actuarial valuation purposes, assets are valued at market value.

We prepared the following schedules, which we understand will be included in the Actuarial Section of the Annual Comprehensive Financial Report, based on the July 1, 2022 actuarial valuation. All historical information prior to the July 1, 2018 actuarial valuation shown in these schedules is based on information reported by the prior actuary, Buck Global, LLC.

- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Schedule of Funding Progress
- Schedule of Funded Liabilities by Type (formerly referred to as the Solvency Test)
- Analysis of Financial Experience: Change in Unfunded Actuarial Accrued Liability
- Summary of Plan Provisions

- Summary of Current Actuarial Assumptions and Methods
- Membership Information (Active, Deferred Vested, and Retired)

The actuarial assumptions and methods are based on the 2022 Experience Study dated November 9, 2022 and approved by the Division of Pensions and Benefits (DPB). As a result of this experience study, the mortality improvement scale was updated.

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices. The assumptions and methods used for funding purposes meet the requirements of the Actuarial Standards of Practice (ASOP), in particular, ASOPs Nos. 4, 27, 35 and 44.

GASB 67 Report as of June 30, 2023

The purpose of the GASB 67 Report as of June 30, 2023 is to provide accounting and financial reporting information under GASB 67 for POPF. This report is not appropriate for other purposes, including the measurement of funding requirements for POPF.

For financial reporting purposes, the Total Pension Liability is based on the July 1, 2022 actuarial valuation updated to the measurement date of June 30, 2023. The assumed discount rate used to measure the Total Pension Liability was changed as of the measurement date, increasing from 3.54% as of June 30, 2022 to 3.65% as of June 30, 2023. We are not aware of any other significant events between the valuation date and the measurement date, so the update procedures only included the addition of service cost and interest cost offset by actual benefit payments, and an adjustment to reflect the change in assumptions.

Please refer to our GASB 67 Report as of June 30, 2023 for additional information related to the financial reporting of the Fund. We prepared the following schedules for inclusion in the Financial Section of the Annual Comprehensive Financial Report based on the June 30, 2023 GASB 67 report:

- Change in Net Pension Liability
- Sensitivity of Net Pension Liability to Changes in Discount Rate
- Schedule of Employer Contributions
- Notes to the Schedule of Employer Contributions

The demographic and economic actuarial assumptions are based on the recommendations from the 2022 Experience Study dated November 9, 2022, performed by Cheiron and approved by the DPB. The assumptions used in the most recent report are intended to produce results that, in the aggregate, reasonably approximate the anticipated future experience of the Plan. The next experience analysis is expected to cover the years through 2024.

The State prescribed the use of an expected long-term rate of return based on the Bond Buyer Go 20-Bond Municipal Bond Index for GASB 67 purposes in lieu of the 2.00% long-term rate of return used for funding.

We certify that the reports were performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for disclosure purposes have been prepared in accordance with our understanding of generally accepted accounting principles as promulgated by the GASB.

Disclaimers

In preparing our reports, we relied on information (some oral and some written) supplied by the DPB. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

Cheiron's reports were prepared for POPF for the purposes described herein and for use by the plan auditor in completing an audit related to matters herein. Other users of these reports are not intended as users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

These reports and their contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinions contained in these reports. These reports do not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Respectfully submitted,

Janet Cranna, FSA, FCA, MAAA, EA
Principal Consulting Actuary

Jonathan B. Chipko, FSA, MAAA, EA
Consulting Actuary

Anu Patel, FSA, MAAA, EA
Principal Consulting Actuary

Justin Runkel, ASA, MAAA, EA
Consulting Actuary

CHEIRON

MEMBERSHIP INFORMATION

The data for this valuation was provided by the New Jersey Division of Pensions and Benefits as of July 1, 2022. Cheiron did not audit any of the data. However, we did perform an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality. The following is a list of data charts contained in this section:

- A-1 and A-2: Inactive Member Data by Age and Status
- A-3: Reconciliation of Plan Membership

Table A-1
Counts by Age and Status of Inactive Members

Attained Age	Status			Total
	Retiree	Beneficiary	Ordinary Disability	
Under 45	0	0	0	0
45-49	0	0	0	0
50-54	0	0	0	0
55-59	0	0	0	0
60-64	0	0	0	0
65-69	0	1	0	1
70-74	0	1	0	1
75-79	0	0	0	0
80-84	0	4	0	4
85 & Up	5	29	2	36
Total	5	35	2	42

Table A-2
Annual Basic Retirement Allowances by Age and Status of Inactive Members

Attained Age	Status			Total
	Retiree	Beneficiary	Ordinary Disability	
Under 45	$ 0	$ 0	$ 0	$ 0
45-49	0	0	0	0
50-54	0	0	0	0
55-59	0	0	0	0
60-64	0	0	0	0
65-69	0	8,469	0	8,469
70-74	0	22,179	0	22,179
75-79	0	0	0	0
80-84	0	50,595	0	50,595
85 & Up	114,226	293,135	45,253	452,614
Total	$ 114,226	$ 374,378	$ 45,253	$ 533,857

Membership Information, *continued*

Table A-3
Reconciliation of Plan Membership from July 1, 2021 to July 1, 2022

	Retired	Disabled	Beneficiaries	Total
1. July 1, 2021	**6**	**2**	**39**	**47**
2. Reductions				
a. Died without beneficiary	(1)		(4)	(5)
3. Changes in Status				
a. Died with beneficiary				0
4. July 1, 2022	**5**	**2**	**35**	**42**

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Investment Rate of Return	2.00% compounded annually.
2. Administrative Expenses	No explicit assumption is made for administrative expenses for funding purposes per the funding methodology prescribed by NJ State Statute.
3. Mortality	*Healthy retirees:* The Pub-2010 Public Safety Healthy Retiree mortality table *[PubS-2010 Healthy Retiree]* as published by the Society of Actuaries (SOA), unadjusted, and with future improvement from the base year of 2010 on a generational basis using the SOA's Scale MP-2021. *Beneficiaries:* The Pub-2010 General Healthy Retiree mortality table *[PubG-2010 Healthy Retiree]* as published by the SOA, unadjusted, and with future improvement from the base year of 2010 on a generational basis using the SOA's Scale MP-2021. *Disabled retirees:* The Pub-2010 Public Safety Disabled Retiree mortality table *[PubS-2010 Disabled Retiree]* as published by the SOA, unadjusted, and with future improvement from the base year of 2010 on a generational basis using the SOA's Scale MP-2021.
4. Family Composition Assumptions	Males are assumed to be 3 years older than females. No assumption was made for children.
5. Rationale for Assumptions	The assumptions are based on the 2022 Experience Study dated November 9, 2022 and approved by the Division of Pensions and Benefits.
6. Changes in Actuarial Assumption since Last Valuation	The mortality assumptions were updated to use Projection Scale MP-2021 instead of MP-2018. For detailed description of the assumptions before and after the changes reflected in the valuation, please reference the Experience Study.

B. Actuarial Methods

The actuarial methods used for determining State contributions are described as follows.

1. Actuarial Cost Method

The actuarial cost method for funding calculations is the Projected Unit Credit Cost Method.

The actuarial liability is calculated as the actuarial present value of the projected benefits allocated to periods prior to the valuation year. The unfunded actuarial liability is the actuarial liability on the valuation date less the actuarial value of assets.

The unfunded actuarial liability as of July 1, 1988 was amortized over a closed period of 14 years. Without additional guidance, we assumed that if there is an unfunded actuarial liability in the future it will be amortized over one year.

Beginning with the July 1, 2021 valuation, liabilities associated with cost-of-living adjustments are included in the valuation based on the amounts provided in the census data by the DPB. Previously, cost-of-living adjustments were separately funded on a pay-as-you-go basis through the Pension Adjustment Fund and the associated liabilities were excluded from the valuation.

Summary of Actuarial Assumptions and Methods, *continued*

2. Asset Valuation Method

The actuarial value of assets is equal to the market value of assets.

In FYE 2021, the Pension Adjustment Fund was transferred into the POPF and cost-of-living adjustments are now paid directly from the POPF.

3. Valuation Software

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech), to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

4. Changes in Actuarial Methods Since Last Valuation

None.

SUMMARY OF PLAN PROVISIONS

This summary of Plan provisions provides an overview of the major provisions of the POPF used in the actuarial valuation. It is not intended to replace the more precise language of the NJ State Statutes, Title 43, Chapter 7, and if there is any difference between the description of the plan herein and the actual language in the NJ State Statutes, the NJ State Statutes will govern. This valuation is prepared based on the plan provisions in effect as of July 1, 2022 and does not reflect the impact of any changes in the benefits that may have been approved after the valuation date.

1. Eligibility of Membership

Employees of State penal institutions, employed prior to January 1, 1960 who did not transfer to the Police & Firemen's Retirement System in accordance with Chapter 205 of Public Law 1989. The System no longer accepts new members.

2. Plan Year

The 12-month period beginning on July 1 and ending on June 30.

3. Service Credit

A year is credited for each year an employee is a member of the retirement system.

4. Average Final Compensation (AFC)

Average annual compensation for the three years immediately preceding retirement. (Effective June 30, 1996, Chapter 113, P.L. 1997 provided that the amount of compensation used for employer and member contributions and benefits under the program cannot exceed the compensation limitation of Section 401(a) (17) of the Internal Revenue Code.)

5. Accumulated Deductions

The sum (without interest) of all required amounts deducted from the compensation of a member or contributed by him or on his behalf.

6. Benefits

a) Service Retirements

25 years of service, or age 55 and 20 years of service. The benefit is a life annuity equal to the greater of (1), (2), and (3) below:

(1) 2% of AFC up to 30 years of service plus 1% for each year in excess of 30 and prior to age 65;

(2) 50% of final pay; and

(3) For a member with 25 years of service, 2% of AFC up to 30 years of service plus 1% for each year in excess of 30.

b) Vested Retirements

Eligible upon termination of employment. Benefits are summarized as follows:

(1) Termination with 10 or more years of service: Benefit is a deferred life annuity payable at age 55 equal to 2% of AFC for service up to 30 years plus 1% for service over 30 years.

(2) Termination with less than 10 years of service: Refund of accumulated deductions.

c) Ordinary Disability Retirement

Permanent and total disability for causes other than as a direct result of a traumatic event occurring during the performance of regular or assigned duties. Benefit is an immediate life annuity equal to 1/2 of AFC.

Summary of Plan Provisions, *continued*

d) Accidental Disability Retirement

Permanent and total disability as a direct result of a traumatic event occurring while performing regular or assigned duties. Benefit is an immediate life annuity of 2/3 of AFC.

e) Death Benefits

Spouse must be either married to the member prior to retirement, or at least five years before the member's death. Benefit is an annuity equal to 25% of member's AFC, plus an additional 15% for one surviving dependent child or 25% for at least two surviving dependent children.

If there is no surviving spouse or spouse remarries, an annuity equal to 20% of member's AFC will be given to one surviving dependent child, or 35% of the member's AFC to two surviving dependent children, or 50% of the member's AFC to three or more surviving dependent children.

If there is no surviving spouse or child, an annuity equal to 25% of member's AFC will be given to one dependent parent or 40% to two dependent parents, provided the member has not retired.

Minimum spousal annuity is $1,600 per annum. If no other benefit is payable prior to retirement, the member's beneficiary will receive the accumulated deductions.

f) Cost-of-Living Adjustments

Cost-of-living increases are granted to retired members and their eligible survivors in accordance with the Pension Adjustment Act. The additional liability due to the pension adjustment was previously paid by the Pension Adjustment Fund, which was established pursuant to Chapter 143, P.L. 1958. Chapter 78, P.L. 2011 suspended the cost-of-living adjustments for current and future retirees and beneficiaries until reactivated as permitted by law. In FYE 2021, the Pension Adjustment Fund was transferred into the POPF and cost-of-living adjustments were paid directly from the POPF, instead of through annual contributions from the Pension Adjustment Fund.

7. Employee Contributions

Each member contributes 6% of compensation.

8. Changes in Plan Provisions Since Last Valuation

None.

HISTORICAL DATA AND REQUIRED ACFR EXHIBITS

In accordance with the Government Finance Officers Association (GFOA) and their recommended checklist for Annual Comprehensive Financial Reports, we prepared the following schedules for the Fund. The GFOA checklist uses the term Actuarial Accrued Liability, which is the same as the Actuarial Liability used elsewhere in this report.

Table D-1
Schedule of Retirees and Beneficiaries Added to and Removed from Rolls[1]

Valuation Date July 1,	Added to Rolls		Removed from Rolls		Rolls at End of Year		Average Annual Allowance	% Increase (Decrease) in Average Annual Allowance
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance		
2022	0	$ 0	5	$ 53,106	42	$ 533,857	$ 12,711	1.78%
2021	0	0	10	57,533	47	586,963	12,489	105.28%
2020	1	2,722	6	26,933	57	346,813	6,084	1.67%
2019	1	13,904	10	91,530	62	371,024	5,984	(5.30%)
2018	3	14,633	9	54,505	71	448,650	6,319	(0.39%)
2017	1	5,776	14	96,732	77	488,522	6,344	(1.48%)
2016	1	10,055	9	82,458	90	579,478	6,439	(3.20%)
2015	2	11,794	14	152,980	98	651,881	6,652	(7.74%)
2014	1	7,671	12	71,652	110	793,067	7,210	1.79%
2013	1	2,856	15	82,854	121	857,048	7,083	2.05%

[1] Annual allowances prior to July 1, 2021 valuation do not include cost-of-living adjustments.

Table D-2
Schedule of Funding Progress

Valuation Date July 1,	Actuarial Value of Assets[1,2] (a)	Actuarial Accrued Liability[2] (b)	(Surplus)/Unfunded Actuarial Accrued Liability (c) = (b) - (a)	Funded Ratio (a) /(b)	Covered Payroll (d)	(Surplus)/Unfunded Actuarial Accrued Liability as % of Covered Payroll (c)/(d)
2022	$ 4,950,414	$ 3,024,998	$ (1,925,416)	163.65%	$ 0	N/A
2021	5,136,044	3,540,725	(1,595,319)	145.06%	0	N/A
2020	4,643,012	2,148,107	(2,494,905)	216.14%	0	N/A
2019	4,925,932	2,433,686	(2,492,246)	202.41%	0	N/A
2018	5,223,456	2,595,221	(2,628,235)	201.27%	0	N/A
2017	5,620,868	2,849,732	(2,771,136)	197.24%	0	N/A
2016	6,111,233	3,461,099	(2,650,134)	176.57%	0	N/A
2015	6,704,568	3,889,524	(2,815,044)	172.38%	0	N/A
2014	7,383,201	4,301,307	(3,081,894)	171.65%	0	N/A
2013	8,171,920	4,748,938	(3,422,982)	172.08%	0	N/A

[1] Includes receivable amounts.

[2] Values prior to July 1, 2021 valuation do not include assets and liabilities associated with cost-of-living adjustments.

Historical Data and Required ACFR Exhibits, *continued*

Table D-3
Schedule of Funded Liabilities by Type (Solvency Test)

Valuation Date July 1,	Actuarial Accrued Liabilities For: Contributing & Non-Contributing Active Member Contributions (1)	Retirees, Beneficiaries & Deferred Vesteds[1] (2)	Contributing & Non-Contributing Active Member Benefits Financed by Employer (3)	Actuarial Value of Assets[1,2]	Portion of Actuarial Accrued Liabilities Covered by Actuarial Value of Assets (1)	(2)	(3)
2022	$ 0	$ 3,024,998	$ 0	$ 4,950,414	N/A	100.00%	N/A
2021	0	3,540,725	0	5,136,044	N/A	100.00%	N/A
2020	0	2,148,107	0	4,643,012	N/A	100.00%	N/A
2019	0	2,433,686	0	4,925,932	N/A	100.00%	N/A
2018	0	2,595,221	0	5,223,456	N/A	100.00%	N/A
2017	0	2,849,732	0	5,620,868	N/A	100.00%	N/A
2016	0	3,461,099	0	6,111,233	N/A	100.00%	N/A
2015	0	3,889,524	0	6,704,568	N/A	100.00%	N/A
2014	0	4,301,307	0	7,383,201	N/A	100.00%	N/A
2013	0	4,748,938	0	8,171,920	N/A	100.00%	N/A

[1] Values prior to July 1, 2021 valuation do not include assets and liabilities associated with cost-of-living adjustments.

[2] Includes receivable amounts.

Table D-4
Analysis of Financial Experience
Change in Unfunded Actuarial Accrued Liability

Valuation Date July 1,	Actuarial Value of Assets Investment (Gain)/Loss	Actuarial Accrued Liability (Gain)/Loss	Assumption & Method Changes	Plan Changes	Contributions[1]	Change in Unfunded Actuarial Accrued Liability
2022	$ 86,065	$ (9,379)	$ (62,218)	$ 0	$ (344,565)	$ (330,097)
2021	99,877	(83,063)	929,207	0	(46,435)	899,586
2020	20,038	22,474	0	0	(45,171)	(2,659)
2019	139,661	(191,104)	314,525	0	(127,093)	135,989
2018	199,280	78,644	(888)	0	(134,135)	142,901
2017	261,844	(254,575)	0	0	(128,271)	(121,002)
2016	302,063	(1,843)	0	0	(135,310)	164,910
2015	345,889	(281,392)	350,461	0	(148,108)	266,850
2014	381,569	124,670	0	0	(165,151)	341,088
2013	421,375	(20,326)	0	0	(175,300)	225,749

[1] Change due to contributions (greater)/less than normal cost plus interest on the Unfunded Actuarial Accrued Liability.

CHEIRON Classic Values, Innovative Advice

June 2, 2023

Council
Supplemental Annuity Collective Trust of New Jersey

Re: Actuary's Certification Letter

Dear Council Members:

This is the Actuary's Certification Letter for the Actuarial Section of the Annual Comprehensive Financial Report for the Supplemental Annuity Collective Trust of New Jersey (SACT or Trust) as of June 30, 2022. This letter includes references to a document produced by Cheiron for the Trust: the Actuarial Valuation Report as of July 1, 2021 (transmitted October 25, 2022).

