

### COMPREHENSIVE ANNUAL FINANCIAL REPORT

for the Fiscal Year Ended June 30, 2015



### **OUR MISSION...**

To provide quality 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 client 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 continuous 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.

### NEW JERSEY DIVISION OF PENSIONS AND BENEFITS

## 60th COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED JUNE 30, 2015

**CHRIS CHRISTIE** 

Governor

FORD M. SCUDDER

**State Treasurer** 

**FLORENCE J. SHEPPARD** 

**Acting Director** 



State of New Jersey • Department of the Treasury
Division of Pensions and Benefits
PO Box 295
Trenton, NJ 08625-0295
(609) 292-7524

### PROGRAMS ADMINISTERED BY THE DIVISION OF PENSIONS AND 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	Defined Contribution Retirement Program
ABP	Alternate Benefit Program
POPF	Police 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	Additional Contributions Tax-Sheltered Program
CPF	Central Pension Fund
PAF	Pension Adjustment Fund
UCTDSE	Unemployment Compensation and Temporary Disability for State Employees
SHBP	State Health Benefits Program
SEHBP	School Employees' Health Benefits Program
PDP	Prescription Drug Plans
EDP	Employee Dental Plans
Tax\$ave	New Jersey State Employees' Tax Savings Program: Premium Option Plan, Unreimbursed Medical Flexible Spending Account, and Dependent Care Flexible Spending Account
Commuter Tax\$ave	New Jersey State Employees' Commuter Tax Savings Program
LTC	Long Term Care Insurance Plan
INDEPENDENT AUDITOR	KPMG LLP — 51 John F. Kennedy Parkway, Short Hills, NJ 07078-2702
ACTUARIAL REPORTS	Buck Consultants — 500 Plaza Drive, Secaucus, NJ 07096-1533
	Milliman — 1550 Liberty Ridge Drive, Suite 200, Wayne, PA 19087-5572
	AON Hewitt — 400 Atrium Drive, Somerset, NJ 08873

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# INTRODUCTORY SECTION

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**Chris Christie** Governor



Ford M. Scudder State Treasurer



Florence J. Sheppard Acting Director, **Division of Pensions** and Benefits



Mailing Address: PO Box 295 Trenton, NJ 08625-0295 Location: 50 West State Street Trenton, New Jersey

State of New Hersey DEPARTMENT OF THE TREASURY DIVISION OF PENSIONS AND BENEFITS (609) 292-7524 TRS 711 (609) 292-6683 www.nj.gov/treasury/pensions

### **Letter of Transmittal**

June 2016

To the Honorable

Chris Christie, Governor Ford M. Scudder, State Treasurer Members of the Legislature Members of the Boards of Trustees

On behalf of the Division of Pensions and Benefits, I am pleased to submit the 60th Comprehensive Annual Financial Report (CAFR) of the New Jersey State-administered retirement systems and related benefit programs for the fiscal year ended June 30, 2015. The management of the Division of Pensions and Benefits (the Division) 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 is reported in a manner that fairly represents the financial position and results of the Division's operations.

### The Reporting Entity

The Division was established in 1955 as the Division of Pensions to provide all administration of the State pension funds except investments. The Division changed its name to the Division of Pensions and Benefits in 1992 to more accurately reflect its roles and responsibilities beyond the realm of pensions. Currently, the Division 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**

Division staff working with the pension systems' actuaries and external auditor implemented the requirements of the Government Accounting Standards Boards (GASB) statement number 67 on financial reporting for pension plans. Additionally, staff began preliminary work on developing the information necessary for employers to comply with the requirements of GASB statement number 68.

An incentive-based wellness program, NJWELL, was introduced for employees participating in the SHBP and SEHBP in October 2013. The Division continued its efforts in this area in fiscal year 2015. The goal of the program is to make employees more aware of their medical condition and take action to improve their health status. The program is currently in a three-year pilot phase. In an effort to increase awareness of NJWELL, the Division sponsored several biometric screening events throughout the State, which were well attended by employees.

In other developments, the Division's Siebel system, which is a customer relations management application that tracks all incoming and outgoing client interactions, was upgraded with the integration of the FileNet system. FileNet is a document query and storage system that holds thousands of member and employer records. In the past in order to retrieve documents, employees would log on to a separate FileNet system to search for the required information. The successful integration of FileNet with Siebel allows staff to retrieve member and employer records while logged into only one system. This has resulted in faster and more accurate customer service interactions with the public.

The Division continued its efforts to provide additional automated and self-service processing opportunities to both the members and employers of the State-administered retirement systems. This year, the Division implemented the Common Enrollment application for TPAF and PERS. The application has consolidated the TPAF, PERS, and PFRS pension enrollment into one application. This will simplify and assist in entering member information and increase the accuracy of the enrollment process.

### **Financial Information**

The Financial reports of the Fiduciary Funds of the Division 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 can be found in the Notes to the Financial Statements found in the Financial Section.

The Fiduciary Funds include 12 separate pension trust funds, three health benefit program funds, and three agency funds. A summary of the condition of the funds administered by the Division of Pensions and Benefits is located in the 'Management Discussion and Analysis' that begins on page 34 of the CAFR. 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 Division as of June 30, 2015. KPMG LLP independently audited the funds.

### **Investments**

The Division of Investment has the responsibility for investing the assets of the programs administered by the Division. This is done under the jurisdiction of the State Investment Council. Investments are guided by the 'prudent person rule.' During FY 2015 investment returns on pension funds were +4.14 percent. When combined with the returns for previous years, the annualized returns over the past three- and five-year periods were +10.71 percent and +10.38 percent, respectively.

### **Funding**

Fully funding the State's pension liabilities and offering sustainable public employee benefits are a major objective. With budgetary constraints and growing benefit liabilities, the Division recognizes that further reform is necessary. The Division has and will continue to devote its resources to support this important objective.

### **Professional Services**

The Division 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 93 of the CAFR. The Office of the Attorney General provides all legal services required by the Division of Pensions and Benefits, the retirement system Boards of Trustees, and the Health Benefits Commissions and Committees.

### **Acknowledgements**

The preparation of the CAFR required the combined efforts of many employees from different operational units within the Division. The CAFR 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, flang Shipper

> Florence J. Sheppard, Acting Director

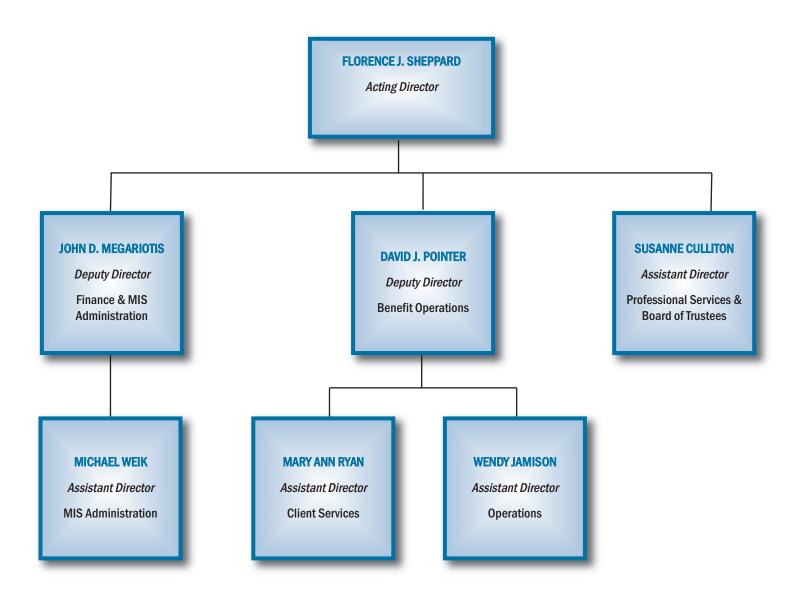
### All in a Year's Work...

- There are **517,591 active members** in the defined benefit and defined contribution retirement systems.
- A total of **312,797 retirees and beneficiaries** received monthly pensions totaling in excess of **\$9.5** billion annually.
- There are **1,816** participating employers in the combined retirement systems; three new employers began participating this year.
- Over 10,837 beneficiary claims were processed. Premiums in excess of \$246 million were paid to the insurance carrier on behalf of active and retired members.
- Over 944,000 inbound calls were received by the Division. Over 478,000 callers selected a phone representative and over 339,000 were handled by the Interactive Voice Response system (IVR).
- **15,853 personal interviews** were conducted by pension counselors.
- **244 seminars** and webinars were conducted for over **9,218 members**.
- 11,827 service purchase requests were processed.
- **32,275** new enrollments or transfers were processed in our retirement systems.
- There were **9,276 withdrawals** from the retirement systems.
- 15,544 members retired.
- Over **105,311 pension loans** totaling **\$716,487,550** were processed.
- State and local membership in the State Health Benefits Program and School Employees' Health Benefits Program was 403,912 members with 862,323 lives covered.
- A total of over \$5.65 billion in premiums was collected from State and local State Health Benefits Program employers, School Employees' Health Benefits Program employers, and combined employees. 1,112 local employers elected to participate in the SHBP or SEHBP this year.

### **ORGANIZATION**

### **State of New Jersey** • **Department of the Treasury**

### **Division of Pensions and Benefits**



### **Director**

The Director is responsible for the coordination of the functions of the Division, the development of the Division 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 Division of Pensions and Benefits.

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

### **Office of Health Benefits**

This office, overseen by a Deputy 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 and School Employees' Health Benefits Program. 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.

### **Office of Financial Services**

The work of this office, overseen by a Deputy 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 \$85.4 billion and include over 803,559 individual member accounts. 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

### **Office of Client Services**

This office, overseen by an Assistant Director, consists of three units: Telecommunications; Counseling, Education, and Support; and Communications. Client Services disseminates pension, life insurance, and health benefits in-

formation to employees, retirees, and employers covered by the various New Jersey State-administered retirement systems and benefit programs.

The Telecommunications Unit counsels employees, retirees, and employers via the telephone by providing information about pension, life insurance, health benefits, and general procedures. The Counseling, Education, and Support Unit responds to written requests for information, conducts personal interviews with employees and retirees who visit the Division of Pensions and Benefits, and provides seminars, employer group meetings, employer instructions, and various presentations concerning pension, life insurance, and health benefits to employees, employers, and retirees. This unit is also responsible for providing receptionist services for the entire Division. The Communications Unit exercises overall responsibility for creating, editing, updating, and printing of written materials disseminated by the Division, including manuals, reports, forms, benefits statements, and booklets. This unit also manages the Division's Internet site.

### **Office of Operations**

The work of this office, overseen by an Assistant Director, is divided among three bureaus: Enrollment and Purchase; Claims; and Retirement.

The Enrollment and Purchase Bureau processes all enrollments, transfers, and purchases of service credit for all of the State retirement systems. The Claims Bureau processes all death claims, withdrawals, and loan requests. In addition, this bureau oversees beneficiary designations filed by active and retired members and issues group life insurance policies, riders, and special endorsements. The Retirement Bureau processes retirement applications for all of the State retirement systems.

### **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 Division. This office also has responsibility for the training, usage, and maintenance of all automated office and telephone equipment.

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

The Support Services section has responsibility for the building and equipment, mail room, warehouse operations, and forms inventory.

### **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 assisting in providing a structured and consistent planning function for the Division, assists in analyzing proposed legislation, providing the regulatory function for the Division, managing the development of contracts with external service providers, conducting research in support of Division 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.

### ORGANIZATION

### Office of **Board of Trustees Administration**

The Office of Board of Trustees Administration, under the direction of an Assistant Director over the Office of Professional Services, 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 pension funds 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 and Benefits.

### ORGANIZATION — BOARDS OF TRUSTEES

(Reflects Board Members who served as of June 30, 2015)

Public Thomas Bruno, Chairperson;

**Employees**' Retirement System

William O'Brien:

Carey H. Brown;

**Tracy Smith;** 

**Brian Currie**;

**Edward Thompson**; **Ronald Winthers**;

**Benjamin Hurst**;

Susanne Culliton, Treasurer's Representative;

Robert Kelly, Deputy Attorney General;

Hank Schwedes, Board Secretary;

Jacqueline Bussanich, Administrative Assistant

Teachers' **Pension** and Annuity Fund

James Joyner, Chairperson;

Martha Liebman:

H. O'Neil Williams;

**Howard Lipoff**;

Paul Orihel;

Jeff Ignatowitz, Deputy Attorney General;

**Susanne Culliton,** *Treasurer's Representative;* 

Mary Ellen Rathbun, Board Secretary;

Jacqueline Bussanich, Administrative Assistant

Police and Firemen's Retirement

Marty Barrett, Chairperson;

**Keith Bennett**; Richard Loccke;

**System Brady Middlesworth;** 

Frank Leake;

Laurel Brennan;

Danielle Schimmel, Deputy Attorney General;

Susanne Culliton, Treasurer's Representative;

Wendy Jamison, Board Secretary;

**Lisa Pointer,** Administrative Assistant

State **Police** Retirement **System** 

Patrick Callahan, Chairperson;

Paulette Knutowicz;

John Sayers;

Amy Chung, Deputy Attorney General;

Susanne Culliton, Treasurer's Representative;

Hank Schwedes, Board Secretary;

**Lisa Pointer,** Administrative Assistant

### ORGANIZATION — BOARDS OF TRUSTEES

**Supplemental** John Megariotis, Chairperson, Representing Andrew P. Sidamon-Eristoff, Treasurer, State of New Jersey,

**Annuity** Leslie Notor, Representing Charlene Holzbaur, Director, Office of Management & Budget,

**Collective Trust** Felix Schirripa, Representing Kenneth E. Kobylowski, Commissioner, Department of Banking & Insurance

**Deferred** David Ridolfino, Chairperson, Representing Andrew P. Sidamon-Eristoff, Treasurer, State of New Jersey,

**Compensation** Leslie Notor, Representing Charlene Holzbaur, Director, Office of Management & Budget,

> **Board** Felix Schirripa, Representing Kenneth E. Kobylowski, Commissioner, Department of Banking & Insurance

**Defined** Nancy Ronaghan, Chairperson, Representing Florence J. Sheppard, Acting Director, Division of Pensions & Benefits;

Contribution Sonia Rivera-Perez, Representing Charlene Holzbaur, Director, Office of Management & Budget,

Retirement Felix Schirripa, Representing Kenneth E. Kobylowski, Commissioner, Department of Banking & Insurance;

**Program Board** Timothy Walsh, Director, Division of Investment

> State Andrew P. Sidamon-Eristoff, State Treasurer, Chairperson;

Health Kenneth E. Kobylowski, Commissioner, Department of Banking & Insurance;

**Benefits** Robert Czech, Chairperson, Civil Service Commission;

Commission Florence J. Sheppard, Secretary,

Patrick Nowlan, State Employees' Representative of the AFL-CIO;

Dudley Burge, Local Employees' Representative of the AFL-CIO

School David Earling, Chairperson;

**Employees' Andrew P. Sidamon-Eristoff**, *Treasurer*, *State of New Jersey*,

Health Kenneth E. Kobylowski, Commissioner, Department of Banking & Insurance;

**Benefits Cynthia Jahn**, Representing the N.J. School Boards Association;

Commission Florence J. Sheppard, Secretary,

**Kevin Kelleher**, *Representing the NJEA*;

Wendell Steinhauer, Representing the NJEA;

Joseph Del Grosso, Representing the AFL-CIO

### SIGNIFICANT LEGISLATION

### **Chapter 21, P.L. 2014**

Effective Date: July 30, 2014

Division's Section(s) Affected by this Law: Enrollments, Retirements.

**Description:** This law will allow a retired member of the Teachers' Pension and Annuity Fund (TPAF) to become employed again with the former employer in a position as a coach of an athletics activity if the employment begins after the retirement allowance becomes due and payable; the retired member had attained service retirement age as of the date of retirement, and the compensation for the employment is less than \$10,000 per year.

Current regulations of the TPAF require a "bona fide" severance from employment before a retiree can return to any employment with the former employer. A "bona fide" severance from employment means a complete termination of the employee's employment relationship with the employer for a period of at least 180 days. These regulations were promulgated to maintain the qualified status of the retirement system under federal law. The new law modifies the conditions for a TPAF retiree returning to work as a coach of an athletics activity in a school district, and recognizes that it would be available only if that qualified status can be maintained.

### **SCOPE OF OPERATIONS**

### **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 seg., 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 seg.

### Alternative 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); MassMutual 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.

### SCOPE OF OPERATIONS

### **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 and 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 Alternate Benefit Program.

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 Division in accordance with the governing statute and the rules and regulations of the State House Commission.

### **Pension Adjustment Fund (PAF)**

This fund was established pursuant to Chapter 143, P.L. 1958, and covers all eligible pensions of State-administered retirement systems. It was altered by Chapter 169, P.L. 1969, which provided a cost-of-living adjustment and by Chapter 139, P.L. 1971, which extended its provisions to eligible survivors.

Statutes can be found in the New Jersey Statutes Annotated, Title 52, Chapter 18A. Rules governing the operation and administration of the fund may be found in Title 17, Chapter 1, of the New Jersey Administrative Code.

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

The Division of Pensions and Benefits coordinates work related to the payment of charges involving 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.

### SCOPE OF OPERATIONS

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 and 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(F). 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, a traditional indemnity plan, and a selection of Dental Plan Organizations.

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

### **TaxSave**

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 pretax 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, Subchapter 13, of the New Jersey Administrative Code.