Actuarial Valuation Report as of July 1, 2021

The purpose of the annual Actuarial Valuation Report as of July 1, 2021 is to determine the actuarial funding status of SACT on that date. The prior review was conducted as of July 1, 2018. N.J. State Statute 52:18A provides for an actuarial review at least once in every three-year period. Active members of the following State-administered retirement systems make voluntary additional contributions through their retirement systems to purchase retirement annuities to supplement the benefits provided by their retirement system:

1. Public Employees' Retirement System
2. Teachers' Pension and Annuity Fund
3. Police and Firemen's Retirement System
4. State Police Retirement System
5. Judicial Retirement System

N.J. State Statutes allow for both variable and fixed annuities; however, only the variable annuity program is in operation.

N.J. State Statute 52:18A provides for the following accounts under the Variable Division:

The Variable Accumulation Account is the account to which participant contributions are credited. An individual account is maintained for each participant.

The Variable Benefit Account is the account from which the variable benefits are paid. Upon retirement, a participant's account in the Variable Accumulation Account is transferred to the Variable Benefit Account.

The Variable Reserve Account is the account to which all investment earnings or losses of the Variable Division are credited or charged. The balance of this account is distributed to the Variable Benefit Account and to the individual accounts in the Variable Accumulation Account in accordance with the rules and regulations of the Council.

The actuarial liability is used for determining the funded status of the Variable Benefit Account and what levels (if any) of mortality adjustments are needed to properly maintain the funded status. The actuarial liability of the Variable Benefit Account is calculated as the actuarial present value of the projected benefits. The actuarial liability of the Variable Accumulation Account is equal to the Variable Accumulation Reserve.

For actuarial valuation purposes, assets are valued at market value.

We prepared the following schedules, which we understand will be included in the Actuarial Section of the Annual Comprehensive Financial Report, based on the July 1, 2021 actuarial valuation. All historical information prior to the July 1, 2018 actuarial valuation shown in these schedules is based on information reported by the prior actuary, Buck Global, LLC.

- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Schedule of Active Member Valuation Data

- Schedule of Funding Progress
- Schedule of Funded Liabilities by Type (formerly referred to as the Solvency Test)
- Analysis of Financial Experience: Change in Unfunded Actuarial Accrued Liability
- Summary of Plan Provisions
- Summary of Current Actuarial Assumptions and Methods
- Membership Information (Active, Suspended, and Retired)

The actuarial assumptions are based on the mortality experience review covering the period from July 1, 2018 through June 30, 2021 contained in Appendix E of the report and a 4.00% discount rate. The discount rate is based on administrative practice.

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices except as noted. In particular, the assumptions (other than the investment rate of return) and methods used for funding purposes meet the requirements of the Actuarial Standards of Practice (ASOP), in particular ASOPs Nos. 4, 27, 35 and 44.

Disclaimers

In preparing our report, we relied on information (some oral and some written) supplied by the DPB. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and, changes in plan provisions or applicable law.

This report is for the use of SACT, DPB and their auditor in preparing financial reports in accordance with applicable law and accounting requirements. Any other user of this report is not an intended user and is considered a third party.

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

Cheiron's report was prepared for SACT for the purposes described herein and for use by the plan auditor in completing an audit related to matters herein. Other users of this report are not intended as users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any such party.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinions contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

Respectfully submitted,

Janet Cranna, FSA, FCA, MAAA, EA
Principal Consulting Actuary

Anu Patel
Anu Patel, FSA, MAAA, EA
Principal Consulting Actuary

Jonathan B. Chipko, FSA, MAAA, EA
Consulting Actuary

CHEIRON

MEMBERSHIP INFORMATION

The data for this valuation was provided by the New Jersey Division of Pensions and Benefits as of June 30, 2021. Cheiron did not audit any of the data. However, we did perform an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23. The following is a list of data charts contained in this section:

- A-1: Active Member Data by Retirement System and Plan
- A-2: Suspended Member Data by Retirement System and Plan
- A-3: Active and Suspended Member Data
- A-4: Inactive Member Data by Status
- A-5: Reconciliation of Plan Membership

Table A-1
Counts by Retirement System and Plan of Active Members[1]

	Number	Total Equity Units	Dollar Value
Public Employees' Retirement System			
Regular Plan	936	450,412.0008	$ 72,731,539
Tax Sheltered Plan	113	69,167.0505	11,168,943
QVEC Plan	3	687.1811	110,964
Total	1,052	520,266.2324	$ 84,011,446
Police and Firemen's Retirement System			
Regular Plan	849	541,290.5899	$ 87,406,414
Total	849	541,290.5899	$ 87,406,414
Teachers' Pension and Annuity Fund			
Regular Plan	33	15,809.8912	$ 2,552,946
Tax Sheltered Plan	177	193,118.6288	31,184,371
Total	210	208,928.5200	$ 33,737,317
State Police Retirement System			
Regular Plan	8	3,836.4205	$ 619,497
Total	8	3,836.4205	$ 619,497
Judicial Retirement System			
Regular Plan	2	2,614.6764	$ 422,212
Total	2	2,614.6764	$ 422,212
Legislative Retirement System			
Regular Plan	1	1,099.4542	$ 177,537
Total	1	1,099.4542	$ 177,537
Total			
Regular Plan	1,829	1,015,063.0330	$ 163,910,145
Tax Sheltered Plan	290	262,285.6793	42,353,314
QVEC Plan	3	687.1811	110,964
Grand Total	2,122	1,278,035.8934	$ 206,374,423

[1] Units for the quarter ended June 30, 2021 were distributed after that date and are not reflected in this data.

Membership Information, *continued*

Table A-2
Counts by Retirement System and Plan of Suspended Members[1]

	Number	Equity Units	Dollar Value
Public Employees' Retirement System			
Regular Plan	91	7,258.5892	$ 1,172,101
Tax Sheltered Plan	23	2,782.3950	449,295
Total	114	10,040.9842	$ 1,621,396
Police and Firemen's Retirement System			
Regular Plan	11	2,666.3583	$ 430,558
Total	11	2,666.3583	$ 430,558
Teachers' Pension and Annuity Fund			
Regular Plan	38	4,249.3788	$ 686,180
Tax Sheltered Plan	20	4,312.3425	696,348
Total	58	8,561.7213	$ 1,382,528
State Police Retirement System			
Regular Plan	0	0	$ 0
Total	0	0	$ 0
Judicial Retirement System			
Regular Plan	0	0	$ 0
Total	0	0	$ 0
Legislative Retirement System			
Regular Plan	1	0	$ 0
Total	1	0	$ 0
Total			
Regular Plan	141	14,174.3263	$ 2,288,839
Tax Sheltered Plan	43	7,094.7375	1,145,643
Grand Total	184	21,269.0638	$ 3,434,482

[1] Units for the quarter ended June 30, 2021 were distributed after that date and are not reflected in this data.

Membership Information, *continued*

Table A-3
Active and Suspended Member Data

	June 30, 2021	June 30, 2018	% Change
Actives[1]			
Count	2,122	2,223	-4.5%
Average Age	48.3	48.9	-1.3%
Equity Units	1,278,035.8934	1,450,045.5120	-11.9%
Average Equity Units	602.2789	652.2922	-7.7%
Dollar Value of Average Equity Units	$ 97,255	$ 70,361	38.2%
Suspended[1]			
Count	184	178	3.4%
Average Age	67.3	65.8	2.2%
Equity Units	21,269.0638	19,495.7695	9.1%
Average Equity Units	115.5927	109.5268	5.5%
Dollar Value of Average Equity Units	$ 18,666	$ 11,814	58.0%

[1] Units for the quarter ended June 30, 2021 were distributed after that date and are not reflected in this data.

Active members are still working and contributing to the Trust and have not retired or terminated employment. Suspended members are members who are no longer contributing to the Trust, whether by choice or because of termination of employment, and have not begun collecting benefits. They may also include members whom the DPB has not been able to locate.

Table A-4
Inactive Member Data by Status

	June 30, 2021	June 30, 2018	% Change
Retirees			
Count	279	324	-13.9%
Annual Equity Units	22,082.3117	26,315.4276	-16.1%
Average Annual Equity Units	79.1481	81.2205	-2.6%
Dollar Value of Average Annual Equity Units	$ 12,781	$ 8,761	45.9%
Beneficiaries			
Count	44	49	-10.2%
Annual Equity Units	3,570.0378	4,457.8392	-19.9%
Average Annual Equity Units	81.1372	90.9763	-10.8%
Dollar Value of Average Annual Equity Units	$ 13,102	$ 9,813	33.5%
Disabled			
Count	3	4	-25.0%
Annual Equity Units	188.6828	289.0248	-34.7%
Average Annual Equity Units	62.8943	72.2562	-13.0%
Dollar Value of Average Annual Equity Units	$ 10,156	$ 7,794	30.3%
In-Pay Total			
Count	**326**	**377**	**-13.5%**
Annual Equity Units	**25,841.0323**	**31,062.2916**	**-16.8%**
Average Annual Equity Units	**79.2670**	**82.3933**	**-3.8%**
Dollar Value of Average Annual Equity Units	**$ 12,800**	**$ 8,888**	**44.0%**

Membership Information, *continued*

Table A-5
Reconciliation of Plan Membership from June 30, 2018 to June 30, 2021

	Active	Suspended	Retired	Disabled	Beneficiaries	Total
1. June 30, 2018	**2,223**	**178**	**324**	**4**	**49**	**2,778**
2. Additions						
a. New entrants	381					381
b. Data correction			2			2
c. Total	381	0	2	0	0	383
3. Reductions						
a. Withdrawal	(446)	(6)				(452)
b. Died without beneficiary			(66)	(1)	(9)	(76)
c. Total	(446)	(6)	(66)	(1)	(9)	(528)
4. Changes in Status						
a. Active	1	(1)				0
b. Suspended	(13)	13				0
c. Retired	(24)		23			(1)
d. Disabled						0
e. Died with beneficiary			(4)		4	0
f. Total	(36)	12	19	0	4	(1)
5. June 30, 2021	**2,122**	**184**	**279**	**3**	**44**	**2,632**

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Discount Rate

4.00% compounded annually.

2. Administrative Expenses

No explicit assumption is made for administrative expenses for funding purposes.

3. Mortality

Healthy Retirees and Beneficiaries (Healthy Annuitants): The Pub-2010 General Healthy Retiree mortality table *[PubG-2010 Healthy Retiree]* as published by the Society of Actuaries (SOA), unadjusted, and with future improvement from the base year of 2010 on a generational basis using the SOA' s Scale MP-2021.

Disabled Retirees (Disabled Annuitants}: The Pub-2010 Non-Safety Disabled Retiree mortality table *[PubNS-2010 Disabled Retiree]* as published by the SOA, unadjusted, and with future improvement from the base year of 2010 on a generational basis using the SOA's Scale MP-2021.

4. Missing Data

Suspended status was assumed for members who were reported with the same number of Equity Units in this valuation and the prior valuation.

The 100% Joint & Survivor payment form was assumed for retirees who were reported with a spouse date of birth and no certain period.

A single life annuity payment form was assumed for beneficiaries who were reported with no certain period or a certain period that expired prior to the valuation date.

5. Rationale for Assumptions

The discount rate is based on administrative practice as indicated by the DPB. Investment returns greater or less than the discount rate will be reflected equally in the Variable Benefit Account's actuarial liability and reserve resulting in no impact on the unfunded actuarial liability or surplus.

The mortality assumptions are based on the experience analysis shown in Appendix E.

6. Changes in Actuarial Assumptions Since Last Valuation

The mortality assumptions were updated to use mortality improvement Scale MP-2021. For a detailed description of the assumptions before and after the change reflected in this valuation, please reference Appendix E.

B. Actuarial Methods

The actuarial methods used for determining the funded status is described as follows.

1. Actuarial Cost Method

The actuarial liability of the Variable Benefit Account is calculated as the actuarial present value of the projected benefits. The actuarial liability of the Variable Accumulation Account is equal to the Variable Accumulation Reserve.

2. Asset Valuation Method

Assets are valued at market value.

3. Changes in Actuarial Methods Since Last Valuation

None.

SUMMARY OF PLAN PROVISIONS

This summary of Plan provisions provides an overview of the major provisions of the SACT used in the actuarial valuation. It is not intended to replace the more precise language of the NJ State Statutes, Title 52, Chapter 18A, and if there is any difference between the description of the plan herein and the actual language in the NJ State Statutes, the NJ State Statutes will govern. This valuation is prepared based on the plan provisions in effect as of June 30, 2021 and does not reflect the impact of any changes in the benefits that may have been approved after the valuation date.

1. Eligibility of Membership

Member of a State-administered retirement system who has elected to make voluntary additional contributions to the SACT or for whom an employer has agreed to purchase an annuity from the SACT.

2. Participant Accounts

NJ State Statute allows for both variable and fixed annuities; however, only the variable annuity program is in operation.

a) Participants can have accounts under three plans:

(1) SACT Regular Plan

i. Available to all eligible employees
ii. Contributions do not reduce participant's taxable compensation

(2) SACT Tax-Sheltered Plan

i. Available to eligible employees of public education institutions
ii. Contributions reduce a participant's taxable compensation

(3) Qualified Voluntary Employee Contribution Plan (QVEC)

i. Contributions treated as IRA contributions for tax purposes
ii. Eliminated as of January 1, 1987

b) Account values are expressed in terms of equity units. The total number of equity units in a variable account at the end of each month is determined as follows:

(1) Number of equity units at beginning of month; plus

(2) Number of equity units credited as of the first of the month for participant's contributions received during the preceding quarter, if any; less

(3) Number of equity units paid out in the current month on account of terminations for death or withdrawal during the preceding month; less

(4) Number of equity units transferred as of the first of the month for retirement during the preceding month; plus

(5) One third of one percent of the balance so obtained.

3. Equity Units

Dollar value initially set at $10 and recomputed at the end of each month. The dollar value varies with the investment experience of the entire variable annuity program.

4. Contributions

a) Participants

Participants may voluntarily contribute between 1% and 100% of base salary through payroll deductions. Contributions to the SACT are subject to applicable limits. Contributions may be changed or suspended at the beginning of a quarter.

Summary of Plan Provisions, *continued*

b) Employers

Employees may enter into an agreement with the employees' employer whereby the employee agrees to a reduction in salary in return for the employer's agreement to use the amount of such reduction in salary to purchase on behalf of such employee from SACT an annuity, provided that any such annuity qualifies under section 403(b) of the Internal Revenue Code of 1986, as amended.

Currently, no employers are contributing to the Trust.

5. Investments

All investments are pooled and managed by the Division of Investment, Department of Treasury, State of New Jersey.

6. Vesting

Participants are fully vested in their account values.

7. Benefits

a) Retirement

Upon retirement from a State administered retirement system. The benefit is a single cash payment equal to the participant's account value as of the close of the month in which the retirement becomes effective or a variable benefit. The variable benefit is a life annuity, expressed as a fixed number of equity units, with the payment amount determined as the actuarial equivalent of the number of equity units in the participant's account as of the close of the month in which the retirement becomes effective, multiplied by the value of the units for the prior month end.

In the event that the initial monthly payment of the variable benefit is less than $10, the benefit is paid in a single cash payment.

b) Death Before Retirement

Upon death prior to retirement. The benefit is a single cash payment equal to the participant's account value as of the last day of the month in which death occurs. The beneficiary may elect, in lieu of a single cash payment, a life annuity under any forms of payment available to the participant.

c) Withdrawal

Upon termination from a State administered retirement system without qualifying and applying for other benefits from the Trust. The benefit is a single cash payment equal to the participant's account value as of the last day of the month in which membership in a State administered retirement system ceases.

The council may terminate inactive accounts if the account value is less than $100. In such a case, the benefit is a single cash payment equal to the account value.

8. Optional Forms of Payment

The member, and the beneficiary of a member who dies prior to retirement, may elect the following forms of payment.

a) 5-year certain and life annuity.
b) 10-year certain and life annuity.
c) 100% joint and survivor annuity.
d) 50% joint and survivor annuity.

9. Changes in Plan Provisions Since Last Valuation

None.

REQUIRED ACFR EXHIBITS

In accordance with the Government Finance Officers Association (GFOA) and their recommended checklist for Annual Comprehensive Financial Reports (ACFRs), we prepared the following schedules for the Trust. The GFOA checklist uses the term Actuarial Accrued Liability, which is the same as the Actuarial Liability/Present Value of Benefits used elsewhere in this report.

Table D-1
Schedule of Active Member Valuation Data

Valuation Date June 30,	Number of Active Members[1]	Total Variable Equity Units[1]	Average Variable Equity Units[1]	% Increase (Decrease) in Average Variable Equity Units[1]
2021	2,122	1,278,035.8934	602.2789	(7.67%)
2018	2,223	1,450,045.5120	652.2922	(6.40%)
2015	2,402	1,673,916.6458	696.8845	2.92%
2012	2,279	1,847,879.8189	677.1271	14.52%
2009	3,317	1,961,173.8340	591.2493	11.41%
2006	3,576	1,897,693.2350	530.6748	9.09%
2003	3,910	1,902,053.0982	486.4586	(9.34%)
2000	4,023	2,158,681.7328	536.5851	(21.74%)

[1]Excludes suspended members.
Units for the quarter preceding the valuation date were distributed after that date and are not reflected in data.

Table D-2
Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
(Allowance in Variable Equity Units)

Valuation Date June 30,	Added to Rolls		Removed from Rolls		Rolls at End of Year		Average Annual Allowance	% Increase (Decrease) in Average Annual Allowance
	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance		
2021	29	1,851.1334	80	7,045.8348	326	25,841.0323	79.2670	(3.79%)
2018	41	3,384.5208	65	7,131.7872	377	31,062.2916	82.3933	(5.27%)
2015	41	3,786.0852	94	9,951.7512	401	34,876.9704	86.9750	(3.79%)
2012	25	2,353.8420	97	9,841.6716	454	41,042.6364	90.4023	(2.02%)
2009	36	3,512.0064	113	11,157.3420	526	48,530.4660	92.2632	(0.96%)
2006	35	2,435.0580	100	9,824.2776	603	56,175.8016	93.1605	(2.10%)
2003	47	6,040.8276	118	10,755.7560	668	63,565.0212	95.1572	2.99%
2000	57	5,584.7820	122	10,275.5556	739	68,279.9496	92.3951	1.80%

Required ACFR Exhibits, *continued*

Table D-3
Schedule of Funding Progress

Valuation Date June 30,	Actuarial Value of Assets[1] (a)	Actuarial Accrued Liability (b)	(Surplus)/Unfunded Actuarial Accrued Liability (c) = (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (d)	(Surplus)/Unfunded Actuarial Accrued Liability as % of Covered Payroll (c) / (d)
2021	$ 310,671,311	$ 285,988,079	$ (24,683,232)	108.63%	N/A	N/A
2018	229,942,681	216,358,053	(13,584,628)	106.28%	N/A	N/A
2015	206,729,868	196,810,185	(9,919,683)	105.04%	N/A	N/A
2012	149,840,256	146,132,680	(3,707,576)	102.54%	N/A	N/A
2009	120,414,735	116,870,615	(3,544,120)	103.03%	N/A	N/A
2006	159,612,705	162,490,488	2,877,783	98.23%	N/A	N/A
2003	127,186,109	127,349,554	163,445	99.87%	N/A	N/A
2000	216,985,359	215,916,009	(1,069,350)	100.50%	N/A	N/A

[1]Equals Fund Balance.

Table D-4
Schedule of Funded Liabilities by Type (Solvency Test)

Valuation Date June 30,	Actuarial Accrued Liability for: Active & Suspended Member Contributions (1)	Retirees & Beneficiaries (2)	Active & Suspended Member Benefits Financed by Employer (3)	Actuarial Value of Assets[1]	Portion of Actuarial Accrued Liabilities Covered by Actuarial Value of Assets (1)	(2)	(3)
2021	$ 246,674,980	$ 39,313,099	$ 0	$ 310,671,311	100.00%	100.00%	N/A
2018	186,116,019	30,242,034	0	229,942,681	100.00%	100.00%	N/A
2015	169,950,687	26,859,498	0	206,729,868	100.00%	100.00%	N/A
2012	123,893,449	22,239,231	0	149,840,256	100.00%	100.00%	N/A
2009	98,576,297	18,294,318	0	120,414,735	100.00%	100.00%	N/A
2006	131,801,641	30,688,847	0	159,612,705	100.00%	90.62%	N/A
2003	100,766,629	26,582,925	0	127,186,109	100.00%	99.39%	N/A
2000	169,574,883	46,341,126	0	216,985,359	100.00%	100.00%	N/A

[1]Equals Fund Balance.

Required ACFR Exhibits, *continued*

Table D-5
Analysis of Financial Experience
Change in Unfunded Actuarial Accrued Liability

Valuation Date June 30,	Retiree Experience[1]	Assumptions & Method Changes	Change in Unfunded Actuarial Accrued Liability
2021	$ (10,662,457)	$ (436,147)	$ (11,098,604)
2018	(4,126,763)	461,818	(3,664,945)
2015	(4,347,567)	(1,684,539)	(6,032,106)
2012	(947,053)	783,596	(163,457)
2009	(6,421,903)	0	(6,421,903)
2006	1,128,877	1,585,451	2,714,328
2003	1,232,795	0	1,232,795
2000	1,919,537	(2,230,603)	(311,066)

[1] Includes mortality experience, census data updates, investment experience and interest on any Unfunded Actuarial Accrued Liability after transfers to the Variable Reserve Account.

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STATISTICAL SECTION

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Schedule of Retired Members by Type of Benefit
(Based on the most recent actuarial valuation prepared as of 6/30/22)

Group	PERS (State)	PERS (Local)	TPAF	PFRS	SPRS	JRS	CPFPF	POPF	Total
Service Retirements									
Number	52,861	107,918	99,963	34,540	2,809	484	–	5	298,580
Annual Allowance	$1,656,669,081	$2,196,925,453	$4,342,838,831	N/A	$211,770,278	$53,526,445	–	$114,226	$8,461,844,314
Average Annual Allowance	$31,340	$20,357	$43,444	N/A	$75,390	$110,592	–	$22,845	$28,340
Ordinary Disability Retirements									
Number	4,403	7,563	3,401	3,021	123	9	–	2	18,522
Annual Allowance	$91,979,706	$132,681,901	$100,587,516	N/A	$5,041,118	$1,106,659	–	$45,253	$331,442,153
Average Annual Allowance	$20,890	$17,544	$29,576	N/A	$40,985	$122,962	–	$22,627	$17,895
Accidental Disability Retirements									
Number	504	841	281	3,110	166	–	–	–	4,902
Annual Allowance	$15,957,947	$24,899,866	$13,392,891	N/A	$10,342,781	–	–	–	$64,593,485
Average Annual Allowance	$31,663	$29,607	$47,662	N/A	$62,306	–	–	–	$13,177
Members' Death Benefits									
Number	5,074	11,877	7,775	8,082	514	185	24	35	33,566
Annual Allowance	$93,024,961	$162,833,504	$216,563,763	N/A	$20,405,387	$10,688,313	$407,282	$374,378	$504,297,588
Average Annual Allowance	$18,334	$13,710	$27,854	N/A	$39,699	$57,775	$16,970	$10,697	$15,024
Deferred Terminated Vested									
Number	147	433	316	60	–	9	–	–	965
Annual Allowance	$2,483,676	$4,890,048	$5,745,240	N/A	–	729,235	–	–	$13,848,199
Average Annual Allowance	$16,896	$11,293	$18,181	N/A	–	81,026	–	–	$14,350

Note: See "Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls" in Actuarial Section for Average Annual Allowance for the last five fiscal years.

Schedule of Revenues by Source

(based on Annual Comprehensive Financial Reports for relevant years)

	Fiscal Year	Member Contributions[1]	Employer/ Non-employer Contributions[2]	Pension Adjustment Contributions[3]	Other[4]	Percentage of Annual Covered Compensation[5]	Transfer from Other Systems[6]	Investment Income[7]	Total
PUBLIC EMPLOYEES' RETIREMENT SYSTEM	2014	797,818,225	917,689,000	–	55,641,713	8.02	–	4,103,472,982	5,874,621,920[8]
	2015	805,232,235	1,085,237,214	–	10,496,496	9.49	–	1,117,827,113	3,018,793,058
	2016	821,305,787	1,273,425,342	–	3,926,053	11.25	–	(237,215,643)	1,861,441,539
	2017	842,049,135	1,464,931,579	–	15,448,547	12.98	6,813,217	3,202,393,837	5,532,636,315
	2018	854,178,790	1,680,631,409	–	8,466,985	14.79	7,171,385	2,435,763,559	4,986,212,128
	2019	909,191,554	1,869,535,783	–	7,163,363	16.34	8,589,133	1,741,296,887	4,535,776,720
	2020	908,936,226	2,116,884,059	–	1,842,717	17.98	6,047,229	456,271,235	3,489,981,466
	2021	909,939,594	2,490,388,432	–	7,082,908	20.81	9,337,175	7,708,453,890	11,125,201,999
	2022	933,155,302	3,163,057,923	–	10,185,131	26.47	10,475,241	(2,594,503,769)	1,522,369,828
	2023	961,919,241	3,258,808,934	–	11,381,604	26.59	14,506,497	2,855,139,988	7,101,756,264
TEACHERS' PENSION AND ANNUITY FUND	2014	716,183,306	427,700,146	–	40,469,573	4.26	–	4,100,453,466	5,284,806,491[8]
	2015	740,296,265	540,603,535	–	4,476,040	5.32	–	1,066,062,926	2,351,438,766
	2016	761,711,695	800,069,277	–	1,807,662	7.76	–	(267,684,353)	1,295,904,281
	2017	781,256,291	1,127,018,480	–	357,659	10.80	10,870,173	2,736,988,791	4,656,491,394
	2018	810,899,751	1,516,131,450	–	345,897	14.25	13,092,464	2,016,316,929	4,356,786,491
	2019	846,166,328	2,015,496,648	–	300,112	18.62	15,148,965	1,361,781,295	4,238,893,348
	2020	867,037,595	2,271,007,729	–	329,571	20.53	15,588,379	318,393,101	3,472,356,375
	2021	883,659,076	2,936,047,960	–	403,226	25.89	10,766,456	5,902,191,421	9,733,068,139
	2022	907,326,471	4,191,916,812	–	395,540	36.42	19,857,109	(2,166,014,956)	2,953,480,976
	2023	933,033,324	4,172,939,358	–	449,590	35.17	19,745,418	2,300,606,725	7,426,774,415
POLICE AND FIREMEN'S RETIREMENT SYSTEM	2014	385,660,096	858,047,628	–	–	23.32	–	3,381,553,869	4,625,261,593[8]
	2015	386,991,641	959,814,917	–	26,963,211	26.06	–	922,598,676	2,296,368,445
	2016	388,681,408	961,499,567	–	6,848,771	26.02	–	(150,693,159)	1,206,336,587
	2017	393,078,137	1,088,510,734	–	12,817,692	29.21	3,090,206	2,791,104,860	4,288,601,629
	2018	395,604,883	1,236,474,884	–	3,834,741	32.51	3,605,472	2,139,481,226	3,778,988,436
	2019	410,943,242	1,336,737,544	–	7,868,386	34.53	3,765,634	1,549,138,833	3,308,453,639
	2020	416,433,179	1,506,807,105	–	6,997,374	38.26	2,857,249	425,543,356	2,358,638,263
	2021	419,458,195	1,620,847,056	–	6,161,341	39.12	2,912,909	6,952,727,005	9,002,106,506
	2022	430,285,900	1,954,710,844	–	6,897,992	46.52	3,210,733	(2,243,518,603)	151,586,866
	2023	439,236,770	1,962,686,338	–	10,619,873	45.55	3,318,920	2,497,976,803	4,913,838,704
STATE POLICE RETIREMENT SYSTEM	2014	24,034,496	–	–	–	13.90	–	287,098,217	347,569,636[8]
	2015	22,315,431	–	–	222,557	14.68	–	75,532,779	136,598,064
	2016	22,818,295	–	–	54,00	13.59	–	(19,284,054)	41,023,782
	2017	23,560,509	53,006,614	–	–	19.08	165,201	207,401,590	284,133,914
	2018	22,416,571	74,603,780	–	–	26.20	248,479	154,029,009	251,297,839
	2019	24,183,990	98,182,956	–	–	35.60	110,843	105,696,140	228,173,929
	2020	24,292,258	117,911,260	–	–	39.81	331,647	24,733,948	167,269,113
	2021	27,268,772	141,212,825	–	–	47.35	688,000	477,604,855	646,774,452
	2022	27,081,021	206,165,510	–	–	62.09	592,961	(170,386,626)	63,452,866
	2023	30,727,554	206,428,454	–	–	59.80	387,576	178,426,880	415,970,464

Schedule of Revenues by Source

(based on Annual Comprehensive Financial Reports for relevant years)

	Fiscal Year	Member Contributions(1)	Employer Contributions(2)	Pension Adjustment Contributions(3	Other(4)	Percentage of Annual Covered Compensation(5)	Transfer from Other Systems(6)	Investment Income(7)	Total
JUDICIAL RETIREMENT SYSTEM	2014	5,096,577	15,874,857	–	–	23.41	–	34,448,036	55,419,470(8)
	2015	6,310,124	17,031,026	–	2,081,523	25.79	–	8,475,641	33,898,314
	2016	9,271,869	14,794,774	–	726,284	22.05	–	(2,721,949)	22,070,978
	2017	7,758,193	20,341,379	–	–	29.89	3,711,095	20,031,152	51,841,819
	2018	9,177,453	24,023,637	–	–	34.71	2,859,841	14,809,869	50,870,800
	2019	9,688,270	29,702,700	–	–	38.20	1,310,118	9,230,701	49,931,789
	2020	9,239,505	37,496,113	–	–	48.93	1,025,802	1,972,315	49,733,735
	2021	9,426,354	52,508,011	–	–	68.22	–	37,225,810	99,160,175
	2022	9,608,031	72,954,420	–	–	95.49	2,026,661	(19,197,001)	65,392,111
	2023	9,799,479	69,711,704	–	–	90.49	1,284,248	17,292,141	98,087,572
CONSOLIDATED POLICE AND FIREMEN'S PENSION FUND	2014	–	–	1,889,091	11,740	–	–	585	1,889,676(8)
	2015	–	–	1,568,185	9,566	–	–	198	1,577,949
	2016	–	148,000	1,196,017	–	–	–	10,856	1,354,873
	2017	–	575,000	964,280	–	–	–	10,099	1,549,379
	2018	–	325,000	806,330	–	–	–	21,542	1,152,872
	2019	–	–	631,757	–	–	–	28,518	660,275
	2020	–	–	963,601	–	–	–	32,354	995,955(11)
	2021	–	248,000	441,879	–	–	–	5,956	695,835(11)
	2022	–	76,000	368,072	–	–	–	6,654	450,726
	2023	–	76,000	202,530	–	–	–	65,412	343,942
PRISON OFFICERS' PENSION FUND	2014	–	–	793,175	–	–	–	7,368	800,543(8)
	2015	–	–	698,360	–	–	–	6,355	704,715
	2016	–	–	634,217	–	–	–	18,067	652,284
	2017	–	–	552,131	–	–	–	30,847	582,978
	2018	–	–	484,565	–	–	–	70,215	554,780
	2019	–	–	412,250	–	–	–	111,413	523,663
	2020	–	–	784,279	–	–	–	90,145	874,424(11)
	2021	–	–	330,028	–	–	–	5,903	335,931(11)
	2022	–	–	313,575	–	–	–	13,892	327,467
	2023	–	–	–	–	–	–	169,271	169,271
CENTRAL PENSION FUND	2014	–	204,750	22,214	–	–	–	89	227,053
	2015	–	231,150	22,214	–	–	–	97	253,461
	2016	–	280,500	22,214	–	–	–	176	302,890
	2017	–	248,000	22,214	–	–	–	612	270,826
	2018	–	324,000	22,214	–	–	–	1,069	347,283
	2019	–	272,660	22,214	–	–	–	2,481	297,355
	2020	–	275,840	9,448	–	–	–	3,168	288,456
	2021	–	241,972	–	–	–	–	190	242,162(11)
	2022	–	263,915	–	–	–	–	421	264,336
	2023	–	269,000	–	–	–	–	9,392	278,392

Schedule of Revenues by Source

(based on Annual Comprehensive Financial Reports for relevant years)

	Fiscal Year	Member Contributions(1)	Employer Contributions(2	Pension Adjustment Contributions(3)	Other(4)	Percentage of Annual Covered Compensation(5)	Transfer from Other Systems(6)	Investment Income(7)	Total
SUPPLEMENTAL ANNUITY COLLECTIVE TRUST	2014	5,907,412	–	–	–	–	–	42,222,601	48,130,013
	2015	6,003,908	–	–	–	–	–	16,456,041	22,459,949
	2016	5,814,213	–	–	–	–	–	5,329,922	11,144,135
	2017	5,882,431	–	–	–	–	–	35,425,977	41,308,408
	2018	6,074,603	–	–	–	–	–	24,247,640	30,322,243
	2019	6,025,497	–	–	–	–	–	12,045,593	18,071,090
	2020	6,424,837	–	–	–	–	–	12,251,699	18,676,536
	2021	6,455,552	–	–	–	–	–	102,539,556	108,995,108
	2022	6,988,916	–	–	–	–	–	(32,866,365)	(25,877,449)
	2023	7,710,911	–	–	–	–	–	47,961,499	55,672,410
DEFERRED COMPENSATION PLAN	2014	181,051,805	–	–	–	–	–	424,147,776	605,199,581
	2015	186,999,797	–	–	–	–	–	133,142,031	320,141,828
	2016	180,268,889	–	–	–	–	–	20,757,799	201,026,688
	2017	194,488,684	–	–	–	–	–	399,453,403	593,942,087
	2018	190,196,996	–	–	–	–	–	342,876,467	533,073,463
	2019	199,862,898	–	–	–	–	–	225,144,674	425,007,572
	2020	207,036,966	–	–	–	–	–	109,679,827	316,716,793
	2021	214,036,694	–	–	–	–	–	1,180,874,331	1,394,911,025
	2022	235,366,280	–	–	–	–	–	(643,921,766)	(408,555,486)
	2023	233,923,776	–	–	–	–	–	498,715,092	732,638,868
DEFINED CONTRIBUTION RETIREMENT PROGRAM(10)	2014	–	1,409,544	–	–	–	–	2,250	1,411,794
	2015	–	2,046,770	–	–	–	–	3,497	2,050,267
	2016	–	–	–	–	–	–	–	–
	2017	–	–	–	–	–	–	–	–
	2018	–	–	–	–	–	–	–	–
	2019	–	–	–	–	–	–	–	–
	2020	–	–	–	–	–	–	–	–
	2021	–	–	–	–	–	–	–	–
	2022	–	–	–	–	–	–	–	–
	2023	–	–	–	–	–	–	–	–
ALTERNATE BENEFIT LONG-TERM DISABILITY FUND(10)	2014	–	1,382,696	–	–	–	–	1,622	1,384,318
	2015	–	1,550,000	–	–	–	–	1,631	1,551,631
	2016	–	–	–	–	–	–	–	–
	2017	–	–	–	–	–	–	–	–
	2018	–	–	–	–	–	–	–	–
	2019	–	–	–	–	–	–	–	–
	2020	–	–	–	–	–	–	–	–
	2021	–	–	–	–	–	–	–	–
	2022	–	–	–	–	–	–	–	–
	2023	–	–	–	–	–	–	–	–

Schedule of Revenues by Source

(based on Annual Comprehensive Financial Reports for relevant years)

	Fiscal Year	Member Contributions(1)	Employer Contributions(2)	Pension Adjustment Contributions(3	Other(4)	Percentage of Annual Covered Compensation(5)	Transfer from Other Systems(6)	Investment Income(7)	Total
STATE HEALTH BENEFIT PROGRAM FUNDS	2014	399,307,467	5,479,344,541	–	–	–	–	1,223,707	5,879,875,715
	2015	497,483,666	5,871,536,760	–	–	–	–	1,175,123	6,370,195,549
	2016	50,097,187	397,482,073	–	–	–	–	310,043	447,889,303(9)
	2017	53,585,505	434,877,635	–	–	–	–	791,049	489,254,189(9)
	2018	53,987,166	474,742,947	–	–	–	–	2,320,422	531,050,535
	2019	43,249,952	390,269,556	–	–	–	–	4,826,936	438,346,444
	2020	37,546,413	327,416,317	–	–	–	–	2,858,334	367,821,064
	2021	43,309,873	362,874,910	–	–	–	–	201,343	406,386,126
	2022	53,166,360	435,282,084	–	–	–	–	235,962	488,684,406
	2023	62,414,616	487,001,157	–	–	–	–	2,001,914	551,417,687
PENSION TRUST AND STATE HEALTH BENEFIT PROGRAM FUNDS TOTAL	2014	2,515,059,384	7,738,090,085	2,704,480	96,123,026	–	–	12,374,632,568	22,726,609,543(8)
	2015	2,651,633,067	8,516,578,669	2,288,759	44,249,393	–	–	3,341,282,108	14,556,031,996
	2016	2,239,969,343	3,485,135,074	1,852,448	13,362,770	–	–	(651,172,295)	5,089,147,340(9)
	2017	2,301,658,885	4,190,509,421	1,538,625	28,623,898	–	24,649,892	9,393,632,217	15,940,612,938(9)
	2018	2,342,536,213	5,007,244,107	1,313,109	12,647,853	–	26,977,641	7,129,937,947	14,520,656,870
	2019	2,449,311,731	5,740,197,847	1,066,221	15,331,861	–	28,924,693	5,009,303,471	13,244,135,824
	2020	2,476,946,979	6,377,798,423	1,757,328	9,169,662	–	25,850,306	1,351,829,482	10,243,352,180(11)
	2021	2,513,554,110	7,604,369,166	771,907	13,647,475	–	23,704,540	22,361,830,260	32,517,877,458(11)
	2022	2,602,978,281	10,024,427,508	681,647	17,478,663	–	36,162,705	(7,870,152,157)	4,811,576,647
	2023	2,678,765,671	10,157,920,945	202,530	22,451,067	–	39,242,659	8,398,365,117	21,296,947,989

(1) Indicates contributions from active members.