### **Commuter TaxSave**

This program, authorized by Chapter 162, P.L. 2001, and available under Internal Revenue Code (IRC) §132(f), allows eligible State employees to use before-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, Subchapter 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).

### **Active Membership**

Retirement System	2014	2015
Public Employees' Retirement System	272,400*	259,161
Teachers' Pension and Annuity Fund	154,487*	153,452
Police and Firemen's Retirement System	41,140*	40,359
State Police Retirement System	2,544*	2,676
Judicial Retirement System	401	404
Alternate Benefit Program	24,236	24,731
<b>Defined Contribution Retirement Program</b>	28,270	36,808
Prison Officers' Pension Fund	0	0
Consolidated Police and Firemen's Pension Fund	0	0
Central Pension Fund	NA	NA
Total	523,478	517,591

<sup>\*</sup> Both the 2014 and 2015 figures represent the total number of Active and Inactive accounts.

The 2015 Inactive (noncontributing) accounts are as follows: PERS Inactive — 48,978, TPAF Inactive — 13,996, PFRS Inactive — 2,235, SPRS Inactive — 48.

### **Retired Membership** & Beneficiaries

Retirement System	2014	2015
Public Employees' Retirement System	160,400	166,182
Teachers' Pension and Annuity Fund	94,795	98,209
Police and Firemen's Retirement System	42,422	44,079
State Police Retirement System	3,398	3,484
Judicial Retirement System	589	617
Alternate Benefit Program	NA	NA
Prison Officers' Pension Fund	103	95
Consolidated Police and Firemen's Pension Fund	141	119
Central Pension Fund	10	12
Total	301,858*	312,797

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

### **Participation in Health Benefits Program**

Health Program	2014	2015
State Health Benefits Program and		
School Employees' Health Benefits Program	412,214	403,912
Prescription Drug Plan	344,410	341,903
Dental Expense Program	181,538	189,018

### MEMBERSHIP

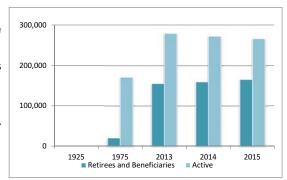
### **Public Employees' Retirement System**

As of June 30, 2015, the active membership of the system totaled 259,161. There were 166,182 retirees and beneficiaries receiving annual pensions totaling \$3,229,729,401.\*

Beneficiaries of deceased active and retired members received lump sum death benefits in the amount of \$73,430,329.

The system's assets totaled \$29,329,176,047 at the close of Fiscal Year 2015.

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



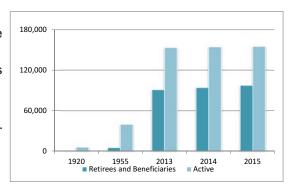
### Teachers' Pension and Annuity Fund

As of June 30, 2015, the active membership of the fund totaled 153,452. There were 98,209 retirees and beneficiaries receiving annual pensions totaling \$3,920,924,262.\*

Beneficiaries of deceased active and retired members received lump sum death benefits in the amount of \$36,283,535.

The fund's assets totaled \$26,363,047,934 at the close of Fiscal Year 2015.

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



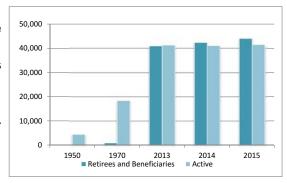
### **Police and Firemen's Retirement System**

As of June 30, 2015, the active membership of the system totaled 40,359. There were 44,079 retirees and beneficiaries receiving annual pensions totaling \$2,161,647,846.\*

Beneficiaries of deceased active and retired members received lump sum death benefits in the amount of \$35,424,340.

The system's assets totaled \$25,621,055,840 at the close of Fiscal Year 2015.

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



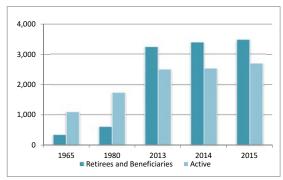
### **State Police Retirement System**

As of June 30, 2015, the active membership of the system totaled 2,676. There were 3,484 retirees and beneficiaries receiving annual pensions totaling \$205,240,377.\*

Beneficiaries of deceased active and retired members received lump sum death benefits in the amount of \$1,169,297.

The system's assets totaled \$1,910,531,629 at the close of Fiscal Year 2015.

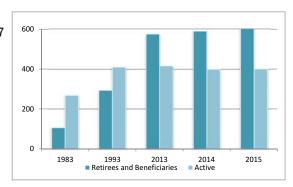
\* Includes cost-of-living adjustments paid under the provisions of the Pension Adjustment Act.



### **Judicial Retirement System**

As of June 30, 2015, the active membership of the system totaled 404. There were 617 retirees and beneficiaries receiving annual pensions totaling \$51,904,990.

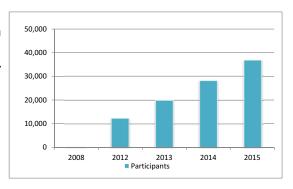
The system's assets totaled \$220,095,394 at the close of Fiscal Year 2015.



### **Defined Contribution Retirement Plan**

As of June 30, 2015, the active membership of the Defined Contribution Retirement Plan totaled 36,808.

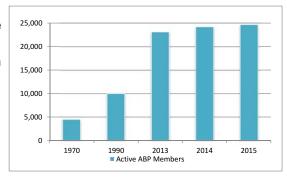
The plan's net assets (participants' balances) were \$96,266,977 at the close of Fiscal Year 2015.



### **Alternate Benefit Program**

As of June 30, 2015, the State paid \$163,225,124 on behalf of 24,731 participants to the carriers underwriting this program.

Beneficiaries of deceased active and retired members received \$16,789,978 in lump sum death benefits.



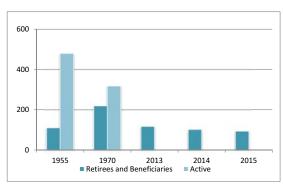
### **Prison Officers' Pension Fund**

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

The fund was closed to new membership in January 1960.

As of June 30, 2015, the active membership of the fund totaled zero. There were 95 retirees and beneficiaries receiving annual pensions totaling \$1,377,505.

The fund's assets totaled \$6,817,137 at the close of Fiscal Year 2015.



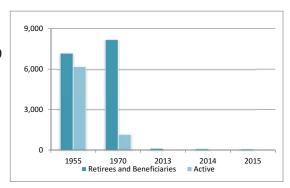
### MEMBERSHIP

### **Consolidated Police and Firemen's Pension Fund**

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

As of June 30, 2015, the active membership of the fund totaled zero. There were 119 retirees and beneficiaries receiving annual pensions totaling \$2,445,627.

The fund's assets totaled \$2,647,012 at the close of Fiscal Year 2015.

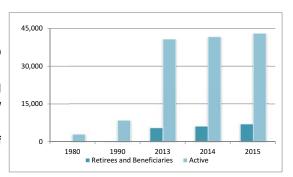


### **N.J. State Employees Deferred Compensation Plan**

Fiscal Year 2015 continues to show a marked increase in active participation due to membership campaigns conducted by the Division of Pensions and Benefits.

As of June 30, 2015, the active membership of the New Jersey State Employees Deferred Compensation Plan totaled 42,952. There were 7,040 members receiving monthly installment payments.

The plan's net assets (participants' balances) were \$3,539,905,553 at the close of Fiscal Year 2015.

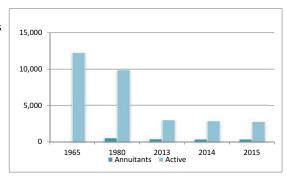


### **Supplemental Annuity Collective Trust**

As of June 30, 2015, the active membership of the trust totaled 2,791. The unit value was \$90.0540, an increase of \$3.6262 from the June 30, 2014 value of \$86.4278.

There were 402 annuitants.

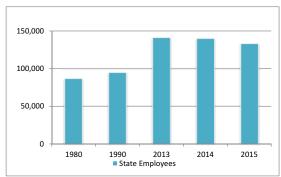
The trust's assets totaled \$211,672,929 at the close of Fiscal Year 2015.



### **Unemployment Compensation** and Temporary Disability Insurance

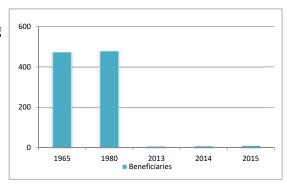
As of June 30, 2015, the Unemployment Compensation Program for State Employees covered as many as 18,336 persons, and the Division remitted \$4,388,031.45 on behalf of the State. There were 7,594 requests for unemployment benefits filed, and \$26,211,570 was paid to the employees found eligible.

During the same time period, the Temporary Disability Insurance Program covered 132,896 employees, and the Division remitted \$34,613,231 on behalf of the State. Claims paid totaled \$31,001,762.



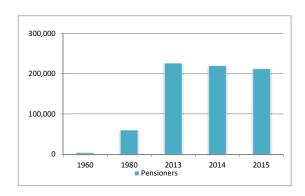
### **Central Pension Fund**

As of June 30, 2015, there were 12 beneficiaries receiving annual pensions totaling \$233,290.



### **Pension Adjustment Expense**

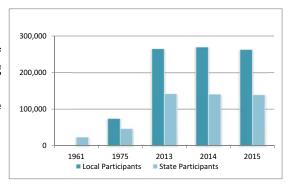
There were 212,615 pensioners who were paid \$832,600,072 during Fiscal Year 2015.



### **State Health Benefits Program and School Employees' Health Benefits Program**

As of June 30, 2015, there were 403,912 participants (active and retired) consisting of 140,675 State participants and 263,237 participants of 1,112 local participating employers.

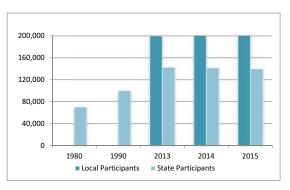
The State and state employee contributions were \$1,707,363,192, while payment made by local (including education) employers and employees was \$3,223,289,158.



### **Prescription Drug Plans**

The Prescription Drug plan covered as many as 139,963 State participants and 201,940 local participants during the fiscal year 2015.

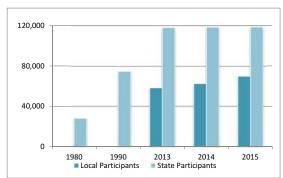
The State's contribution was \$490,506,828 while payment made by local (including education) employers was \$788,955,535.



### **MEMBERSHIP**

### **Dental Expense Program**

The Dental Expense Program covered as many as 118,713 eligible State participants and 70,305 local participants during Fiscal Year 2015. The State of New Jersey as the employer expended \$32,337,236 for active participants while payment made by local (including education) employers was \$4,971,124.



## FINANCIAL SECTION

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### **FINANCIAL INFORMATION**

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KPMG LLP New Jersey Headquarters 51 John F. Kennedy Parkway Short Hills, NJ 07078-2702

### **Independent Auditors' Report**

The Treasurer State of New Jersey:

We have audited the accompanying financial statements of the fiduciary activities of the State of New Jersey, Division of Pensions and Benefits (the Division), as of and for the year ended June 30, 2015, and the related notes to the financial statements, which collectively comprise the Division's basic financial statements as listed in the table of contents.

### **Management's Responsibility for the Financial Statements**

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

### **Auditors' Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the fiduciary activities of the State of New Jersey, Division of Pensions and Benefits, as of June 30, 2015, and the respective changes in financial position for the year then ended in accordance with U.S. generally accepted accounting principles.

### **Emphasis of Matter**

### **Reporting Entity**

As discussed in note 2(a) to the financial statements, the financial statements referred to above are intended to present the financial position and the changes in financial position of the fiduciary funds administered by the Division. As a result, these financial statements do not purport to, and do not, present fairly the financial position of the State of New Jersey as of June 30, 2015, and the changes in its financial position, or, where applicable, its cash flows thereof for the year then ended in conformity with U.S. generally accepted accounting principles. Our opinion is not modified with respect to this matter.

### FINANCIAL INFORMATION

### **Other Matters**

### **Required Supplementary Information**

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

### **Supplementary Information**

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

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

KPMG LLP

Short Hills, New Jersey March 8, 2016

### **Management's Discussion and Analysis (Unaudited) June 30, 2015**

Our discussion and analysis of the financial performance of the fiduciary funds (the Funds) administered by the Division of Pensions and Benefits (the Division) provides an overview of the Funds' financial activities for the State fiscal year ended June 30, 2015. Please read it in conjunction with the basic financial statements and financial statement footnotes, which follow this discussion.

### **Financial Highlights**

### Fiduciary Funds - Pension Trust and Other Post-employment Benefit Plans

- Fiduciary net position decreased by \$1.9 billion as a result of this year's operations, from \$87.3 billion to \$85.4 billion.
- Additions for the year are \$14.6 billion, which are comprised of member, employer, non-employer, and employer specific pension contributions of \$11.2 billion and investment income of \$3.4 billion.
- Deductions for the year are \$16.5 billion, which are comprised of benefit and refund payments of \$16.4 billion and administrative expenses of \$52.3 million.

### **Overview of the Financial Statements**

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

### **Fund Financial Statements**

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

### **Fiduciary Funds**

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

The Division administers eighteen fiduciary funds: twelve pension trust funds, three other post-employment benefit plans, and three agency funds.

The statement of fiduciary net position for the pension trust, other post-employment benefit plans, and agency funds presents the Division's assets and liabilities by major categories and may serve over time as a useful indicator of the Division's financial position. The difference between assets and liabilities represents the net position held in trust for pension and other post-employment benefit plans.

The statement of changes in fiduciary net position for the pension trust and other post-employment benefit plans provides information on the change in the Division's net position during the current year. Additions are comprised of investment income and member, employer, non-employer, and employer specific 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 information regarding the funding status and employer contributions to the pension trust and other post-employment benefit plans.

### Management's Discussion and Analysis (Unaudited) — June 30, 2015, continued

### **Financial Analysis**

### **Summary of Fiduciary Net Position Pension Trust and Other Post-employment Benefit Plans**

	2015	2014	Increase/ (Decrease)
Assets:			
Cash and cash equivalents	\$ 9,388,816	74,798,145	(65,409,329)
Receivables	2,428,479,945	2,376,288,542	52,191,403
Investments	83,606,669,808	86,062,907,529	(2,456,237,721)
Securities lending collateral	1,060,832,090	1,475,934,227	(415,102,137)
Members' loans	1,157,974,931	1,033,107,655	124,867,276
Total assets	\$ 88,263,345,590	91,023,036,098	(2,759,690,508)
Liabilities:			
Accounts payable and accrued expenses	899,264,872	841,506,608	57,758,264
Retirement benefits payable	828,772,890	786,118,182	42,654,708
Noncontributory group life insurance premiums payable	27,443,236	26,422,962	1,020,274
Administrative expense payable	20,504,604	_	20,504,604
Cash overdraft	424,213	_	424,213
Securities lending collateral and rebates payable	1,059,479,792	1,474,629,754	(415,149,962)
Contributory life insurance payable	_	556,155,444	(556,155,444)
Total liabilities	2,835,889,607	3,684,832,950	(848,943,343)
Net position	\$ 85,427,455,983	87,338,203,148	(1,910,747,165)

Assets of the pension trust and other post-employment benefit plans consist of cash and cash equivalents, investments, contributions due from members, participating employer and non-employers, accrued interest and dividends on investments, other receivables, securities lending collateral, and members' loans. Between State fiscal years 2014 and 2015, total assets decreased by \$2.8 billion or 3.0%. This is primarily due to a decrease of \$2.5 billion in the fair value of investable assets due to benefit payments exceeding revenues and investment returns being lower than the returns in fiscal year 2014.

Liabilities of the pension trust and other post-employment benefit plans 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 other post-employment benefit plans. Also included with accounts payable and accrued expenses are liabilities of the pension trust funds for unclaimed member accounts and checks issued to members that have not been negotiated by the members but remain due and payable. Total liabilities decreased by \$848.9 million or 23.0%. This is due to a decrease in securities lending collateral and rebates payable of \$415.1 million and a decrease of \$433.8 million in all other payables.

Net position of the pension trust and other post-employment benefit plans decreased by \$1.9 billion or 2.2%.

### Management's Discussion and Analysis (Unaudited) - June 30, 2015, continued

### **Summary of Fiduciary Net Position Agency Funds**

	2015	2014	Increase
Assets	\$ 81,363,133	78,066,982	3,296,151
Liabilities	81,363,133	78,066,982	3,296,151
Net Position	\$ _	_	_

Assets of the agency funds consist of cash and cash equivalents, investments and contributions due from the State and local employers. Between State fiscal years 2014 and 2015, total assets increased by \$3.3 million or 4.2%. This is attributable to the increased amount invested in the Cash Management Fund (CMF) of \$4.9 million, offset by a decrease of \$1.6 million in cash and cash equivalents.

Liabilities in the agency funds vary according to each plan. In the Alternate Benefit Program (ABP), they include reimbursements to state and county colleges, reimbursement to the State of New Jersey general fund of any unused appropriations, and NCGI benefits payable. In the Dental Expense Program (DEP), they include claims payable, and in the Pension Adjustment Fund (PAF), they include liabilities for payroll and amounts due to the State of New Jersey general fund and other pension trust funds. Between State fiscal years 2014 and 2015, total liabilities increased by \$3.3 million or 4.2%. This was comprised of a \$26 thousand increase in liabilities in PAF, a \$3.8 million increase in liabilities in DEP, and a \$0.5 million decrease in ABP liabilities.