(2) Includes contributions both from State and local employers (also both employer and non-employer contributions).

(3) Indicates State contribution to POPF, CPFPF, and CPF as pension adjustment.

(4) Previously, indicated Contributory Group Insurance (CGI) member contributions; however, now, indicates other employer contribution items, such as Delayed Enrollments/Appropriations, Retro billing, CPFPF Admin. fees, etc. Starting FY 2015, based on GASB No. 67, we are taking out CGI items from our financial statements.

(5) Indicates percentage of Employer Contributions over Annual Covered Compensation.

(6) Indicates transfers of member/employer contributions from other pension plans/systems.

(7) Indicates net appreciation/depreciation of fair value, dividends, and interest.

(8) GASB No. 67 became implemented in fiscal year 2014. Fiscal years before 2014 other than the restated 2013 were presented otherwise.

(9) GASB No. 74 became implemented in fiscal year 2017, which is presenting State Health Benefit Program - Local - Retired only. Fiscal years before 2017 other than the restated 2016 were presented otherwise.

(10) Both DCRP and ABPLTD moved from NJDP&B to NJ OMB (State) in fiscal year 2017. The 2016 was restated accordingly.

(11) GASB No.84 became implemented in fiscal year 2021. Fiscal years before 2021 other than the restated 2020 were presented otherwise. The Pension Adjustment Fund (cost-of-living adjustments), previously one of the Agency Funds, became allocated to Prison Officers' Pension Fund, Consolidated Police & Firemen's Pension Fund, and Central Pension Fund.

Schedule of Expenses by Type

(based on Annual Comprehensive Financial Reports for relevant years)

	Fiscal Year	Retirement Benefits[1]	Cost-of-Living Adjustments[2]	Death Benefits[3]	Withdrawal[4]	Other Refunds[5]	Admin & Misc.[6]	Transfer to Other Retirement Systems[7]	Total
PUBLIC EMPLOYEES' RETIREMENT SYSTEM	2014	2,806,343,114	256,307,998	127,100,559	111,909,794	–	21,756,019	13,778,475	3,337,195,959[8]
	2015	2,986,839,116	242,890,285	73,430,329	116,431,242	–	23,761,859	21,455,094	3,464,807,925
	2016	3,186,588,835	229,541,844	77,192,795	117,027,599	–	23,285,920	19,300,842	3,652,937,835
	2017	3,370,538,479	216,676,990	80,002,130	125,005,841	–	19,648,715	18,595,252	3,830,467,407
	2018	3,537,483,365	204,022,000	72,207,064	122,608,146	–	21,368,150	20,388,385	3,978,077,110
	2019	3,705,013,463	191,673,351	86,793,757	134,890,851	–	21,257,441	20,544,727	4,160,173,590
	2020	3,862,909,876	179,338,007	83,662,877	127,143,151	–	19,365,011	20,170,908	4,292,589,830
	2021	4,010,530,404	165,881,528	117,825,095	140,317,667	–	14,120,177	14,091,794	4,462,766,665
	2022	4,190,378,874	154,100,010	105,651,747	167,840,894	–	18,030,213	26,050,417	4,662,052,155
	2023	4,369,118,929	142,092,918	109,678,977	172,396,653	–	19,140,588	25,797,572	4,838,225,637
TEACHERS' PENSION AND ANNUITY FUND	2014	3,397,559,391	357,451,129	74,929,067	43,101,723	–	12,170,972	5,467,788	3,890,680,070[8]
	2015	3,576,672,146	344,252,116	36,283,535	51,161,238	–	13,890,080	6,634,552	4,028,893,667
	2016	3,744,665,145	330,897,322	35,580,277	51,526,638	–	13,768,112	6,401,380	4,182,838,874
	2017	3,881,732,050	317,245,237	39,099,480	60,938,382	–	11,923,787	7,253,596	4,318,192,532
	2018	4,005,287,888	304,241,146	35,766,941	55,907,156	–	13,222,178	7,406,171	4,421,831,480
	2019	4,118,411,040	289,851,559	41,107,648	61,489,992	–	13,922,385	8,493,288	4,533,275,912
	2020	4,230,853,848	276,029,186	42,513,729	65,752,288	–	18,590,555	6,171,046	4,639,910,652
	2021	4,336,143,724	261,046,626	55,342,960	58,051,016	–	9,042,590	9,478,706	4,729,105,622
	2022	4,447,741,072	246,657,591	56,578,899	72,009,660	–	12,635,916	10,469,821	4,846,092,959
	2023	4,550,212,489	232,065,648	55,182,358	71,304,446	–	13,581,904	14,776,834	4,937,123,679
POLICE AND FIREMEN'S RETIREMENT SYSTEM	2014	1,831,032,076	223,111,212	42,612,105	8,652,971	–	3,884,342	420,647	2,109,713,353[8]
	2015	1,945,006,485	216,641,361	35,424,340	7,789,561	–	4,531,012	602,550	2,209,995,309
	2016	2,067,836,471	209,926,511	38,372,031	7,712,880	–	4,292,891	328,060	2,328,468,844
	2017	2,171,405,313	203,553,759	38,969,665	7,340,359	–	4,124,457	216,341	2,425,609,894
	2018	2,273,247,266	196,849,281	43,309,987	10,055,932	–	4,505,685	182,584	2,528,150,735
	2019	2,373,888,854	189,805,322	35,769,359	7,400,176	–	7,199,218	525,865	2,614,588,794
	2020	2,488,037,176	182,902,311	45,645,395	8,980,837	–	12,859,324	506,320	2,738,931,363
	2021	2,607,628,489	175,114,443	58,204,999	11,135,743	–	18,293,096	604,094	2,870,980,864
	2022	2,730,314,557	167,939,477	59,802,758	12,166,977	–	15,261,328	701,846	2,986,186,943
	2023	2,829,347,488	161,064,324	42,265,825	10,774,061	–	11,239,652	566,478	3,055,257,828
STATE POLICE RETIREMENT SYSTEM	2014	173,264,302	23,198,162	1,148,273	348,201	–	280,026	–	198,238,964[8]
	2015	182,540,341	22,700,036	1,169,297	83,950	–	351,724	–	206,845,348
	2016	189,392,434	22,058,752	1,855,541	129,423	–	334,630	–	213,770,780
	2017	193,774,056	21,469,397	1,968,614	91,879	–	294,745	–	217,598,691
	2018	198,710,925	20,906,944	2,499,780	255,650	–	377,193	–	222,750,492
	2019	203,065,592	20,251,885	2,182,956	181,797	–	596,137	150,677	226,429,044
	2020	208,841,559	19,673,473	1,991,260	131,740	–	632,762	26,341	231,297,135
	2021	217,155,620	18,999,300	1,719,825	85,096	–	494,765	157,527	238,612,133
	2022	227,592,184	18,399,602	4,844,510	280,470	–	701,981	222,176	252,040,923
	2023	234,301,347	17,766,278	1,554,454	145,718	–	861,652	23,087	254,652,536

Schedule of Expenses by Type

(based on Annual Comprehensive Financial Reports for relevant years)

	Fiscal Year	Retirement Benefits(1)	Cost-of-Living Adjustments(2)	Death Benefits(3)	Withdrawal(4)	Other Refunds(5)	Admin & Misc.(6)	Transfer to Other Retirement Systems(7)	Total
JUDICIAL RETIREMENT SYSTEM	2014	45,079,634	3,930,547	540,681	53,218	–	162,372	–	49,766,452(8)
	2015	48,077,475	3,827,515	525,026	–	–	168,762	–	52,598,778
	2016	50,226,767	3,615,980	843,774	–	–	168,008	–	54,854,529
	2017	52,257,756	3,384,318	664,379	59,265	–	150,588	–	56,516,306
	2018	54,020,953	3,229,235	757,636	278,597	–	185,364	–	58,471,785
	2019	55,841,702	3,005,477	702,700	41,727	–	200,338	–	59,791,944
	2020	57,340,981	2,681,333	886,113	40,682	–	219,976	–	61,169,085
	2021	58,896,368	2,292,622	1,221,011	295,182	–	324,080	–	63,029,263
	2022	61,224,781	2,092,184	579,420	818,343	–	183,857	36,541	64,935,126
	2023	64,405,372	1,889,944	1,385,704	511,215	–	177,626	100,036	68,469,897
CONSOLIDATED POLICE AND FIREMEN'S PENSION FUND	2014	1,052,944	1,889,091	–	–	–	9,566	–	2,951,601(8)
	2015	877,442	1,568,185	–	–	–	8,003	–	2,453,630
	2016	685,235	1,196,017	–	–	–	6,643	–	1,887,895
	2017	571,343	964,280	–	–	–	4,188	–	1,539,811
	2018	483,569	806,330	–	–	–	4,006	–	1,293,905
	2019	401,418	631,757	–	–	–	3,013	–	1,036,188
	2020	850,683	476,787	–	–	–	3,308	–	1,330,778(11)
	2021	265,148	437,251	–	–	–	2,620	–	705,019(11)
	2022	178,095	295,342	–	–	–	3,226	–	476,663
	2023	117,921	210,452	–	–	–	2,819	–	331,192
PRISON OFFICERS' PENSION FUND	2014	790,234	793,174	–	–	–	5,853	–	1,589,261(8)
	2015	679,145	698,360	–	–	–	5,843	–	1,383,348
	2016	606,090	634,217	–	–	–	5,312	–	1,245,619
	2017	517,078	552,131	–	–	–	4,134	–	1,073,343
	2018	463,312	484,565	–	–	–	4,315	–	952,192
	2019	404,722	412,250	–	–	–	4,215	–	821,187
	2020	855,252	297,465	–	–	–	4,628	–	1,157,345(11)
	2021	313,397	329,350	–	–	–	3,429	–	646,176(11)
	2022	257,537	252,334	–	–	–	3,226	–	513,097
	2023	229,151	226,220	–	–	–	3,112	–	458,483
CENTRAL PENSION FUND	2014	189,826	22,214	–	–	15,013	–	–	227,053
	2015	211,076	22,214	–	–	20,171	–	–	253,461
	2016	274,633	22,214	–	–	6,043	–	–	302,890
	2017	236,076	22,214	–	–	12,536	–	–	270,826
	2018	319,826	22,214	–	–	5,243	–	–	347,283
	2019	279,490	22,214	–	–	(4,349)	–	–	297,355
	2020	224,629	9,448	–	–	54,379	–	–	288,456
	2021	212,505	10,430	–	–	19,227	–	–	242,162
	2022	224,465	9,561	–	–	30,310	–	–	264,336
	2023	239,019	9,416	–	–	29,957	–	–	278,392

Schedule of Expenses by Type

(based on Annual Comprehensive Financial Reports for relevant years)

	Fiscal Year	Retirement Benefits[1]	Cost-of-Living Adjustments[2]	Death Benefits[3]	Withdrawal[4]	Other Refunds[5]	Admin & Misc.[6]	Transfer to Other Retirement Systems[7]	Total
SUPPLEMENTAL ANNUITY COLLECTIVE TRUST	2014	17,638,584	–	–	–	–	–	–	17,638,584
	2015	20,710,344	–	–	–	–	–	–	20,710,344
	2016	20,342,949	–	–	–	–	–	–	20,342,949
	2017	16,520,123	–	–	–	–	–	–	16,520,123
	2018	22,615,594	–	–	–	–	–	–	22,615,594
	2019	20,973,004	–	–	–	–	–	–	20,973,004
	2020	21,502,168	–	–	–	–	–	–	21,502,168
	2021	21,927,170	–	–	–	–	–	–	21,927,170
	2022	30,053,885	–	–	–	–	1,230,082	–	31,283,967
	2023	24,308,550	–	–	–	–	–	–	24,308,550
DEFERRED COMPENSATION PLAN	2014	149,393,111	–	–	–	–	482,277	–	149,875,388
	2015	175,989,352	–	–	–	–	464,130	–	176,453,482
	2016	163,247,570	–	–	–	–	190,880	–	163,438,450
	2017	183,110,996	–	–	–	–	444,503	–	183,555,499
	2018	203,425,764	–	–	–	–	407,732	–	203,833,496
	2019	233,812,585	–	–	–	–	432,105	–	234,244,690
	2020	219,539,196	–	–	–	–	442,132	–	219,981,328
	2021	232,951,509	–	–	–	–	516,190	–	233,467,699
	2022	304,646,810	–	–	–	–	568,913	–	305,215,723
	2023	355,631,822	–	–	–	–	564,295	–	356,196,117
DEFINED CONTRIBUTION RETIREMENT PROGRAM[10]	2014	359,385	–	–	–	–	–	–	359,385
	2015	844,050	–	–	–	–	–	–	844,050
	2016	–	–	–	–	–	–	–	–
	2017	–	–	–	–	–	–	–	–
	2018	–	–	–	–	–	–	–	–
	2019	–	–	–	–	–	–	–	–
	2020	–	–	–	–	–	–	–	–
	2021	–	–	–	–	–	–	–	–
	2022	–	–	–	–	–	–	–	–
	2023	–	–	–	–	–	–	–	
ALTERNATE BENEFIT LONG-TERM DISABILITY FUND[10]	2014	1,400,000	–	–	–	–	–	–	1,400,000
	2015	1,550,000	–	–	–	–	–	–	1,550,000
	2016	–	–	–	–	–	–	–	–
	2017	–	–	–	–	–	–	–	–
	2018	–	–	–	–	–	–	–	–
	2019	–	–	–	–	–	–	–	–
	2020	–	–	–	–	–	–	–	–
	2021	–	–	–	–	–	–	–	–
	2022	–	–	–	–	–	–	–	–
	2023	–	–	–	–	–	–	–	–

Schedule of Expenses by Type

(based on Annual Comprehensive Financial Reports for relevant years)

	Fiscal Year	Retirement Benefits(1)	Cost-of-Living Adjustments(2)	Death Benefits(3)	Withdrawal(4)	Other Refunds(5)	Admin & Misc.(6)	Transfer to Other Retirement Systems(7)	Total
STATE HEALTH BENEFIT PROGRAM FUNDS	2014	5,918,951,153	–	–	–	–	9,359,616	–	5,928,310,769
	2015	6,290,847,391	–	–	–	–	9,142,428	–	6,299,989,819
	2016	425,946,495	–	–	–	–	10,516,251	–	436,462,746(9)
	2017	417,488,848	–	–	–	–	8,894,576	–	426,383,424(9)
	2018	421,621,253	–	–	–	–	8,200,113	–	429,821,366
	2019	470,179,613	–	–	–	–	9,478,435	–	479,658,048
	2020	466,218,997	–	–	–	–	9,913,267	–	476,132,264
	2021	509,642,373	–	–	–	–	11,334,383	–	520,976,756
	2022	585,291,951	–	–	–	–	12,334,441	–	597,626,392
	2023	597,093,300	–	–	–	–	12,616,744	–	609,710,044
PENSION TRUST AND STATE HEALTH BENEFIT PROGRAM FUNDS TOTAL	2014	14,343,053,754	866,703,527	246,330,685	164,065,907	15,013	48,111,043	19,666,910	15,687,946,839(8)
	2015	15,230,844,363	832,600,072	146,832,527	175,465,991	20,171	52,323,841	28,692,196	16,466,779,161
	2016	9,849,812,624	797,892,857	153,844,418	176,396,540	6,043	52,568,647	26,030,282	11,056,551,411(9)
	2017	10,288,152,118	763,868,326	160,704,268	193,435,726	12,536	45,489,693	26,065,189	11,477,727,856(9)
	2018	10,717,679,715	730,561,715	154,541,408	189,105,481	5,243	48,274,736	27,977,140	11,868,145,438
	2019	11,182,271,483	695,653,815	166,556,420	204,004,543	(4,349)	53,093,287	29,714,557	12,331,289,756
	2020	11,557,174,365	661,408,010	174,699,374	202,048,698	54,379	62,030,963	26,874,615	12,684,290,404(11)
	2021	11,995,666,707	624,111,550	234,313,890	209,884,704	19,227	54,131,330	24,332,121	13,142,459,529(11)
	2022	12,577,904,211	589,746,101	227,457,334	253,116,344	30,310	60,953,183	37,480,801	13,746,688,284
	2023	13,025,005,388	555,325,200	210,067,318	255,132,093	29,957	58,188,392	41,264,007	14,145,012,355

(1) Indicates benefits from retirement (regular, early, or disability) other than death.

(2) Indicates supplement enefit as cost of living adjustment (pension adjustment) benefit.

(3) Previously, indicated Contributory Group Insurance (CGI) member contributions; however, now, indicates other employer contribution items, such as Delayed Enrollments/Appropriations, Retro billing, CPFPF Admin. fees, etc. Starting FY 2015, based on GASB No. 67, we are taking out CGI items from our financial statements.

(4) Indicates members' withdrawal of their contributions; that is, a type of refund.

(5) Indicates refund to State with excess of revenues and expenses.

(6) Indicates admnistration expenses of pension plans/systems plus petty misc adjustment items.

(7) Indicates transfers of member/employer contributions to other pension plans/systems.

(8) GASB No. 67 became implemented in fiscal year 2014. Fiscal years before 2014 other than the restated 2013 were presented otherwise.

(9) GASB No. 74 became implemented in fiscal year 2017, which is presenting State Health Benefit Program - Local - Retired only. Fiscal years before 2017 other than the restated 2016 were presented otherwise.

(10) Both DCRP and ABPLTD moved from NJDP&B to NJ OMB (State) in fiscal year 2017. The 2016 was restated accordingly.

(11) GASB No.84 became implemented in fiscal year 2021. Fiscal years before 2021 other than the restated 2020 were presented otherwise. The Pension Adjustment Fund (cost-of-living adjustments), previously one of the Agency Funds, became allocated to Prison Officers' Pension Fund, Consolidated Police & Firemen's Pension Fund, and Central Pension Fund.

Schedule of Changes in Net Position

(based on Annual Comprehensive Financial Reports for relevant years)

					Net Position	
	Fiscal Year	Additions (1)	Deductions (2)	Total Change in Net Position	Beginning of Year	End of Year
PUBLIC EMPLOYEES' RETIREMENT SYSTEM	2014	5,874,621,920	3,337,195,959	2,537,425,961	26,462,155,812	28,999,581,773(3)
	2015	3,018,793,058	3,464,807,925	(446,014,867)	28,999,581,773	28,553,566,906
	2016	1,861,441,539	3,652,937,835	(1,791,496,296)	28,553,566,906	26,762,070,610
	2017	5,532,636,315	3,830,467,407	1,702,168,908	26,762,070,610	28,464,239,518
	2018	4,986,212,128	3,978,077,110	1,008,135,018	28,464,239,518	29,472,374,536
	2019	4,535,776,720	4,160,173,590	375,603,130	29,472,374,536	29,847,977,666
	2020	3,489,981,466	4,292,589,830	(802,608,364)	29,847,977,666	29,045,369,302
	2021	11,125,201,999	4,462,766,665	6,662,435,334	29,045,369,302	35,707,804,636
	2022	1,522,369,828	4,662,052,155	(3,139,682,327)	35,707,804,636	32,568,122,309
	2023	7,101,756,264	4,838,225,637	2,263,530,627	32,568,122,309	34,831,652,936
TEACHERS' PENSION AND ANNUITY FUND	2014	5,284,806,491	3,890,680,070	1,394,126,421	25,888,126,039	27,282,252,461(3)
	2015	2,351,438,766	4,028,893,667	(1,677,454,901)	27,282,252,461	25,604,797,560
	2016	1,295,904,281	4,182,838,874	(2,886,934,593)	25,604,797,560	22,717,862,967
	2017	4,656,491,394	4,318,192,532	338,298,862	22,717,862,967	23,056,161,829
	2018	4,356,786,491	4,421,831,480	(65,044,989)	23,056,161,829	22,991,116,840
	2019	4,238,893,348	4,533,275,912	(294,382,564)	22,991,116,840	22,696,734,276
	2020	3,472,356,375	4,639,910,652	(1,167,554,277)	22,696,734,275	21,529,179,998
	2021	9,733,068,139	4,729,105,622	5,003,962,517	21,529,179,998	26,533,142,515
	2022	2,953,480,976	4,846,092,959	(1,892,611,983)	26,533,142,515	24,640,530,532
	2023	7,426,774,415	4,937,123,679	2,489,650,736	24,640,530,532	27,130,181,268
POLICE AND FIREMEN'S RETIREMENT SYSTEM	2014	4,625,261,593	2,109,713,353	2,515,548,240	22,504,937,545	25,020,485,785(3)
	2015	2,296,368,445	2,209,995,309	86,373,136	25,020,485,785	25,106,858,921
	2016	1,206,336,587	2,328,468,844	(1,122,132,257)	25,106,858,921	23,984,726,664
	2017	4,288,601,629	2,425,609,894	1,862,991,735	23,984,726,664	25,847,718,399
	2018	3,778,988,436	2,528,150,735	1,250,837,701	25,847,718,399	27,098,556,100
	2019	3,308,453,639	2,614,588,794	693,864,845	27,098,556,100	27,792,420,945
	2020	2,358,638,263	2,738,931,363	(380,293,100)	27,792,420,945	27,412,127,845
	2021	9,002,106,506	2,870,980,864	6,131,125,642	27,412,127,845	33,543,253,487
	2022	151,586,866	2,986,186,943	(2,834,600,077)	33,543,253,487	30,708,653,410
	2023	4,913,838,704	3,055,257,828	1,858,580,876	30,708,653,410	32,567,234,286

Schedule of Changes in Net Position

(based on Annual Comprehensive Financial Reports for relevant years)

	Fiscal Year	Additions [1]	Deductions [2]	Total Change in Net Position	Net Position Beginning of Year	Net Position End of Year
STATE POLICE RETIREMENT SYSTEM	2014	347,569,636	198,238,964	149,330,672	1,788,625,722	1,937,956,394[3]
	2015	136,598,064	206,845,348	(70,247,284)	1,937,956,394	1,867,709,110
	2016	41,023,782	213,770,780	(172,746,998)	1,867,709,110	1,694,962,112
	2017	284,133,914	217,598,691	66,535,223	1,694,962,112	1,761,497,335
	2018	251,297,839	222,750,492	28,547,347	1,761,497,335	1,790,044,682
	2019	228,173,929	226,429,044	1,744,885	1,790,044,682	1,791,789,567
	2020	167,269,113	231,297,135	(64,028,022)	1,791,789,567	1,727,761,545
	2021	646,774,452	238,612,133	408,162,319	1,727,761,545	2,135,923,864
	2022	63,452,866	252,040,923	(188,588,057)	2,135,923,864	1,947,335,807
	2023	415,970,464	254,652,536	161,317,928	1,947,335,807	2,108,653,735
JUDICIAL RETIREMENT SYSTEM	2014	55,419,470	49,766,452	5,653,018	225,830,817	231,483,835[3]
	2015	33,898,314	52,598,778	(18,700,464)	231,483,835	212,783,371
	2016	22,070,978	54,854,529	(32,783,551)	212,783,371	179,999,820
	2017	51,841,819	56,516,306	(4,674,487)	179,999,820	175,325,333
	2018	50,870,800	58,471,785	(7,600,985)	175,325,333	167,724,348
	2019	49,931,789	59,791,944	(9,860,155)	167,724,348	157,864,193
	2020	49,733,735	61,169,085	(11,435,350)	157,864,193	146,428,843
	2021	99,160,175	63,029,263	36,130,912	146,428,843	182,559,755
	2022	65,392,111	64,935,126	456,985	182,559,755	183,016,740
	2023	98,087,572	68,469,897	29,617,675	183,016,740	212,634,415
CONSOLIDATED POLICE AND FIREMEN'S PENSION FUND	2014	1,901,416	2,951,601	(1,050,185)	4,353,816	3,303,631[3]
	2015	1,577,949	2,453,630	(875,681)	3,303,631	2,427,950
	2016	1,354,873	1,887,895	(533,022)	2,427,950	1,894,928
	2017	1,549,379	1,539,811	9,568	1,894,928	1,904,496
	2018	1,152,872	1,293,905	(141,033)	1,904,496	1,763,463
	2019	660,275	1,036,188	(375,913)	1,763,463	1,387,550
	2020	995,955	1,330,778	(334,823)	1,387,550	1,052,727[6]
	2021	695,835	705,019	(9,184)	2,194,649	2,185,465[6]
	2022	450,726	476,663	(25,937)	2,185,465	2,159,528
	2023	343,942	331,192	12,750	2,159,528	2,172,278

Schedule of Changes in Net Position

(based on Annual Comprehensive Financial Reports for relevant years)

	Fiscal Year	Additions [1]	Deductions [2]	Total Change in Net Position	Net Position Beginning of Year	Net Position End of Year
PRISON OFFICERS' PENSION FUND	2014	800,543	1,589,261	(788,718)	8,171,919	7,383,201[3]
	2015	704,715	1,383,348	(678,633)	7,383,201	6,704,568
	2016	652,284	1,245,619	(593,335)	6,704,568	6,111,233
	2017	582,978	1,073,343	(490,365)	6,111,233	5,620,868
	2018	554,780	952,192	(397,412)	5,620,868	5,223,456
	2019	523,663	821,187	(297,524)	5,223,456	4,925,932
	2020	874,424	1,157,345	(282,921)	4,925,932	4,643,011[6]
	2021	335,931	646,176	(310,245)	5,446,289	5,136,044[6]
	2022	327,467	513,097	(185,630)	5,136,044	4,950,414
	2023	169,271	458,483	(289,212)	4,950,414	4,661,202
CENTRAL PENSION FUND	2014	227,053	227,053	–	–	–
	2015	253,461	253,461	–	–	–
	2016	302,890	302,890	–	–	–
	2017	270,826	270,826	–	–	–
	2018	347,283	347,283	–	–	–
	2019	297,355	297,355	–	–	–
	2020	288,456	288,456	–	–	–
	2021	242,162	242,162	–	–	–[6]
	2022	264,336	264,336	–	–	–
	2023	278,392	278,392	–	–	–
SUPPLEMENTAL ANNUITY COLLECTIVE TRUST	2014	48,130,013	17,638,584	30,491,429	178,262,014	208,753,443
	2015	22,459,949	20,710,344	1,749,605	208,753,443	210,503,048
	2016	11,144,135	20,342,949	(9,198,814)	210,503,048	201,304,234
	2017	41,308,408	16,520,123	24,788,285	201,304,234	226,092,519
	2018	30,322,243	22,615,594	7,706,649	226,092,519	233,799,168
	2019	18,071,090	20,973,004	(2,901,914)	233,799,168	230,897,254
	2020	18,676,536	21,502,168	(2,825,632)	230,897,254	228,071,622
	2021	108,995,108	21,927,170	87,067,938	228,071,622	315,139,560
	2022	(25,877,449)	31,283,967	(57,161,416)	315,139,560	257,978,144
	2023	55,672,410	24,308,550	31,363,860	257,978,144	289,342,004

Schedule of Changes in Net Position

(based on Annual Comprehensive Financial Reports for relevant years)

	Fiscal Year	Additions (1)	Deductions (2)	Total Change in Net Position	Net Position: Beginning of Year	Net Position: End of Year
DEFERRED COMPENSATION PLAN	2014	605,199,581	149,875,388	455,324,193	2,940,893,014	3,396,217,207
	2015	320,141,828	176,453,482	143,688,346	3,396,217,207	3,539,905,553
	2016	201,026,688	163,438,450	37,588,238	3,539,905,553	3,577,493,791
	2017	593,942,087	183,555,499	410,386,588	3,577,493,791	3,987,880,379
	2018	533,073,463	203,833,496	329,239,967	3,987,880,379	4,317,120,346
	2019	425,007,572	234,244,690	190,762,882	4,317,120,346	4,507,883,228
	2020	316,716,793	219,981,328	96,735,465	4,507,883,228	4,604,618,693
	2021	1,394,911,025	233,467,699	1,161,443,326	4,604,618,693	5,766,062,019
	2022	(408,555,486)	305,215,723	(713,771,209)	5,766,062,019	5,052,290,810
	2023	732,638,868	356,196,117	376,442,751	5,052,290,810	5,428,733,561
DEFINED CONTRIBUTION RETIREMENT PROGRAM(5)	2014	1,411,794	359,385	1,052,409	969,614	2,022,023
	2015	2,050,267	844,050	1,206,217	2,022,023	3,228,240
	2016	–	–	–	–	–
	2017	–	–	–	–	–
	2018	–	–	–	–	–
	2019	–	–	–	–	–
	2020	–	–	–	–	–
	2021	–	–	–	–	–
	2022	–	–	–	–	–
	2023	–	–	–	–	–
ALTERNATE BENEFIT LONG-TERM DISABILITY FUND(5)	2014	1,384,318	1,400,000	(15,682)	1,646,696	1,631,014
	2015	1,551,631	1,550,000	1,631	1,631,014	1,632,645
	2016	–	–	–	–	–
	2017	–	–	–	–	–
	2018	–	–	–	–	–
	2019	–	–	–	–	–
	2020	–	–	–	–	–
	2021	–	–	–	–	–
	2022	–	–	–	–	–
	2023	–	–	–	–	–

Schedule of Changes in Net Position

(based on Annual Comprehensive Financial Reports for relevant years)

	Fiscal Year	Additions (1)	Deductions (2)	Total Change in Net Position	Net Position Beginning of Year	Net Position End of Year
STATE HEALTH BENEFIT PROGRAM FUNDS	2014	5,879,875,715	5,928,310,769	(48,435,054)	295,567,435	247,132,381
	2015	6,370,195,549	6,299,989,819	70,205,730	247,132,381	317,338,111
	2016	447,889,303	436,462,746	11,426,557	317,338,111	150,385,152 (4)
	2017	489,254,189	426,383,424	62,870,765	150,385,152	213,255,917 (4)
	2018	531,050,535	429,821,366	101,229,169	213,255,917	314,485,086
	2019	438,346,444	479,658,048	(41,311,604)	314,485,086	273,173,482
	2020	367,821,064	476,132,264	(108,311,200)	273,173,482	164,862,282
	2021	406,386,126	520,976,756	(114,590,630)	164,862,282	50,271,652
	2022	488,684,406	597,626,392	(108,941,986)	50,271,652	(58,670,334)
	2023	551,417,687	609,710,044	(58,292,357)	(58,670,334)	(116,962,691)
PENSION TRUST AND STATE HEALTH BENEFIT PROGRAM FUNDS TOTAL	2014	22,726,609,543	15,687,946,839	7,038,662,704	80,299,540,443	87,338,203,147 (3)
	2015	14,556,031,996	16,466,779,161	(1,910,747,165)	87,338,203,147	85,427,455,982
	2016	5,089,147,340	11,056,551,411	(5,967,404,071)	85,427,455,982	79,455,191,026 (4)
	2017	15,940,612,938	11,477,727,856	4,462,885,082	79,276,811,510	83,739,696,592 (4)
	2018	14,520,656,870	11,868,145,438	2,652,511,432	83,739,696,592	86,392,208,024
	2019	13,244,135,824	12,331,289,756	912,846,068	86,392,208,024	87,305,054,092
	2020	10,243,352,180	12,684,290,404	(2,440,938,224)	87,305,054,092	84,864,115,868 (6)
	2021	32,517,877,458	13,142,459,529	19,375,417,929	84,866,061,068	104,241,478,997 (6)
	2022	4,811,576,647	13,746,688,284	(8,935,111,637)	104,241,478,997	95,306,367,360
	2023	21,296,947,989	14,145,012,355	7,151,935,634	95,306,367,360	102,458,302,994

(1) See Schedule of Revenues by Source.

(2) See Schedule of Expenses by Type.

(3) GASB No. 67 became implemented in fiscal year 2014. Fiscal years before 2014 other than the restated 2013 were presented otherwise.

(4) GASB No. 74 became implemented in fiscal year 2017, which is presenting State Health Benefits Program - Local - Retired only. Fiscal years before 2017 other than the restated 2016 were presented otherwise.

(5) Both DCRP and ABPLTD moved from NJ DP&B to NJ OMB (State) in fiscal year 2017. The 2016 was restated accordingly.

(6) GASB No. 84 became implemented in fiscal year 20121. Fiscal years before 2021 other than the restated 2020 were presented otherwise. The Pension Adjustment Fund (cost-of-living adjustments), previously one of the Agency Funds, became allocated to Prison Officers' Pension Fund, Consolidated Police & Firemen's Pension Fund, and Central Pension Fund.