### **Summary of Changes in Fiduciary Net Position Pension Trust and Other Post-employment Benefit Plans**

			Increase/
	2015	2014	(Decrease)
Additions:			
Member contributions	\$ 2,651,633,067	2,515,059,384	136,573,683
Employer contributions	7,900,744,380	7,315,089,724	585,654,656
Non-employer contributions	615,834,289	423,012,101	192,822,188
Employer specific contributions	46,538,152	98,815,766	(52,277,614)
Net investment income	3,341,282,108	12,374,632,568	(9,033,350,460)
Total additions	14,556,031,996	22,726,609,543	(8,170,577,547)
Deductions:			
Benefits	16,210,276,964	15,359,288,555	850,988,409
Contributory life insurance payments	_	96,799,412	(96,799,412)
Refunds of contributions	204,178,357	183,747,830	20,430,527
Administrative expenses	52,323,840	48,111,042	4,212,798
Total deductions	16,466,779,161	15,687,946,839	778,832,322
Changes in net position	\$ (1,910,747,165)	7,038,662,704	(8,949,409,869)

Additions of the pension trust and other post-employment benefit plans consist of member, employer, non-employer and employer specific contributions and earnings from investment activities. There was a decrease of \$8.2 billion or 35.9% in total additions, attributable to a decrease in net investment income of \$9.0 billion and a net increase of \$862.8 million in member, employer, non-employer and employer specific contributions in State fiscal year 2015 as compared to State fiscal year 2014.

### Management's Discussion and Analysis (Unaudited) - June 30, 2015, continued

Member contributions increased by \$136.6 million overall, of which a \$98.2 million increase was attributable to the other post-employment benefit funds and a \$38.4 million increase was attributable to the pension trust funds. In the State Health Benefit Program (SHBP) - State, the member contributions increased by \$99.6 million or 34.1%, in SHBP - Local, the member contributions decreased slightly by \$0.7 million or 1.2%, and in SHBP - Education, the member contributions decreased slightly by \$0.8 million or 1.4%. Active employee contributions in SHBP - State increased as a result of Chapter 78, P.L. 2011 premium share requirements and rate increases in plan year 2015. In SHBP - Local and SHBP - Education, the slight decrease in member contributions was due to a reduction in active membership. In plan year 2015, the active employee group rate for SHBP - State increased by 8.0%, in SHBP - Local the increase was 8.1%, and in SHBP - Education the increase was 10.3%.

For the pension trust funds, the increase in member contributions is attributable to the higher member contribution rate for the Teachers' Pension and Annuity Fund (TPAF), Public Employees' Retirement System (PERS) and the Judicial Retirement System (JRS) pension trust funds as required in Chapter 78, P.L. 2011.

The State contributed \$892.6 million to the pension trust funds in State fiscal year 2015. It was composed of \$680.6 million of normal cost and \$212.0 million of supplemental appropriation. The contributions were as follows: \$504.3 million to TPAF, \$195.1 million to PERS, \$139.3 million to the Police & Firemen's Retirement System (PFRS), \$16.5 million to JRS, and \$37.4 million to the State Police Retirement System (SPRS).

State NCGI contributions for the State fiscal year totaling \$75.3 million were as follows: \$36.3 million for TPAF, \$29.7 million for PERS, \$7.6 million for PFRS, \$0.5 million for JRS, and \$1.2 million for SPRS. Between State fiscal years 2014 and 2015, the State's contribution toward noncontributory group life insurance decreased by \$1.1 million due to lower claims activity. State noncontributory life insurance benefits are funded on a pay-as-yougo 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, 2013. For PERS, the amount accrued in State fiscal year 2014 for normal contribution, accrued liability, and NCGI was \$821.6 million and was due on April 1, 2015. For State fiscal year 2015, the total amount accrued was \$859.7 million and is due April 1, 2016. For PFRS, the total amount accrued in State fiscal year 2014 for normal contributions, accrued liability, and NCGI was \$767.8 million and was due April 1, 2015. For State fiscal year 2015, the total amount accrued was \$813.0 million and is due April 1, 2016.

SHBP - State employer contributions increased by \$54.7 million. For SHBP - Local, employer contributions increased by \$70.8 million. For SHBP -Education, employer contributions increased by \$266.6 million. These increases are primarily attributable to rate increases effective January 1, 2014 and 2015.

Net investment income for the pension trust funds and other post-employment benefit plans as a whole decreased by \$9.0 billion or 73.0%. Fiscal year 2015 was a challenging investment year for public equity and fixed income markets. Positive returns for U.S. equities were offset by negative returns outside the U.S. due to a strong U.S. dollar, slowing economic growth in China, and weak commodity prices. The end of the Federal Reserve's quantitative easing program, along with expectations for less accommodative monetary policy and higher targeted interest rates were reflected in subpar fixed income returns. Alternative asset classes, led by real estate and private equity, outperformed global stocks and fixed income. Private equity benefited from low interest rates, rising valuations and strong exit markets. Real estate yields remained attractive relative to other asset classes, leading to continued strong capital inflows and yield compression across property types and geographic regions.

In reference to Schedule of Investment Returns - Annual Money-Weighted Rate of Return, Net of Investment Expense (see Required Supplementary Information Schedule 3), the fiscal year 2015 rate was 4.05% compared to 16.64% of the prior year. It was based on Governmental Accounting Standards Board (GASB) Statement No. 67, Financial Reporting for Pension Plans – an Amendment of GASB Statement No. 25.

Deductions of the pension trust funds and other post-employment benefit plans are mainly comprised of pension benefit payments to retirees and beneficiaries, refunds of contributions to former members, and administrative costs incurred by the Funds to operate the pension trust funds and other post-employment benefit plans. Also included are claim charges for the self-insured health and prescription drug benefit programs. Between State fiscal years 2014 and 2015, benefit payments increased by \$851.0 million or 5.5% due to an increase in the number of retirees receiving retirement and other benefits. The number of refunds processed increased by \$20.4 million or 11.1% compared to last year. Administrative expenses increased by \$4.2 million or 8.8%.

The change in net position of \$8.9 billion was mainly attributable to the decrease in investment income when comparing State fiscal year 2015 to State fiscal year 2014.

## Management's Discussion and Analysis (Unaudited) — June 30, 2015, continued

#### **Investment Performance**

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

	Year en	ded June 30
	2015	2014
Total rate of return (%):		
Total Pension Funds	4.14%	16.72%
Absolute Return Hedge Funds	3.79	1.55
Risk Mitigation	3.79	1.55
Cash Equivalents	0.85	0.92
Short Term Cash Equivalents	0.18	N/A <sup>(1)</sup>
TIPS	(2.35)	4.29
US Treasuries	1.61	(0.12)
Total Liquidity	(0.26)	1.11
Investment Grade Credit	2.23	7.02
High Yield Fixed Income	2.88	15.53
Credit Oriented Hedge Funds	0.79	11.97
Debt Related Private Equity	10.63	13.71
Debt Related Real Estate	8.23	13.20
Total Income	2.89	10.11
Commodities and Other Real Assets	(20.85)	9.23
Private Real Assets	1.28	N/A
Real Estate	15.48	17.04
Total Real Return	5.37	13.76
US Equity	7.48	26.23
Non-US Developed Markets Equity	(3.81)	23.31
Emerging Markets Equity	(7.11)	13.62
Equity Oriented Hedge Funds	7.41	12.55
Buyout/Venture Capital Funds	18.75	26.25
Total Global Growth	4.97	23.13
Police and Fire Mortgage Program	2.44	4.23
Returns of Various Market Indices (%):		
S&P Composite 1500 Index	7.31	24.70
S&P 500 Index	7.42	24.61
Dow Jones Industrial Average	7.21	15.56
Barclays US Government/Credit Index	1.69	4.28
Barclays Long Government/Credit Index	1.94	10.77
MSCI EAFE — Net (Developed Non-US)	(4.22)	23.57
MSCI Emerging Market Free — Net	(5.12)	14.31
HFRI Fund of Funds Index (3)	6.10	5.10
NCREIF Property Index (2)	12.98	12.74
Cambridge Private Equity Index (2)	10.55	18.90
US Treasury bills (3 month)	0.02	0.04

<sup>(1)</sup> Performance not available on fiscal year basis, since category commenced during fiscal year 2014.

<sup>(2)</sup> Reported with one quarter lag.

<sup>(3)</sup> Reported with one month lag.

### Management's Discussion and Analysis (Unaudited) - June 30, 2015, continued

#### **Overall Financial Condition of the Funds**

Based on the Governmental Accounting Standards Board (GASB) Statement No. 67, Financial Reporting for Pension Plans - an amendment of GASB No. 25 (GASB Statement No. 67) and actuaries' GASB 67 disclosures for State fiscal years as of June 30, 2014 and 2015, 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 37.5%, and the net pension liability as a percentage of covered payroll was 529.7%. For the prior year, the combined state and local ratios of plan fiduciary net position as a percentage of the total pension liability was 42.5%, and the net pension liability as a percentage of covered payroll was 443.7%.

For SHBP - Local, total revenues recognized exceeded total expenses incurred by \$36.7 million, increasing the surplus at the beginning of the year from \$257.4 million to \$294.1 million at year end. This increase was attributable to a gain for the retired group due to favorable claims experience. Local premium rates for calendar year 2015 were set to match expected claim charges and administrative costs. Similarly, for SHBP - Education, total revenues recognized exceeded total expenses incurred by \$13.4 million, increasing the surplus at the beginning of the year from \$131.5 million to \$144.9 million at year end. For SHBP - State, total revenues recognized exceeded total expenses incurred by \$20.2 million, reducing the deficit at the beginning of the year from \$141.8 million to \$121.6 million at year end. This small reduction in the deficit was due to favorable claims experience.

For the other post-employment benefit plans for State fiscal year 2015, based on the current actuarial valuation dated July 1, 2014, the State had a \$24.5 billion unfunded actuarial accrued liability (UAAL) under GASB Statement No. 43, Financial Reporting for Post-employment Benefit Plans Other Than Pension Plans, for SHBP - State active and retired members and a \$40.6 billion UAAL for SHBP - Education employees and retirees that become the obligation of the State of New Jersey upon retirement. In comparison, based on the prior year actuarial valuation, the State had a \$19.7 billion UAAL for SHBP - State active and retired members and a \$33.3 billion UAAL for SHBP - Education employees and retirees. Major factors that contributed to the increase in the UAAL include the following: (1) the State continues to fund post-retirement medical benefits on a pay-as-you-go basis as opposed to funding on an actuarial reserve basis; (2) new mortality assumption tables were utilized in the July 1, 2014 valuation which assume longer life expectancies as compared to the prior mortality assumptions; and (3) trend rates used to project retiree prescription drug costs were increased based on recent poor experience and projected future increases in retiree prescription drug costs. SHBP - Local fiscal year 2015 UAAL for OPEB based on the same actuarial valuation was \$16.4 billion and, for the prior year actuarial valuation, the liability was \$13.8 billion.

During the year, the ABP and the PAF received sufficient funding to meet their benefit obligations.

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, 2015**

	Pension Trust and Oth Post-employment Benefit Plans	er Agency Funds
Assets:		
Cash and cash equivalents	\$ 9,388,816	1,100,212
Receivables:		
Contributions:		
Members	190,852,595	_
Employers	2,191,150,231	426,251
Accrued interest and dividends	4,363,138	_
Securities sold in transit	17,466,901	_
Other	24,647,080	35,787,139
Total receivables	2,428,479,945	36,213,390
Investments, at fair value:		
Cash Management Fund	1,893,308,716	44,049,531
Common Pension Fund D	51,222,834,892	_
Common Pension Fund E	25,921,246,067	_
Common stocks	210,119,031	_
Mortgages	840,098,565	_
Domestic equities	1,690,548,942	_
International equities	328,042,823	_
Domestic fixed income	1,448,063,095	_
International fixed income	52,407,677	_
Total investments	83,606,669,808	44,049,531
Securities lending collateral	1,060,832,090	_
Members' loans	1,157,974,931	_
Total assets	88,263,345,590	81,363,133
iabilities:		
Accounts payable and accrued expenses	899,264,872	78,035,619
Retirement benefits payable	828,772,890	_
Noncontributory group life insurance premiums payable	27,443,236	_
Administrative expense payable	20,504,604	_
Cash overdraft	424,213	326,400
Assets held for local contributing employers	_	2,350,663
Pension adjustment payroll payable	_	175,351
Due to State of New Jersey	_	217,470
Due to other funds	_	257,630
Securities lending collateral and rebates payable	1,059,479,792	
Total liabilities	2,835,889,607	81,363,133
Net position:		
Restricted for pension and other post-employment benefits	\$ 85,427,455,983	_

See accompanying notes to financial statements.

# **Combining Statement of Fiduciary Net Position — Fiduciary Funds — Pension Trust and Other Postemployment Benefit Plans June 30, 2015**

	Defined Benefit Pension Plans						Defined Contribution Pension Plans				Other Postemployment Benefit Plans					
	Judicial Retirement System	Prison Officers' Pension Fund	State Police Retirement System	Consolidated Police and Firemen's Retirement System	Teachers' Pension and Annuity Fund	Police and Firemen's Retirement System	Public Employees' Retirement System	Central Pension Fund	Alternate Benefit Long-term Disability Fund	New Jersey State Employees Deferred Compensation Plan	Defined Contribution Retirement Plan	Supplemental Annuity Collective Trust	State Health Benefit Program Fund State	State Health Benefit Program Fund Local	State Health Benefit Program Fund Education	Total
Assets:																
Cash and cash equivalents	\$129,439	204,808	1,218,409	86,110	2,305,252	2,282,551	389,872	44,403	_	13,848	24,937	_	1,064,614	440,833	1,183,740	9,388,816
Receivables:																
Contributions:																
Members	315,037	_	1,056,221	_	80,079,148	47,026,382	58,691,867	_	_	_	_	369,116	1,252,238	1,141,174	921,412	190,852,595
Employers	49,025	-	247,407	_	34,158,260	988,189,776	997,609,057		-	_	-		25,738,270	82,722,754	62,435,682	2,191,150,231
Accrued interest and dividends	146	4	151	8	3,012	3,403,162	5,520	1	-	672,162	-	278,972	-	-	-	4,363,138
Securities sold in transit	-	-	-	_	_	17,466,901	-	-	-	_	-	-	-	_	_	17,466,901
Other	2,247,577	54,418	275,103	397,028	4,931,424	5,766,449	7,338,822	-	1,550,000	-	-	-	653,922	459,987	972,350	24,647,080
Total receivables	2,611,785	54,422	1,578,882	397,036	119,171,844	1,061,852,670	1,063,645,266	1	1,550,000	672,162	-	648,088	27,644,430	84,323,915	64,329,444	2,428,479,945
Investments, at fair value:																
Cash Management Fund	7,914,882	6,557,907	29,092,618	2,163,866	384,497,341	243,030,252	321,199,236	769	82,645	21,404,495	3,204,914	905,810	106,033,357	369,178,243	398,042,381	1,893,308,716
Common Pension Fund D	135,248,837	_	1,213,236,046	_	16,583,641,041	15,300,971,183	17,989,737,785	_	_	_	_	_	_	_	_	51,222,834,892
Common Pension Fund E	70,551,166	-	625,060,781	_	8,682,210,214	7,535,806,030	9,007,617,876		-	_	-		-	_	-	25,921,246,067
Common Stocks	-	-	-	_	_	-	-		-	_	-	210,119,031	-	_	-	210,119,031
Mortgages	-	-	-	_	-	840,098,565	-	-	-	-	-	-	-	-	-	840,098,565
Domestic equities	-	-	-	_	-	-	-	-	-	1,690,548,942	-	-	-	-	-	1,690,548,942
International equities	-	-	-	_	_	-	-	-	-	328,042,823	-	-	-	_	_	328,042,823
Domestic fixed income	-	-	-	_	-	-	_	-	-	1,448,063,095	-	-	-	_	_	1,448,063,095
International fixed income	_	_	_	_	_	_	_	_	_	52,407,677	_	_	_	_	_	52,407,677
Total investments	213,714,885	6,557,907	1,867,389,445	2,163,866	25,650,348,596	23,919,906,030	27,318,554,897	769	82,645	3,540,467,032	3,204,914	211,024,841	106,033,357	369,178,243	398,042,381	83,606,669,808
Securities lending collateral	2,801,022	-	25,126,289	_	343,449,530	316,885,258	372,569,991	-	-	-	-	-	-	-	-	1,060,832,090
Members' loans	838,263	_	15,218,604	_	247,772,712	320,129,331	574,016,021	-	_	_	_	-	_	_	-	1,157,974,931
Total assets	220,095,394	6,817,137	1,910,531,629	2,647,012	26,363,047,934	25,621,055,840	29,329,176,047	45,173	1,632,645	3,541,153,042	3,229,851	211,672,929	134,742,401	453,942,991	463,555,565	88,263,345,590
Liabilities:																
Accounts payable and	010	700	77.020		CC 20C 004	4 007 040	02 707 700	20.200		4 047 400	4.044	425.007	055 502 000	450 467 600	247 740 544	000 004 070
accrued expenses  Retirement benefits	210	708	77,038	_	66,386,024	4,887,810	93,727,796	20,369	_	1,247,489	1,611	135,687	255,563,989	159,467,600	317,748,541	899,264,872
payable	4,413,919	110,160	17,253,857	217,505	337,238,435	184,105,304	284,798,925	24,804	-	-	-	609,981	-	-	-	828,772,890
Noncontributory group life insurance premiums																
payable	49,025	-	247,407	-	5,511,853		14,949,421	-	-	-	-	-	-	-	-	27,443,236
Administrative expense payable	51,417	1,701	149,958	1,557	6,102,345	2,036,967	10,037,943	-	-	-	-	-	796,019	388,457	938,240	20,504,604
Cash overdraft	-	-	-	-	-	-	-	-	-	-	-	424,213	-	-	_	424,213
Securities lending collateral and rebates payable	2,797,452	-	25,094,259	-	343,011,717	316,481,308	372,095,056	-	-	-	_	-	_	-	-	1,059,479,792
Total liabilities	7,312,023	112,569	42,822,519	219,062	758,250,374	514,196,919	775,609,141	45,173	-	1,247,489	1,611	1,169,881	256,360,008	159,856,057	318,686,781	2,835,889,607
Net position: Restricted for pension and other postemployment																
benefits	\$212,783,371	6,704,568	1,867,709,110	2,427,950	25,604,797,560	25,106,858,921	28,553,566,906		1,632,645	3,539,905,553	3,228,240	210,503,048	(121,617,607)	294,086,934	144,868,784	85,427,455,983

See accompanying notes to financial statements.