Participating County and Municipal Employers

Aberdeen Township
Absecon City *
Alexandria Township *
Allamuchy Township *
Allendale Borough
Allenhurst Borough *
Allentown Borough
Alloway Township *
Alpha Borough *
Alpine Borough
Andover Borough
Andover Township *
Asbury Park City
Atlantic City
Atlantic Highlands *
Atlantic County *
Atlantic County Welfare Board *
Audubon Borough *
Audubon Park Borough *
Avalon Borough
Avon By The Sea
Barnegat Light Borough *
Barnegat Township*
Barrington Borough
Bass River Twp Municipal Bldg
Bay Head Borough *
Bayonne City *
Beach Haven Borough *
Beachwood Borough
Bedminster Township *
Belleville Township
Bellmawr Borough
Belmar Borough *
Belvidere Town *
Bergen County
Bergen Co Board of Social Services
Bergenfield Borough *
Berkeley Heights Township
Berkeley Township
Berkeley Twp Municipal Bldg *
Berlin Borough *
Berlin Township *
Bernards Township *
Bernardsville Boro *
Bethlehem Township *
Beverly City Municipal Bldg *
Blairstown Township *
Bloomfield Township
Bloomingdale Borough *
Bloomsbury Borough *
Bogota Borough
Boonton Town
Boonton Township *
Bordentown City *
Bordentown Township
Bound Brook Borough *
Bradley Beach Borough *
Branchburg Township
Branchville Borough *
Brick Township
Bridgeton City
Bridgewater Township *
Brielle Borough
Brigantine City
Brooklawn Borough
Buena Borough *
Buena Vista Township *
Burlington Co Board of Social Services *
Burlington County/Payroll Dept
Burlington City *
Burlington Township
Butler Borough
Byram Township *
Caldwell Borough
Califon Borough *
Camden City
Camden County*
Camden Co Board of Chosen Freeholders
Camden Co Board of Social Services *
Camden County Library*
Cape May City *
Cape May County
Cape May Co Board Social Services
Cape May Point Borough *
Carlstadt Borough
Carneys Point Township
Carteret Borough
Casino Reinvestment Dev Auth/A
Cedar Grove Township *
Chatham Borough
Chatham Township
Cherry Hill Township *
Cherry Hill Township Library *
Chesilhurst Borough
Chester Borough *
Chester Township *
Chesterfield Township *
Cinnaminson Township
Clark Township *
Clayton Borough *
Clementon Borough *
Cliffside Park Borough *
Clifton City
Clinton Town *
Clinton Township *
Closter Borough *
Collingswood Borough *
Colts Neck Township
Commercial Township *
Comm Workers of America 1034
Comm Workers of America 1037
Comm Workers of America 1033
Corbin City *
Cranbury Township *
Cranford Township
Cresskill Borough *
Cumberland County
Cumberland Co Board Social Services *
Deal Borough *
Deerfield Township *
Delanco Township *
Delaware Township *
Delran Township
Demarest Borough *
Dennis Township *
Denville Township *
Deptford Township *
Dover Town
Downe Township
Dumont Borough *
Dunellen Borough *
Eagleswood Township *
East Amwell Township *
East Brunswick Township
East Brunswick Township Fire Dist *
East Greenwich Township
East Hanover Township *
East Newark Borough *
East Orange City
East Rutherford Borough *
East Windsor Township
Eastampton Township *
Eatontown Borough
Edgewater Borough
Edgewater Park Township *
Edison Township
Egg Harbor City
Egg Harbor Township
Elizabeth City *
Elk Township *
Elmer Borough
Elmwood Park Borough *
Elsinboro Township
Emerson Borough
Englewood City *
Englewood Cliffs Borough *
Englishtown Borough
Essex County
Essex Fells Borough *
Estell Manor City *
Evesham Township
Evesham Township Municipal Utiil Auth*
Ewing Township *
Fair Haven Borough *
Fair Lawn Borough
Fairfield Township (Cumberland)
Fairfield Township (Essex)
Fairview Borough *
Fanwood Borough
Far Hills Borough *
Farmingdale Borough *
Fieldsboro Borough
Flemington Borough *
Florence Township *
Florham Park Borough
Folsom Borough *
Fort Lee Borough
Frankford Township *
Franklin Borough *
Franklin Lakes Borough *
Franklin Township (Gloucester)
Franklin Township (Hunterdon)
Franklin Township (Somerset)
Franklin Township (Warren)
Fredon Township
Freehold Borough *
Freehold Township
Frelinghuysen Twp *
Frenchtown Borough *
Galloway Township
Garfield City
Garwood Borough
Gibbsboro Borough
Glassboro Borough
Glen Gardner Borough *
Glen Ridge Borough *
Glen Rock Borough *
Gloucester City
Gloucester County
Gloucester Co Board of Social Services
Gloucester Township
Green Brook Township *
Green Township *
Greenwich Township (Cumberland)
Greenwich Township (Gloucester)
Greenwich Township (Warren) *
Guttenberg Town
Hackensack City
Hackettstown Town *
Haddon Heights Borough *
Haddon Township
Haddonfield Borough
Hainesport Township *
Haledon Borough *
Hamburg Borough *
Hamilton Township (Atlantic) *
Hamilton Township (Mercer)
Hammonton Town *
Hampton Borough *
Hampton Township *
Hanover Township
Harding Township
Hardwick Township *
Hardyston Township
Harmony Township *
Harrington Park Borough *
Harrison Township *
Harrison Town (Hudson)
Harrison Twp Fire Dist 1*
Harrison Township (Gloucester) *
Harvey Cedars Borough *
Hasbrouck Heights Borough *
Haworth Borough *
Hawthorne Borough *
Hazlet Township *
Helmetta Borough *
High Bridge Borough
Highland Park Borough *
Highlands Borough *
Hightstown Borough
Hillsborough Township *
Hillsdale Borough
Hillside Township *
Hi-Nella Borough
Hoboken City
Ho-Ho-Kus Borough *
Holland Township *
Holmdel Township *

** In addition to participating in the retirement system, also participates in the State Health Benefits Program/School Employees' Health Benefits Program*

Participating County and Municipal Employers, *continued*

Hopatcong Borough *
Hope Township *
Hopewell Borough *
Hopewell Township (Cumberland)
Hopewell Township (Mercer)
Howell Township
Hudson County *
Hunterdon County
Hunterdon Co Board Social Services
Independence Township / Municipal. Bldg *
Interlaken Borough
Irvington Township Dept Of Rev & Finance
Island Heights Borough *
Jackson Township *
Jamesburg Borough *
Jefferson Township
Jersey City
Keansburg Borough
Kearny Town *
Kenilworth Borough *
Keyport Borough
Kingwood Township *
Kinnelon Borough
Knowlton Township *
Lacey Township *
Lafayette Township *
Lake Como Borough *
Lakehurst Borough *
Lakewood Township
Lakewood Twp Fire District 1 *
Lambertville City *
Laurel Springs Borough *
Lavallette Borough *
Lawnside Borough
Lawrence Township (Cumberland) *
Lawrence Township (Mercer) *
Lebanon Borough *
Lebanon Township *
Leonia Borough *
Liberty Township *
Lincoln Park Borough
Linden City
Lindenwold Borough *
Linwood City
Little Egg Harbor Township
Little Falls Township *
Little Ferry Borough *
Little Silver Borough *
Livingston Township *
Loch Arbour Village
Lodi Borough
Logan Township
Long Beach Township *
Long Branch City
Long Hill Township *
Longport Borough *
Lopatcong Township
Lower Alloways Creek Township
Lower Township
Lumberton Township *
Lyndhurst Township*
Madison Borough
Magnolia Borough
Mahwah Township
Manalapan Township *
Manasquan Borough
Manchester Township
Mannington Township *
Mansfield Township *
Mansfield Township Mansfield Township (Burlington)
Mansfield Township (Warren)
Mantoloking Borough *
Mantua Township *
Manville Borough *
Maple Shade Township*
Maplewood Township *
Margate City
Marlboro Township *
Matawan Borough
Maurice River Township *
Maywood Borough
Medford Lakes Borough *
Medford Township *
Mendham Borough *
Mendham Township *
Merchantville Borough
Mercer County *
Mercer Co Board of Social Service *
Metuchen Borough
Middle Township *
Middlesex Borough *
Middlesex County
Middlesex Co Board of Social Services
Middletown Township
Midland Park Borough *
Milford Borough *
Millburn Township *
Millstone Borough
Millstone Township *
Milltown Borough *
Millville City
Mine Hill Township *
Monmouth Beach Borough *
Monmouth County Division of Social Services
Monmouth County/Hall of Records
Monroe Township (Gloucester)
Monroe Township (Middlesex)
Montague Township *
Montclair Township *
Montgomery Township *
Montvale Borough
Montville Township *
Moonachie Borough
Moorestown Township
Morris County
Morris Plains Borough *
Morris Township *
Morristown Town
Mount Arlington Borough *
Mount Ephraim Borough
Mount Holly Township *
Mount Laurel Township *
Mount Olive Township
Mountain Lakes Borough *
Mountainside Borough *
Mullica Township *
National Park Borough
Neptune City Borough
Neptune Township
Netcong Borough *
New Brunswick City
New Jersey Association of Counties *
New Jersey Infrastructure Bank *
New Jersey School Boards Association *
New Jersey State League of Municipalities *
New Hanover Township *
New Milford Borough
New Providence Borough *
Newark City
Newfield Borough *
Newton Town *
North Arlington Borough
North Bergen Township
North Brunswick Township *
North Caldwell Borough *
North Haledon Borough *
North Hanover Township *
North Hunterdon Municipal Court *
North Plainfield Borough *
North Wildwood City
Northfield City *
Northvale Borough *
Norwood Borough *
Nutley Township *
Oakland Borough
Oaklyn Borough
Ocean City
Ocean County *
Ocean County Board of Social Services *
Ocean Gate Borough *
Ocean Township (Monmouth) *
Ocean Township (Ocean)
Oceanport Borough
Ogdensburg Borough *
Old Bridge Township*
Old Bridge Twp Fire District 3 *
Old Tappan Borough
Oldmans Township
Oradell Borough *
Orange City
Oxford Township *
Palisades Park Borough
Palmyra Borough *
Paramus Borough *
Park Ridge Borough
Parsippany Troy Hills Township
Passaic City *
Passaic County
Passaic County Board of Social Services
Passaic Valley Water Comm
Paterson City *
Paulsboro Borough
Peapack Gladstone Borough *
Pemberton Borough *
Pemberton Township
Pennington Borough *
Penns Grove Borough
Pennsauken Township
Pennsville Township
Pequannock Township
Perth Amboy City
Phillipsburg Town
Pilesgrove Township *
Pine Beach Borough *
Pine Hill Borough
Pine Hill Borough Fire Dist 1 *
Pine Valley Borough *
Piscataway Township
Pitman Borough
Pittsgrove Township *
Plainfield City *
Plainsboro Township
Pleasantville City *
Plumsted Township
Pohatcong Township
Point Pleasant Beach Borough
Point Pleasant Borough
Pompton Lakes Borough *
Port Republic City *
Princeton Borough *
Princeton Township
Prospect Park Borough *
Quinton Township
Rahway City *
Ramsey Borough
Randolph Township
Raritan Borough *
Raritan Township
Readington Township *
Red Bank Borough
Ridgefield Borough *
Ridgefield Park Village
Ridgewood Village *
Ringwood Borough
River Edge Borough *
River Vale Township *
Riverdale Borough *
Riverside Township
Riverton Borough *
Robbinsville Township
Rochelle Park Public Library
Rochelle Park Township *
Rockaway Borough *
Rockaway Township *
Rockleigh Borough *
Rocky Hill Borough
Roosevelt Borough *
Roseland Borough *
Roselle Borough *
Roselle Park Borough
Roxbury Township
Rumson Borough *
Runnemede Borough
Rutherford Borough
Saddle Brook Township
Saddle River Borough
Salem City *
Salem County *
Salem County Board of Social Services *
Sandyston Township *
Sayreville Borough

** In addition to participating in the retirement system, also participates in the State Health Benefits Program/School Employees' Health Benefits Program*

Participating County and Municipal Employers, *continued*

Scotch Plains Township
Sea Bright Boro *
Sea Girt Borough *
Sea Isle City
Seaside Heights Borough *
Seaside Park Borough *
Secaucus Town
Shamong Township *
Shiloh Borough
Ship Bottom Borough
Shrewsbury Borough
Shrewsbury Township
Somerdale Borough *
Somers Point City
Somerset County Finance Office
Somerville Borough *
South Amboy City
South Bergen JT Const. Code Office
South Bound Brook Borough *
South Brunswick Township *
South Hackensack Township
South Harrison Township *
South Orange Village *
South Plainfield Borough
South River Borough *
South Toms River Borough *
Southampton Township *
Sparta Township
Spotswood Borough *
Spring Lake Borough *
Spring Lake Heights Borough *
Springfield Township (Union)
Springfield Twp (Burlington)
Stafford Township
Stanhope Borough *
Stillwater Township *
Stockton Borough
Stone Harbor Borough
Stow Creek Township
Stratford Borough *
Summit City *
Summit Housing Authority *
Surf City Borough
Sussex Borough *
Sussex County
Sussex County Health & Public *
Sussex County Social Services *
Swedesboro Borough
Tabernacle Township *
Tavistock Borough
Teaneck Township
Tenafly Borough *
Teterboro Borough *
Tewksbury Township *
Tinton Falls Borough
Toms River Township
Totowa Borough *
Trenton City *
Trenton City Library *
Tuckerton Borough *
Union Beach Borough *
Union City
Union County
Union County Board of Social Services
Union Township (Hunterdon) *
Union Township (Union)
Upper Deerfield Township *
Upper Delaware Soil Conservation District *
Upper Freehold Township *
Upper Pittsgrove Township *
Upper Saddle River Boro *
Upper Township
Ventnor City
Vernon Township *
Verona Township *
Victory Gardens Borough
Vineland City
Voorhees Township *
Waldwick Borough *
Wall Township
Wall Township Fire District 2*
Wall Township Fire District 3 *
Wallington Borough
Wallpack Township
Wanaque Borough
Wantage Township
Warren County Bd of Chosen Freeholders
Warren Township *
Washington Borough *
Washington Township (Bergen) *
Washington Township (Burlington)
Washington Township (Gloucester)
Washington Township (Morris)
Washington Township (Warren)
Watchung Borough *
Waterford Township *
Wayne Township
Weehawken Township *
Wenonah Borough
West Amwell Township *
West Caldwell Township
West Cape May Borough *
West Deptford Township
West Long Branch Borough
West Milford Township
West New York Town *
West Orange Township *
West Paterson Borough
West Wildwood Borough *
West Windsor Township
Westampton Township *
Westfield Town
Westville Borough
Westwood Borough
Weymouth Township *
Wharton Borough *
White Township *
Wildwood City *
Wildwood Crest Borough *
Willingboro Township
Winfield Township *
Winslow Township
Woodbine Borough *
Woodbridge Township
Woodbury City
Woodbury Heights Borough
Woodcliff Lake Borough *
Woodland Township *
Woodlynne Borough *
Wood-Ridge Borough
Woodstown Borough *
Woolwich Township
Wrightstown Borough *
Wyckoff Township *

** In addition to participating in the retirement system, also participates in the State Health Benefits Program/School Employees' Health Benefits Program*

Participating Education Employers

Absecon Boardof Education
Academy Charter High School
Academy For Urban Leadership
Achieve Community Charter School
Achievers Early College Prep
Adelaide Sanford Charter School
Alexandria Twp Board of Education
Allamuchy Board of Education
Allendale Boro Board of Education
Allenhurst Board of Education *
Alloway Twp Board of Education
Alpha Board of Education *
Alpine Board of Education *
Andover Regional Board of Education *
Asbury Park Board of Education *
Atlantic Cape Community College *
Atlantic City Board of Education *
Atlantic Co Audio Visual Aids Comm
Atlantic County Special Services *
Atlantic Highlands Board of Education *
Atlantic Co Vocational Schools *
Audubon Borough Board of Education
Avalon Borough Board of Education
Avon By The Sea Boro Board of Education *
Barack Obama Green Charter High School
Barnegat Twp Board of Education
Bass River Twp Board of Education
Bay Head Board of Education *
Bayonne Board of Education
Beach Haven Borough Board of Education *
Bedminster Twp Board of Education
Belleville Board of Education
Bellmawr Borough Board of Education *
Belmar Boro Board of Education
Belvidere Town Board of Education
Bergen Arts And Science Charter School
Bergen Co Board Of Special Services
Bergen Community College *
Bergen County Vocational School
Bergenfield Board of Education *
Berkeley Heights Board of Education
Berkeley Twp Board of Education
Berlin Borough Board of Education
Berlin Township Board of Education
Bernards Twp Board of Education
Bethlehem Twp Board of Education
Beverly City Board of Education *
Black Horse Pike Regional School District
Blairstown Twp Board of Education
Bloomfield Twp Board of Education
Bloomingdale Board of Education *
Bloomsbury Borough Board of Education
Bogota Boro Board of Education *
Boonton Town Board of Education
Boonton Twp Board of Education
Bordentown Regional School District *
Bound Brook Boro Board of Education
Bradley Beach Board of Education
Branchburg Twp Board of Education
Branchville Board of Education
Brick Twp Board of Education
Bridgeton Board of Education
Bridgeton Public Charter School
Bridgewater-Raritan Regional School Dist
Brielle Boro Board of Education
Brigantine City Board of Education *
Brookdale Community College *
Brooklawn Boro Board of Education
Buena Regional School District
Burch Charter School For Excellence *
Burlington City Board of Education
Burlington Co Audio Visual Aids Comm
Burlington Co Board Special Services *
Burlington Co College *
Burlington Co Institute of Tech
Burlington Township Board of Education
Butler Boro Board of Education
Byram Twp Board of Education
Caldwell West Caldwell Board of Education *
Califon Boro Board of Education *
Camden Academy Charter High School
Camden City Board of Education *
Camden County College *
Camden County Ed Services Commission
Camden County Technical Schools *
Camden Promise Charter School
Camden's Pride Charter School
Cape May City Board of Education *
Cape May County Special Services *
Cape May County Technical School Dist
Cape May Pt Boro Board of Education
Carlstadt Borough Board of Education
Carlstadt East Rutherford Board of Education
Carteret Board of Education
Cedar Grove Twp Board of Education *
Central Jersey Arts Charter School *
Central Jersey College Prep Charter
Central Regional High School District *
Charter Tech *
Chathams School District
Cherry Hill Twp Board of Education
Chesilhurst Boro Board of Education *
Chester Twp Board of Education
Chesterfield Twp Board of Education *
Cinnaminson Twp Board of Education
Clark Twp Board of Education
Classical Academy Charter School *
Clayton Borough Board of Education
Clearview Regional Board of Education
Clementon Board of Education
Cliffside Park Board of Education
Clifton City Board of Education
Clinton Town Board of Education
Clinton Twp Board of Education
Closter Board of Education *
College Achieve Greater Asbury *
College Achieve Paterson C/S *
Collingswood Borough Board of Education
Colts Neck Twp Board of Education
Commercial Twp Board of Education *
Communications Workers of America
Community Charter School of Paterson
Corbin City Board of Education *
Cranbury Township Board of Education
Cranford Twp Board of Education *
Creativity Colaboratory Charter School
Cresskill Board of Education
Cresthaven Academy Charter School
Cumberland County Board of Voc Ed
Cumberland County College *
Cumberland Regional School Dist
Deal Boro Board of Education *
Deerfield Township Board of Education
Delanco Twp Board of Education *
Delaware Twp Board of Education
Delaware Valley Regional High School Dist.
Delsea Regional High School District
Demarest Boro Board of Education *
Dennis Twp Board of Education
Denville Twp Board of Education
Deptford Twp Board of Education
Dover Board of Education
Downe Twp Board of Education
Dr. Lena Edwards Academy Chater School
Dumont Borough Board Of Education *
Dunellen Board of Education
Eagleswood Twp Board of Education *
East Amwell Township Board of Education
East Brunswick Twp Board of Education
East Hanover Twp Board of Education *
East Newark Borough Board of Education *
East Orange City Board of Education
East Orange Community Charter School *
East Rutherford Boro Board of Education
East Windsor Regional School Dist
Eastampton Township Board of Education
Eastern Camden Co Regional School Dist
Eatontown Board of Education *
Eco Charter School
Edgewater Boro Board of Education
Edgewater Park Twp Board of Education *
Edison Twp Board of Education
Egg Harbor City Board of Education *
Egg Harbor Twp Board of Education
Elizabeth Board of Education *
Elk Twp Board of Education
Elmer Board of Education
Elmwood Park Borough Board of Ed *
Elsinboro Township Board of Education *
Elysian Charter School of Hoboken *
Emerson Borough Board of Education *
Englewood City Board of Education *
Englewood Cliffs Board of Education *
Englewood On The Palisades Charter School *
Essex County College *
Essex Co Educational Service Commission
Essex Co Vocational School
Essex Fells Board of Education
Estell Manor Board of Education *
Ethical Comm Charter School Jersey City
Evesham Twp Board of Education *
Ewing Township Board of Education *
Fair Haven Borough Board of Education
Fair Lawn Board of Education
Fairfield Twp Bd of Ed (Cumberland) *
Fairfield Twp Board of Education (Essex)
Fairview Boro Board of Education *
Farmingdale Board of Education *
Flemington Raritan Board of Education
Florence Township Board of Education
Florham Park Board of Education
Folsom Borough Board of Education *
Fort Lee Board of Education
Frankford Township Board of Education
Franklin Boro Board of Education *
Franklin Lakes Board of Education
Franklin Twp Board of Ed (Gloucester)
Franklin Twp Board of Ed (Somerset)
Franklin Twp Board of Education (Warren)
Franklin Twp Board of Ed Hunterdon)
Freedom Academy Charter School
Freehold Boro Board of Education *
Freehold Regional High School District
Freehold Twp Board of Education
Frelinghuysen Twp Board of Education
Frenchtown Borough Board of Education *
Galloway Township Board of Education
Garfield City Board of Education *
Garwood Borough Board of Education
Gateway Regional High School
Gibbsboro Borough Board of Education
Glassboro Board of Education
Glen Ridge Board of Education *
Glen Rock Borough Board of Education *
Gloucester City Board of Education *
Gloucester County Audio Visual Aid Comm *
Gloucester County College *
Gloucester County Sp Services School District
Gloucester County Vo-Tech School Dist
Granville Charter Middle School
Gray Charter School *
Great Meadows Regional Board of Education
Great Oaks Charter School
Greater Brunswick Charter School *
Greater Egg Harbor Regional
Green Brook Board of Education
Green Township Board of Education
Greenwich Twp Bd of Ed (Cumberland)
Greenwich Twp Board of Ed (Gloucester)
Greenwich Twp Board of Ed (Warren)
Guttenberg Boro Board of Education
Hackensack City Board of Education *
Hackettstown Board of Education
Haddon Heights Board of Education
Haddon Township Board of Education
Haddonfield Board of Education
Hainesport Township Board of Education
Haledon Borough Board of Education *
Hamburg Borough Board of Education
Hamilton Twp Board of Education (Atlantic) *
Hamilton Twp Board of Education (Mercer)
Hammonton Town Board of Education
Hampton Borough Board of Education *
Hampton Township Board of Education *
Hanover Park Regional High School Dist *
Hanover Township Board of Education
Harding Township Board of Education
Hardwick Twp Board of Education
Hardyston Township Board of Education
Harmony Township Board of Education *
Harrington Park Board of Education
Harrison Town Board of Education (Hudson)
Harrison Twp Board of Education (Gloucester)
Hasbrouck Heights Board of Education
Haworth Borough Board of Education *
Hawthorne Board of Education