# **Statement of Changes in Fiduciary Net Position — Fiduciary Funds** Year ended June 30, 2015

**Pension Trust** and Other Post-employment

	Post-employment Benefit Plans
Additions:	
Contributions:	
Members	\$ 2,651,633,067
Employers	7,900,744,380
Non-employer	615,834,289
Employer specific	46,538,152
Total contributions	11,214,749,888
Investment income:	
Net increase in fair value of investments	1,552,595,116
Interest	1,788,822,789
Dividends	14,764,547
	3,356,182,452
Less investment expense	14,900,344
Net investment expense	3,341,282,108
Total additions	14,556,031,996
Deductions:	
Benefits	16,210,276,964
Refunds of contributions	204,178,357
Administrative and miscellaneous expenses	52,323,840
Total deductions	16,466,779,161
Change in net position	(1,910,747,165)
Net position restricted for pension and other post-employment benefits:	
Beginning of year	 87,338,203,148
End of year	\$ 85,427,455,983

 $See\ accompanying\ notes\ to\ financial\ statements.$ 

# Combining Statement of Changes in Fiduciary Net Position — Fiduciary Funds — Pension Trust and Other Postemployment Benefit Plans Year ended June 30, 2015

	Defined Benefit Pension Plans						Defined Contribution Pension Plans			Other Postemployment Benefit Plans						
	Judicial Retirement System	Prison Officers' Pension Fund	State Police Retirement System	Consolidated Police and Firemen's Retirement System	Teachers' Pension and Annuity Fund	Police and Firemen's Retirement System	Public Employees' Retirement System	Central Pension Fund	Alternate Benefit Long-term Disability Fund	New Jersey State Employees Deferred Compensation Plan	Defined Contribution Retirement Plan	Supplemental Annuity Collective Trust	State Health Benefit Program Fund State	State Health Benefit Program Fund Local	State Health Benefit Program Fund Education	Total
Additions:																
Contributions:																
Members	\$6,310,124	-	22,315,431	_	740,296,265	386,991,641	805,232,235	_	-	186,999,797	_	6,003,908	392,058,372	52,547,496	52,877,798	2,651,633,067
Employers	17,031,026	-	38,527,297	_	807,246	883,776,917	1,085,237,214	231,150	1,550,000	-	2,046,770	-	1,925,134,226	1,279,987,154	2,666,415,380	7,900,744,380
Non-employers	-	-	-	_	539,796,289	76,038,000	_	_		-	-	-	-	-		615,834,289
Employer specific	2,081,523	698,360	222,557	1,577,751	4,476,040	26,963,211	10,496,496	22,214	-	-	-	-	-	-	-	46,538,152
Total contributions	25,422,673	698,360	61,065,285	1,577,751	1,285,375,840	1,373,769,769	1,900,965,945	253,364	1,550,000	186,999,797	2,046,770	6,003,908	2,317,192,598	1,332,534,650	2,719,293,178	11,214,749,888
Investment income:																
Net increase (decrease) in fair value of investments	4,113,081	(452)	35,950,418	(270)	512,147,543	372,976,317	492,515,109	-	(25)	122,980,412	(55)	11,940,482	(4,233)	(10,698)	(12,513)	1,552,595,116
Interest	4,381,441	8,776	39,695,724	3,157	558,668,862	551,216,608	633,521,190	97	1,656	118,040	3,552	1,119	191,961	555,525	455,081	1,788,822,789
Dividends	_	_	_	_	_	_	_	_	_	10,250,107	-	4,514,440	-	-	_	14,764,547
	8,494,522	8,324	75,646,142	2,887	1,070,816,405	924,192,925	1,126,036,299	97	1,631	133,348,559	3,497	16,456,041	187,728	544,827	442,568	3,356,182,452
Less investment expense	18,881	1,969	113,363	2,689	4,753,479	1,594,249	8,209,186	_	_	206,528	-	-	-	-	_	14,900,344
Net investment income	8,475,641	6,355	75,532,779	198	1,066,062,926	922,598,676	1,117,827,113	97	1,631	133,142,031	3,497	16,456,041	187,728	544,827	442,568	3,341,282,108
Total additions	33,898,314	704,715	136,598,064	1,577,949	2,351,438,766	2,296,368,445	3,018,793,058	253,461	1,551,631	320,141,828	2,050,267	22,459,949	2,317,380,326	1,333,079,477	2,719,735,746	14,556,031,996
Deductions:																
Benefits	52,430,016	1,377,505	206,409,675	2,445,627	3,957,207,798	2,197,072,186	3,303,159,729	233,290	1,550,000	175,989,353	844,050	20,710,344	2,293,781,694	1,294,747,415	2,702,318,282	16,210,276,964
Refunds of contributions	_	_	83,950	_	57,795,789	8,392,111	137,886,336	20,171	_	_	_	_	_	_	_	204,178,357
Administrative and miscellaneous expenses	168,762	5,843	351,723	8,003	13,890,080	4,531,012	23,761,860	_	_	464,129	-	_	3,428,411	1,673,063	4,040,954	52,323,840
Total deductions	52,598,778	1,383,348	206,845,348	2,453,630	4,028,893,667	2,209,995,309	3,464,807,925	253,461	1,550,000	176,453,482	844,050	20,710,344	2,297,210,105	1,296,420,478	2,706,359,236	16,466,779,161
Change in net position	(18,700,464)	(678,633)	(70,247,284)	(875,681)	(1,677,454,901)	86,373,136	(446,014,867)	_	1,631	143,688,346	1,206,217	1,749,605	20,170,221	36,658,999	13,376,510	(1,910,747,165)
Net position restricted for pension and other postemployment benefits:																
Beginning of year	231,483,835	7,383,201	1,937,956,394	3,303,631	27,282,252,461	25,020,485,785	28,999,581,773	_	1,631,014	3,396,217,207	2,022,023	208,753,443	(141,787,828)	257,427,935	131,492,274	87,338,203,148
End of year	\$212,783,371	6,704,568	1,867,709,110	2,427,950	25,604,797,560	25,106,858,921	28,553,566,906	_	1,632,645	3,539,905,553	3,228,240	210,503,048	(121,617,607)	294,086,934	144,868,784	85,427,455,983

See accompanying notes to financial statements.

# **Notes to Financial Statements June 30, 2015**

#### (1) Description of the Plans

#### (a) Organization

The State of New Jersey, Division of Pensions and Benefits (the Division) was created and exists pursuant to N.J.S.A. 52:18A to oversee and administer the pension trust and other post-employment benefit plans 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
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#### **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 Public Employees' Retirement System (PERS) Cost-sharing multiple-employer

Central Pension Fund (CPF) Single-employer

#### **Defined contribution pension plans:**

Alternate Benefit Long-term Disability Fund (ABPLTD) Single-employer **New Jersey State Employees Deferred Compensation Plan (NJSEDCP)** Single-employer **Defined Contribution Retirement Plan (DCRP)** Multiple-employer Supplemental Annuity Collective Trust (SACT) Multiple-employer

### **Defined benefit other post-employment benefit plans:**

State Health Benefit Program Fund — State (SHBP—State) Single-employer

State Health Benefit Program Fund — Local (SHBP—Local) Cost-sharing multiple-employer

State Health Benefit Program Fund — Education (SHBP—Education) Cost-sharing multiple-employer with special funding situation

### The Division oversees the following agency funds:

**Agency Fund** 

Pension Adjustment Fund (PAF)

Alternate Benefit Program (ABP)

Dental Expense Program Fund — State (DEP—State)

Dental Expense Program Fund — Local (DEP-Local)

#### (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	<u>N.J.S.A</u> . 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 the 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).

<sup>\*</sup> Represents a closed plan.