** In addition to participating in the retirement system, also participates in the State Health Benefits Program/School Employees' Health Benefits Program*

Participating Education Employers, *continued*

Hatikvah International Academy C S
Hazlet Twp Board of Education *
Helmetta Boro Board of Education *
Henry Hudson Regional School District
High Bridge Borough Board of Education
High Point Regional High School
Highland Park Board of Education
Highlands Boro Board of Education
Hillsborough Twp Board of Education
Hillsdale Borough Board of Education *
Hillside Board of Education
Hoboken Board of Education
Hoboken Charter School
Hoboken Dual Language Charter School
Ho-Ho-Kus Board of Education *
Holland Township Board of Education *
Holmdel Township Board of Education *
Hopatcong Board of Education *
Hope Academy Charter School
Hope Township Board of Education
Hopewell Township Board v Ed (Cumberland)
Hopewell Valley Regional School District
Howell Township Board of Education
Hudson Arts & Sciences Charter School
Hudson County Community College *
Hudson County Schools of Technology
Hunterdon Central High School
Hunterdon County Ed Services Commission
Hunterdon County Vocational *
Interlaken Borough Board of Education
International Charter School
Irvington Board of Education
Irvington Town Board of Education
Island Heights Boro Board of Education *
Jackson Township Board of Education
Jamesburg Borough Board of Education *
Jefferson Township Board of Education
Jersey City Board of Education
Jersey City Public Schools *
Jersey City Comm Charter School *
Jersey City Golden Door Charter
John P Holland Charter School
Kean University *
Keansburg Board of Education *
Kearny Town Board of Education
Kenilworth Borough Board of Education
Keyport Borough Board of Education
Kingsway Regional School District
Kingwood Township Board of Education
Kinnelon Borough Board of Education
Kittatinny Regional High School
Knowlton Twp Board of Education
Lacey Township Board of Education
Lafayette Twp Board of Education
Lakehurst Borough Board of Education
Lakeland Regional High School District
Lakewood Twp Board of Education *
Lambertville City Board of Education *
Laurel Springs Borough Board of Education
Lavallette Borough Board of Education
Lawnside Borough Board of Education
Lawrence Twp Board of Ed (Cumberland)
Lawrence Twp Board of Education (Mercer)
Lead Charter School *
Leap Academy Charter School
Learning Comm. Charter School *
Lebanon Borough Board of Education *
Lebanon Township Board of Education
Lenape Regional High School District
Lenape Valley Regional High School Dist
Leonia Borough Board of Education
Lincoln Park Boro Board Of Education
Linden City Board of Education
Lindenwold Borough Board of Education
Linwood Board of Education *
Little Egg Harbor Twp Board of Education *
Little Falls Board of Education *
Little Ferry Board of Education *
Little Silver Board of Education
Livingston Board of Education
Lodi Board of Education
Logan Township Board of Education
Long Beach Island Board of Education *
Long Branch Board of Education *
Long Hill Township Board of Education
Longport Borough Board of Education *
Lopatcong Township Board of Education
Lower Alloways Creek Board of Education *
Lower Cape May Regional School District *
Lower Township Board of Education *
Lumberton Township Board of Education
Lyndhurst Township Board of Education*
Madison Borough Board of Education
Magnolia Borough Board of Education
Mahwah Board of Education
Mahwah Township Board of Education*
Mainland Regional High School Dist *
Manalapan Englishtown Regional Schools *
Manasquan Borough Board of Education
Manchester Township Board of Education *
Mannington Township Board of Education
Mansfield Township Board of Ed (Burlington)
Mansfield Township Board of Ed (Warren)
Mantoloking Boro Board of Education
Manville Borough Board of Education
Maple Shade Board of Education
Margate City Board of Education *
Maria L. Varisco-Rogers Charter *
Marion P. Thomas Charter School *
Marlboro Township Board of Education
Maurice River Township Board of Education
Maywood Board of Education
Medford Lakes Boro Board of Education
Medford Township Board of Education
Mendham Boro Board of Education *
Mendham Township Board of Education
Merchantville Boro Board of Education *
Mercer County Community College *
Mercer County Special Ser School District*
Mercer County Vocational Schools
Mets Chater School
Metuchen Boro Board of Education *
Middle Township Board of Education *
Middlesex Board of Education
Middlesex County College
Middlesex County Ed Services Commission
Middlesex County Stem Charter School
Middlesex County Vocational School *
Middletown Township Board of Education
Midland Park Boro Board of Education *
Milford Borough Board of Education *
Millburn Township Public Schools
Millstone Borough Board of Education
Millstone Township Board of Education *
Milltown Borough Board Of Education
Millville Board of Education
Millville Public Charter School
Mine Hill Township Board of Education *
Monmouth Beach Board of Education *
Monmouth County Vocational Schools
Monmouth Ocean Ed Service Commission
Monmouth Regional School
Monroe Township Board of Ed (Gloucester)
Monroe Township Board of Ed (Middlesex)
Montague Board of Education*
Montclair Board of Education
Montclair State University *
Montgomery Township Board of Education
Montvale Borough Board of Education *
Montville Township Board of Education
Moonachie Borough Board of Education
Moorestown Township Board of Education *
Morris County College *
Morris County Vocational School District *
Morris Hills Regional District
Morris Plains Board of Education
Morris Audio Visual Commission
Morris County Ed Services Commission
Morris School District
Mount Arlington Board of Education
Mount Ephraim Board of Education
Mount Holly Township Board of Education
Mount Laurel Township Board of Education
Mount Olive Township Board of Education
Mountain Lakes Boro Board of Ed *
Mountainside Boro Board of Education *
Mullica Township Board of Education *
National Park Borough Board of Education
Neptune City Board of Education *
Neptune Township Board of Education
Netcong Borough Board of Education
New Brunswick Board of Education
Newfield Borough Board of Education *
New Hanover Township Board of Education *
New Horizon Community Charter School *
New Jersey City University *
New Jersey Institute Of Technology *
New Jersey State Federation of Teachers NJEA
New Milford Board of Education
New Providence Board of Education
Newark Educators' Comm Charter School
Newark Legacy Charter School
Newark Public Schools *
Newark Teachers' Union
New Lisbon Developmental Center
Newton Board of Education
North Arlington Board of Education
North Bergen Board of Education *
North Brunswick Board of Education
North Caldwell Board of Education
North Haledon Boro Board of Education *
North Hanover Township Board of Education
North Hunterdon-Voorhees
North Plainfield Board of Education
North Star Academy Charter School
North Warren Regional High School
North Wildwood Board of Education *
Northern Burlington Co Regional
Northern Highlands Reg High School *
Northern Valley Regional High School District
Northfield Board of Education
Northvale Board of Education *
Norwood Board of Education *
Nutley Board of Education
Oakland Board of Education
Oaklyn Borough Board of Education
Ocean Academy Charter School *
Ocean City Board of Education
Ocean Gate Board of Education *
Ocean Co Audio Visual Aids Commission
Ocean County College *
Ocean Township Board of Ed (Monmouth)
Ocean Township Board of Education (Ocean) *
Oceanport Schools
Old Bridge Board of Education
Old Tappan Board of Education
Oldmans Township Board of Education
Oradell Board of Education *
Orange City Board of Education
Oxford Twp Board of Education
Pace Charter School of Hamilton *
Palisades Park Board of Education
Palmyra Borough Board of Education
Paramus Board of Education
Parsippany Troy Hills Board of Education
Pascack Valley Regional High School District *
Passaic Board of Education *
Passaic County Community College *
Passaic Co. Ed Services Commission *
Passaic Co Manchester Regional High *
Passaic Co Regional High School District 1 *
Passaic County Vocational School
Paterson Board of Education *
Paterson Chart School - Science/Tech *
Paterson City Bd Of Ed
Paul Robeson Charter School
Paulsboro Boro Board ofEducation
Pemberton Borough Board of Education
Pemberton Township Board of Education
Penns Grove Carneys Point Regional
Pennsauken Twp Board of Education
Pennsville Twp Board of Education
Peoples Preparatory Chater School
Pequannock Twp Board of Education
Perth Amboy Board of Education
Phillips Academy Chart. Schl of Paterson
Phillipsburg Town Board of Education
Pine Hill Borough Board of Education
Pinelands Regional School District
Piscataway Board of Education Admn Bldg
Piscataway Township Ed Association
Pitman Board of Education
Plainfield Board of Education
Pleasantville Board of Education
Pleasantech Academy Charter School
Plumsted Twp Board of Education *

** In addition to participating in the retirement system, also participates in the State Health Benefits Program/School Employees' Health Benefits Program*

Participating Education Employers, *continued*

Pohatcong Twp Board of Education
Point Pleasant Beach Boro Board of Ed
Point Pleasant Boro Board of Education
Pompton Lakes Board of Education *
Port Republic City Board of Education *
Pride Academy Charter School
Princeton Charter School
Princeton Regional School
Prospect Park Board of Education *
Queen City Academy Charter School
Quinton Township Board of Education
Rahway City Board of Education *
Ramapo College of New Jersey *
Ramapo Indian Hills Reg High School Dist
Ramsey Borough Board of Education
Rancocas Valley Regional High School
Randolph Township Board of Education
Raritan Valley Community College *
Readington Twp Board of Education
Red Bank Board of Education *
Red Bank Charter School*
Red Bank Regional High School District
Richard Stockton College of New Jersey *
Ridge And Valley Charter School
Ridgefield Boro Board of Education *
Ridgefield Park Board of Education *
Ridgewood Twp Board of Education
Ringwood Boro Board of Education *
Riverbank Charter School of Excellence
River Dell Regional School District *
River Edge Boro Board of Education
River Vale Twp Board of Education
Riverdale Borough Board of Education *
Riverside Township Board of Education
Riverton Boro School Board
Robert Treat Academy Charter School
Robbinsville Twp Board of Education
Rochelle Park Twp Board of Education *
Rockaway Borough Board of Education
Rockaway Township Board of Education
Rockleigh Borough Board of Education
Rocky Hill Board of Education
Roosevelt Borough Board of Education *
Roseland Board of Education
Roselle Boro Board of Education
Roselle Park Boro Board of Education
Roseville Community Charter School
Rowan College at Burlington County
Rowan University *
Rowan University-Rutgers Camden
Roxbury Twp Board of Education
Rumson Boro Board of Education
Rumson Fair Haven Regional High School
Runnemede Borough Board of Education
Rutgers University *
Rutherford Boro Board of Education
Saddle Brook Board of Education *
Saddle River Board of Education *
Salem City Board of Education
Salem Community College *
Sussex County Comm. College *
Salem Co Special Services School District *
Salem County Vocational School
Sandyston Walpack School District
Sayreville Board of Education Selover Elm
Scotch Plains Fanwood Board of Education
Sea Bright Boro Board of Education *
Sea Girt Board of Education *
Sea Isle City Board of Education *
Seaside Heights Board of Education
Seaside Park Board of Education *
Secaucus Town Board of Education
Shamong Twp Board of Education
Shiloh Borough Board of Education
Shore Regional High School District
Shrewsbury Borough Board of Education
Soaring Heights Charter School *
Somerdale Boro Board of Education
Somers Point City Board of Education
Somerset County Ed Services Commission *
Somerset County Vocational School
Somerset Hills Board of Education
Somerville Board of Education
South Amboy Board of Education
South Belmar Board of Education
South Bound Brook Board of Education
South Brunswick Board of Education *
South Hackensack Board of Education *
South Harrison Twp Board of Education
South Hunterdon Regional Bd of Ed *
South Orange-Maplewood Board of Ed *
South Plainfield Board of Education
South River Boro Board of Education
Southampton Twp Board of Education
Southern Regional High School District
Sparta Board of Education
Spotswood Board of Education
Spring Lake Boro Board of Education
Spring Lake Heights Board of Education
Springfield Twp Board of Ed (Union)
Springfield Twp Board of Ed (Burlington)
Stafford Township Board of Education
Stanhope Borough Board of Education
State Library Affiliated W/TESC *
Sterling High School District
Stillwater Township Board of Education *
Stockton Affiliated Services Inc
Stockton Borough Board of Education *
Stone Harbor Board of Education *
Stow Creek Township Board of Education
Stratford Board of Education
Summit Board of Education
Sussex County Charter School
Sussex Co Ed Services Comm Board of Ed *
Sussex County Vocational
Sussex-Wantage Regional School District *
Swedesboro Woolwich Board of Education
Team Academy Charter School
Tabernacle Twp Board of Education
Teaneck Board of Education *
Teaneck Community Charter School *
Tenafly Board of Education *
Tewksbury Twp Board of Education
The College of New Jersey *
Thomas Edison State University *
Tinton Falls Board of Education *
Toms River School District
Totowa Borough Board of Education *
Trenton City Board of Education
Trenton Community Charter School *
Trenton Education Association
Union Beach Boro Board of Education
Union City Board of Education
Union County College
Union County Ed Services Commission *
Union County Teams Charter School
Ocean County Vocational Schools
Union Township of Ed (Hunterdon)
Unity Charter School
University Academy Charter High School
University Heights Charter School *
Univ. Of Med & Dentistry New Brunswick *
Univ. Of Medicine & Dentistry - Newark *
Univ. Of Medicine & Dentistry - Stratford *
Upper Deerfield Twp Board of Education
Upper Freehold Regional
Upper Pittsgrove Twp Board of Education *
Upper Saddle River Board of Education *
Upper Township Board of Education
Ventnor City Board of Education
Vernon Township Board of Education *
Verona Board of Education
Victory Gardens Boro Board of Education *
Village Charter School *
Vineland City Board of Education
Vineland Developmental Center
Vineland Public Charter School
Visions Academy Charter High School
Voorhees Twp Board of Education
Waldwick Boro Board of Education *
Wall Township Board of Education
Wallington Borough Board of Education *
Wallkill Valley Regional High School
Wanaque Board of Education
Warren Co Audio Visual Aids
Warren County Community College *
Warren Co Sp Services School District *
Warren Hills Regional Schools *
Warren Township Board of Education
Washington Boro Board of Education
Washington Twp Board of Ed (Morris)
Washington Twp Board of Ed (Warren)
Washington Twp Board of Ed (Gloucester)
Watchung Borough Board of Education
Watchung Hills Regional High School
Waterford Twp Board of Education
Wayne Board of Education *
Weehawken Twp Board of Education *
Wenonah Borough Board of Education
West Amwell Twp Board of Education *
West Cape May Boro Board of Education *
West Essex Regional School District *
West Long Branch Board of Education
West Milford Township Board of Education
West Morris Regional High School District *
West New York Board of Education *
West Orange Township Board of Education
West Paterson Boro Board of Education *
West Windsor-Plainsboro Reg. School Dist
Westampton Township Board of Education
Westfield Town Board of Education
Westville Board of Education *
Westwood Regional School District *
Weymouth Township Board of Education *
Wharton Borough Board of Education *
White Township Board of Education
Wildwood Crest Board of Education *
William Paterson University of NJ *
Willingboro Twp Board of Education *
Winfield Township Board of Education *
Winslow Township Board of Education
Woodbine Borough Board of Education*
Woodbine Developmental Center
Woodbridge Township Board of Education
Woodbridge Township Ed Association
Woodbury City Board of Education
Woodbury Heights Board of Education *
Woodcliff Lake Board of Education *
Woodland Twp Board of Education
Woodlynne Board of Education *
Wood-Ridge Board of Education *
Woodstown-Pilesgrove Regional School
Wyckoff Township Board of Education *

** In addition to participating in the retirement system, also participates in the State Health Benefits Program/School Employees' Health Benefits Program*

Participating Agencies and Authorities

Aberdeen Twp Fire Dist 2*
Aberdeen Twp Fire District 1*
Asbury Park Housing Authority*
Atlantic City Convention Center*
Atlantic City Housing Authority*
Atlantic City Municipal Utilities Authority*
Atlantic County Improvement Authority
Atlantic County Utilities Authority*
Atlantic Highlands-Highlands Reg. Sew. Auth.
Bayonne City Parking Authority
Bayonne Municipal Utilities Authority*
Bayonne Housing Authority*
Bayonne Local Redevelopment Agency*
Bayshore Jointure Commission*
Bayshore Regional Sewerage Authority*
Beach Haven Sewerage Authority*
Beachwood Sewerage Authority
Bedminster & Far Hills Pub Library*
Belmar Housing Authority
Bergen County Housing Authority
Bergen County Improvement Authority*
Bergen County Soil Conservation District*
Bergen County Utilities Authority
Berkeley Twp Housing Authority*
Berkeley Twp Municipal Utilities Authority*
Berkeley Twp Sewerage Authority *
Bernards Twp Sewerage Authority*
Beverly City Housing Authority*
Beverly Sewerage Authority*
Bloomfield Parking Authority*
Boonton Housing Authority*
Bordentown Fire District 1*
Bordentown Sewerage Authority*
Bordentown Twp Fire District 2*
Brick Township Fire Dist 2
Brick Twp Fire District 1
Brick Twp Housing Authority*
Brick Twp Joint Board of Fire Commission*
Brick Twp Municipal Utilities Authority*
Bridgeton City Housing Authority*
Bridgeton Zone Development Authority
Buena Boro Housing Authority*
Buena Boro Municipal Utilities Authority*
Burlington City Housing Authority*
Burlington County Bridge Commission
Burlington County Soil Conservation District*
Camden City Housing Authority*
Camden City Park Authority*
Camden City Redevelopment Agency
Camden County Health Services Center
Camden County Improvement Authority
Camden County Municipal Utilities Authority
Camden County Park Police
Camden County Pollution Control Fin
Camden County Soil Conservation District*
Cape Atlantic Soil Conservation District*
Cape May City Housing Authority*
Cape May County Bridge Commission*
Cape May County Municipal Utilities Authority
Carlstadt Sewerage Authority
Carneys Point Twp Sewerage Authority
Carteret Housing Authority*
Carteret Port Authority
Carteret Redevelopment Agency*
Casino Reinvestment Development Authority*
Chatham Joint Free Public Library*
Cherry Hill Fire District 13
Chester Boro/Twp Public Library*
Chesterfield-Ham. Fire District 1*
Cinnaminson Sewerage Authority*
Cinnaminson Twp Fire Dist 1
Clementon Housing Authority
Cliffside Park Housing*
Clinton Twp Sewerage Authority*
Collingswood Boro Housing Authority*
Compensation Rating & Ins Bureau*
Cumberland County Improvement Authority*
Cumberland County Utilities Authority*
Cumberland-Salem Conservation District*
Delanco Sewerage Authority*
Delaware River Basin Commission*
Delaware River Joint Toll Bridge Comm
Delaware River Port Authority
Delaware Twp Municipal Utilities Authority
Delran Sewerage Authority*
Deptford Twp Municipal Utilities Authority*
Delran Twp Fire District 1*
Deptford Twp Fire District*
Dover Town Housing Authority
Dover Twp Fire District 2
Dover Twp Parking Authority
Dunellen Parking Authority*
East Brunswick Twp Fire District 1*
East Orange Housing Authority*
East Orange Parking Authority*
East Windsor Municipal Utilities Authority*
Eatontown Sewerage Authority
Ed Information & Resource Center
Edgewater Housing Authority*
Edgewater Park Sewerage Authority
Edison Twp Housing Authority*
Egg Harbor Twp Municipal Utilities Authority*
Elizabeth City Housing Authority*
Elizabeth City Parking Authority*
Elizabeth Public Library*
Elk Township Municipal Utilities Authorty
Englewood Housing Authority*
Essex County Improvement Authority*
Essex Regional Health Commission*
Essex & Union Joint Meeting*
Evesham Municipal Utilities Authority*
Evesham Township Fire District 1*
Ewing Lawrence Sewerage Authority*
Florence Twp Housing Authority
Florence Twp. Fire District 1
Florham Park Sewage Authority
Fort Lee Housing Authority*
Fort Lee Parking Authority Hackettstown
Fort Monmouth Planning Authority
Franklin Twp Housing Authority
Franklin Twp Sewerage Authority*
Freehold Boro Housing Authority*
Freehold Soil Conservation District*
Garfield Housing Authority*
General Assembly*
Glassboro Borough Housing Authority*
Gloucester County Housing Authority*
Gloucester County Improvement Authority
Gloucester County Soil Conservation District*
Gloucester County Utilities Authority
Gloucester Twp Fire District 2
Gloucester Twp Fire District 3*
Gloucester Twp Fire District 4
Gloucester Twp Fire District 5*
Gloucester Twp Fire District 6*
Gloucester Twp Housing Authority*
Gloucester Twp Municipal Utilities Authority*
Greater Wildwood Tourism Imp & Da*
Guttenberg Housing Authority*
Hackensack Housing Authority*
Hackettstown Municipal Utilities Authority*
Haddon Twp Fire District 1*
Haddon Township Housing Authority*
Hamilton Twp Fire District 2
Hamilton Twp Fire District 3
Hamilton Twp Fire District 4
Hamilton Twp Fire District 5
Hamilton Twp Fire District 6
Hamilton Twp Fire District 7
Hamilton Twp Fire District 8
Hamilton Twp Fire District 9
Hamilton Twp Municipal Utilities Authority*
Hanover Sewerage Authority*
Hanover Twp Fire District 2
Hanover Twp Fire District 3
Harrison Township Fire District 1
Harrison Town Housing Authority
Hazlet Township Fire District 1
Hazlet Twp Sewerage Authority*
Highland Park Housing Authority*
Highlands Housing Authority*
Hightstown Boro Housing Authority*
Hillsborough Twp Mun. Utilities Authority*
Hillside Public Library
Hoboken City Parking Authority
Hoboken Housing Authority*
Hopewell Twp Fire District 1*
Howell Twp Fire District 1
Howell Twp Fire District 2
Howell Twp Fire District 3*
Howell Twp Fire District 4
Hudson County Economic Development Corp
Hudson County Improvement Authority*
Hudson-Essex Passaic*
Hudson Regional Health Commission*
Hunterdon County Soil Conservation District *
Irvington Housing Authority*
Interstate Environmental Commission*
Jackson Bd Fire District 2*
Jackson Twp Fire District 3*
Jackson Twp Fire District 4
Jackson Twp Municipal Utilities Authority*
Jersey City Fire Department
Jersey City Housing Authority*
Jersey City Incinerator Authority
Jersey City Municipal Utilities Authority
Jersey City Parking Authority*
Jersey City Redevelopment Agency*
Joint Dispatch Authority For Spring Lake
Keansburg Boro Housing Authority*
Kearny Municipal Utilities Authority*
Lacey Municipal Utilities Authority*
Lake Hopatcong Commission
Lakewood Twp Fire District 1
Lakewood Housing Authority
Lakewood Twp Municipal Utilities Authority
Lambertville City Fire District 1
Lambertville Sewerage Authority*
Landis Sewerage Authority
Lebanon Boro Sew Authority*
Linden City Free Public Library
Linden City Housing Authority*
Linden Roselle Sewerage Authority*
Lindenwold Twp Fire District 1*
Little Egg Harbor Mun. Utilities Authority*
Lodi Housing Authority*
Logan Twp Municipal Utilities Authority*
Long Branch City Housing Authority*
Long Branch Parking Authority*
Long Branch Sewerage Authority*
Lower Twp Municipal Utilities Authority*
Madison Boro Housing Authority
Madison-Chatham Joint Meeting*
Manalapan Fire District 2
Manalapan Twp Fire District 1
Manasquan Boro Fire District 1
Manasquan River Reg Sewerage Authority
Manville Borough Public Library
Manchester Utilities Authority
Mantua Twp Municipal Utilities Authority*
Marlboro Twp Fire District 1
Marlboro Twp Fire District 3
Marlboro Twp Municipal Utilities Authority*
Matawan Aberdeen Public Library*
Meadowlands Conservation Trust
Mercer County Improvement Authority*
Mercer County Park Commission*
Mercer County Soil Conservation District*
Merchantville Pennsauken Water Commission
Metuchen Parking Authority
Mid Bergen Regional Health Commission*
Middle Brook Regional Health Comm*
Middlesex County Improvement Authority
Middlesex County Joint Health Insurance Fund
Middlesex County Mosquito Exterm Comm
Middlesex County Municipal Joint Ins Fund*
Middlesex County Utilities Authority
Middletown Twp Housing Authority*
Middletown Twp Sewerage Authority*
Middle Township Fire District 1*
Millstone Township Fire District 1*
Millville Housing Authority
Monmouth County Bayshore Outfill Authority*
Monmouth County Health Department *
Monmouth County Mosquito Exterm Comm*
Monmouth County Regional Health Comm 1
Monroe Twp Fire District 1*
Monroe Twp Fire District 2*

** In addition to participating in the retirement system, also participates in the State Health Benefits Program/School Employees' Health Benefits Program*

Participating Agencies and Authorities, *continued*

Monroe Twp Fire District 3*
Monroe Twp Mun. Ut Authority (Gloucester)*
Montclair Library*
Montclair Parking Authority*
Montclair Township Redev Agency
Montville Twp Fire District 1*
Montville Twp Fire District 3*
Montville Twp Municipal Utilities Authority
Morris County Park Commission
Morris County Soil Conservation District*
Morristown/Morris Joint Library*
Morristown Parking Authority
Moorestown Twp Fire District 1*
Moorestown Twp Fire District 2
Mount Laurel Fire District 1*
Millville Housing Authority
Morris County Housing Authority
Morristown Housing Authority*
Morris County Housing Authority
Morristown Housing Authority*
Morris-Union Jointure Commission
Mount Holly Municipal Utilities Authority
Mount Laurel Twp Municipal Utilities Authority
Musconetcong Sewerage Authority*
NJ Building Authority*
NJ Commerce & Economic Growth Comm*
NJ Economic Development Authority*
NJ Educational Facilities Authority*
NJ Firemens Home*
NJ Health Care Facilities*
NJ Housing & Mortgage Finance Agency*
NJ Meadowland Commission*
NJ Public Broadcasting Authority
NJ Redevelopment Authority*
NJ School Board Association Ins Group*
NJ Schools Development Authority*
NJ Sports & Exposition Authority
NJ Transit Corporation
NJ Turnpike Authority
NJ Water Supply Authority*
Neptune City Housing Authority*
Neptune Fire District 1*
Neptune Twp Housing Authority*
Neptune Twp Sewerage Authority*
New Brunswick Housing Authority*
New Brunswick Parking Authority*
Newark Housing Authority*
Newark Parking Authority
Newton Town Housing Authority*
North Bergen Housing Authority*
North Bergen Municipal Utilities Authority
North Bergen Parking Authority
North Hudson Regional Fire & Rescue
North Hudson Sewerage Authority*
North Jersey Water Supply Commission
North Plainfield Parking Authority
Northwest Bergen Central Dispatch*
Northwest Bergen Co Utility Authority*
Northwest Bergen Health Commission*
Ocean City Housing Authority *
Ocean County Board of Health
Ocean County Mosquito Commission*
Ocean County Soil Conservation District*
Ocean County Utilities Authority*
Ocean Grove Board Of Fire Commission
Ocean Grove Sewerage Authority
Ocean Twp Fire District 1*
Ocean Twp Fire District 2*
Ocean Twp Municipal Utility Authority
Ocean Twp Sewerage Authority*
Old Bridge Housing Authority
Old Bridge Municipal Utility Authority
Old Bridge Twp District 1
Old Bridge Twp Fire District 2
Old Bridge Twp Fire District 3*
Old Bridge Twp Fire District 4
Orange City Housing Authority*
Orange City Library
Palisades Interstate Park Commission*
Parking Authority
Passaic City Housing Authority*
Passaic County Improvement Authority
Passaic County Utility Authority
Passaic Valley Sewerage Commission
Passaic Valley Water Commission
Paterson Housing Authority*
Paterson Parking Authority*
Pemberton Twp Municipal Utilities Authority
Penns Grove Housing Authority*
Penns Grove Sewerage Authority
Pennsauken Sewerage Authority *
Pennsville Sewerage Authority
Pequannock, Lincoln Park &Fairfield *
Perth Amboy City Parking Authority
Perth Amboy Housing Authority
Perth Amboy Port Authority
Phillipsburg Housing Authority
Pine Hill Boro Municipal Utilities Authority
Pine Hill Fire District 1
Pinelands Commission*
Plainfield Area Regional Sewer Authority*
Plainfield Housing Authority*
Plainfield Municipal Utilities Authority
Plainsboro Twp Fire District 1*
Pleasantville Housing Authority*
Plumsted Fire District 1*
Pompton Lakes Municipal Utilities Authority*
Princeton Housing Authority*
Princeton Joint Public Library*
Rahway City Housing Authority*
Rahway City Redevelopment Agency
Rahway Parking Authority
Rahway Public Library
Rahway Valley Sewerage Authority*
Raritan Twp Municipal Utilities Authority*
Readington-Lebanon Sewerage Authority*
Red Bank Boro Housing Authority*
Ridgewood Public Library*
Riverside Sewage Authority
Riverside Twp Fire District 1
Rockaway Valley Regional Sewer Authority*
Rockleigh Boro Sewerage Authority
Roselle Borough
Rowan University Foundation
Runnemede Sewerage Authority
Salem City Housing Authority*
Salem City Municipal Port Authority*
Salem Co Improvement Authority*
Salem Co Mosquito Commission*
Sayreville Economic & Redev Agency*
Sayreville Housing Authority*
Secaucus Housing Authority
Secaucus Municipal Utilities Authority
Second River Joint Meeting
Senate*
Somerset Co Park Commission
Somers Point Sewerage Authority
Somerset Raritan Valley Sewerage Authority*
Somerset Regional Animal Shelter*
South Amboy Housing Authority*
South Bergen Jointure Commission
South Jersey Economic Development Dist*
South Jersey Port Corporation
South Jersey Transportation Authority
South Monmouth Reg Sewerage Authority*
South Orange Twp Parking Authority*
South River Parking Authority
Southeast Morris Co Muni Utilities Authority*
South Toms River Sewerage Authority*
Stafford Municipal Utilities Authority
Statewide Insurance Fund
Stony Brook Regional Sewerage Authority*
Sussex County Municipal Utilities Authority*
Sussex County Soil Conservation*
Toms River Twp Fire District 1
Toms River Twp Municipal Utilities Authority*
Towaco Fire District 2
Trenton Downtown Association
Trenton Housing Authority*
Trenton Parking Authority*
Two Rivers Water Reclamation Authority*
Union City Housing Authority*
Union City Parking Authority
Union County Pollution Control Authority
Union County Utilities Authority
Union Township Library
Vineland Housing Authority
Vineland-Millville Urban Enterprise Zone*
Voorhees Fire District*
Wall Township Fire District 2
Wall Township Fire District 3
Wanaque Borough Sewerage Authority*
Wanaque Valley Reg Sewerage Authority*
Warren County Mosquito Exterm Commission
Warren County Municipal Utilities Authority*
Warren County Pollution Control*
Warren County Soil Conservation District*
Washington Twp Board of Fire Commission
Washington Twp Fire District 1
Washington Twp Mun. Ut. Auth. (Mercer)
Washington Twp Mun. Ut. Auth. (Gloucester)*
Washington Twp Mun. Ut. Auth. (Morris)*
Waterford Twp Municipal Utilities Authority
Waterfront Commission Of Ny Harbor*
Weehawken Twp Housing Authority*
West New York Housing Authority
West New York Parking Authority
West Orange Library*
Westville Fire District 1
West Milford Twp Municipal Utilities Auth.
Western Monmouth Utilities Authority*
West Windsor Parking Authority*
Weymouth Twp Municipal Utilities Authority
Wildwood City Housing Authority*
Wildwoods Joint Construction
Willingboro Municipal Utilities Authority*
Winslow Twp Fire District 1*
Woodbine Municipal Utilities Authority
Woodbridge Bd Of Fire Commission 9
Woodbridge Housing Authority*
Woodbridge Twp Fire District 1*
Woodbridge Twp Fire District 2*
Woodbridge Twp Fire District 5
Woodbridge Twp Fire District 7*
Woodbridge Twp Fire District 8
Woodbridge Twp Fire District 11
Woodbridge Twp Fire District 12
Woodstown Sewerage Authority

** In addition to participating in the retirement system, also participates in the State Health Benefits Program/School Employees' Health Benefits Program*

Participating State Departments and Pension Funds

All New Jersey State Government Departments and their Associated Divisions

The following locations participate in the State Health Benefits Program only:

Essex County Pension Fund; Hudson County Pension Fund; Jersey City Pension Fund; UMDNJ Pension Fund