The authority to amend the provisions of the above plans rests with new legislation passed by the State of New Jersey. Pension reforms enacted pursuant to Chapter 78, P.L. 2011, included provisions creating special Pension Plan Design Committees for JRS, SPRS, TPAF, PFRS, and PERS, once a Target Funded Ratio (TFR) is met, that 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.

#### **Plan Membership and Contributing Employers**

Membership and contributing employers of the defined benefit pension plans consisted of the following at June 30, 2015:

	JRS	POPF	SPRS	CPFPF	TPAF*	PFRS	PERS	CPF
Inactive plan members or beneficiaries currently receiving benefits	586	98	3,511	124	98,230	44,252	166,637	12
Inactive plan members entitled to but not yet receiving benefits	4	_	_	_	210	51	703	_
Active plan members	404	_	2,676	_	153,452	40,359	259,161	
Total	994	98	6,187	124	251,892	84,662	426,501	12
Contributing employers	1	1	1	52	26	585	1,710	1

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

#### **Pension Plans' Boards and Composition**

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

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

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

#### **Contribution Requirements and Benefit Provisions**

#### **Significant Legislation**

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

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

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

#### **JRS**

The contribution policy is set by N.J.S.A. 43:6A and requires contributions by active members and the State of New Jersey. Members enrolled on January 1, 1996, or after, contribute at 3% on their entire base salary. Contributions by active members enrolled prior to January 1, 1996, are based on 3% of the difference between their current salary and the salary of the position on January 18, 1982. Pursuant to the provisions of Chapter 78, P.L. 2011, the active member contribution rate is being increased from 3% to 12%, phased in over seven years for members hired or reappointed after June 28, 2011. In October 2011, the member contribution rate for new members increased. The phase-in of the additional incremental member contribution rate takes place in July of each subsequent State fiscal year. The member contribution rate was 8.12% in State fiscal year 2015. 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 or more years of judicial service; members between ages 65-69 with 15 or more years of judicial service or between ages 60-64 with 20 or more years of judicial service. Benefits of 50% of final salary are available to those with both judicial service and non-judicial service for which five or more consecutive years were judicial service. These benefits are available at age 65 or older with 15 years or more of aggregate service or age 60 or older with 20 or more years 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 or more years in aggregate public service. The amount of benefits is actuarially reduced for the number of months remaining until the member reaches age 60.

There are no active members in POPF. Additionally, based on the recent actuarial valuation, there was no normal cost or accrued liability contribution required by the State for the fiscal year ended June 30, 2015. The vesting and benefit provisions were set by N.J.S.A. 43:7.

#### **SPRS**

The contribution policy is set by N.J.S.A. 53:5A and requires contributions by active members and the State of New Jersey. Pursuant to the provisions of Chapter 78, P.L. 2011, the active member contribution rate increased from 7.5% to 9% in October 2011. 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 10 years of service, as defined 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. 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 or more years 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. (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 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, there was no normal cost or accrued liability contribution required by the State for the fiscal year ended June 30, 2015. The vesting and benefit provisions were set by N.J.S.A. 43:16.

#### **TPAF**

The contribution policy is set by N.J.S.A. 18A:66 and requires contributions by active members and contributing employers. Pursuant to the provisions of Chapter 78, P.L. 2011, the active member contribution rate increased from 5.5% of annual compensation to 6.5% plus an additional 1% phased in over 7 years beginning in July 2012. The member contribution rate was 6.92% in State fiscal year 2015. The phase-in of the additional incremental member contribution rate takes place in July of each subsequent State fiscal year. The State's contribution is based on an actuarially determined amount which includes the normal cost and unfunded accrued liability.

The vesting and benefit provisions are set by N.J.S.A. 18A:66. TPAF provides retirement, death and disability benefits. All benefits vest after 10 years of service, except for medical benefits, which vest after 25 years of service or under the disability provisions of TPAF. Members are always fully vested for their own contributions and, after three years of service credit, become vested for 2% of related interest earned on the contributions. In the case of death before retirement, members' beneficiaries are entitled to full interest credited to the members' accounts.

The following represents the membership tiers for TPAF:

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

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

#### **PFRS**

The contribution policy is set by N.J.S.A. 43:16A and requires contributions by active members and contributing employers. Pursuant to the provisions of Chapter 78, P.L. 2011, the active member contribution rate increased from 8.5% to 10% in October 2011. 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 10 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, as defined, 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 10 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. Members contribute at a uniform rate. Pursuant to the provisions of Chapter 78, P.L. 2011, the active member contribution rate increased from 5.5% of annual compensation to 6.5% plus an additional 1% phased in over 7 years beginning in July 2012. The member contribution rate was 6.92% in State fiscal year 2015. The phase-in of the additional incremental member contribution rate takes place in July of each subsequent State fiscal year. The rate for members who are eligible for the Prosecutors Part of PERS (Chapter 366, P.L. 2001) increased from 8.5% of base salary to 10%. Employers' contributions are based on an actuarially determined amount which includes the normal cost and unfunded accrued liability.

The vesting and benefit provisions are set by N.J.S.A. 43:15A. PERS provides retirement, death and disability benefits. All benefits vest after ten years of service, except for medical benefits, which vest after 25 years of service or under the disability provisions of PERS.

The following represents the membership tiers for PERS:

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

Service retirement benefits of 1/55th of final average salary for each year of service credit is available to tiers 1 and 2 members upon reaching age 60 and to tier 3 members upon reaching age 62. Service retirement benefits of 1/60th of final average salary for each year of service credit is available to tier 4 members upon reaching age 62 and tier 5 members upon reaching age 65. Early retirement benefits are available to tiers 1 and 2 members before reaching age 60, tiers 3 and 4 before age 62 with 25 or more years of service credit and tier 5 with 30 or more years 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.

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

Benefits are payable under various State of New Jersey legislation in an amount equal to one half of the compensation received by the participant for his/her service.

#### (c) Defined Contribution Pension Plans

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

Plan	Established as of	Legislation	Membership
ABPLTD	1965 through 1968	N.J.A.C. 17:7	Substantially all full-time employees of the State of New Jersey after completing twelve months of continuous full-time employment in an Alternate Benefit Plan eligible position.
NJSEDCP	June 19, 1978	Chapter 39, P.L. 1978, amended by Chapter 449, P.L. 1985, effective Janu- ary 14, 1986, and fur- ther 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.
DCRP	July 1, 2007	Chapter 92, P.L. 2007 and Chapter 103, P.L. 2007, expanded under the provisions of Chapter 89, P.L. 2008 and Chapter 1, P.L. 2010	State or local officials, elected or appointed on or after July 1, 2007; employees enrolled in TPAF or PERS on or after July 1, 2007, who earn salary in excess of established "maximum compensation" limits; employees enrolled in SPRS or PFRS after May 21, 2010, who earn salary in excess of established "maximum compensation" limits; employees otherwise eligible to enroll in TPAF or PERS on or after November 2, 2008, who do not earn the minimum annual salary for tier 3 enrollment but who earn salary of at least \$5,000 annually; and employees otherwise eligible to enroll in TPAF or PERS after May 21, 2010, who do not work the minimum number of hours per week required for tier 4 or tier 5 enrollment, but who earn salary of at least \$5,000 annually.
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, 2015, membership in the defined contribution pension plans consisted of the following based on the information within the Division's database:

Plan	Members
ABPLTD	173
NJSEDCP	49,992
DCRP	36,808
SACT	3,193

#### **Contribution Requirements and Benefit Provisions**

#### **ABPLTD**

The State of New Jersey makes an annual contribution to the ABPLTD, as required, toward the cost of long-term disability benefits which extend beyond the calendar year following the year in which the disability benefits commence for those with a benefit commencement date on or after October 1, 1986.

Members who are totally disabled due to an occupational or nonoccupational condition are eligible to receive a regular monthly benefit equal to 60% of the base salary earned over the twelve-month period preceding the onset of the disability. The long-term disability benefits continue until such time as the member retires or attains the age of 70, whichever comes first.

#### **NJSEDCP**

Participants may defer between 1% and 100% of their salary, less any Internal Revenue Code (IRC) Section 414(h) reductions or \$18,000 annually. Under the limited "catch-up" provision, a participant may be eligible to defer up to a maximum of twice the annual maximum in the three years immediately preceding the retirement age at which no reduction in benefits would be applicable. The employer does not make contributions to the Plan.

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

#### **DCRP**

State and local government employers contribute 3% of the employees' base salary. Active members contribute 5.5% of base salary.

Eligible members are provided with a defined contribution retirement plan intended to qualify for favorable Federal income tax treatment under IRC Section 401(a), a noncontributory group life insurance plan and a noncontributory group disability benefit plan. A participant's interest in that portion of his or her defined contribution retirement plan account attributable to employee contributions shall immediately become and shall at all times remain fully vested and nonforfeitable. A participant's interest in that portion of his or her defined contribution retirement plan account attributable to employer contributions shall be vested and nonforfeitable on the date the participant commences the second year of employment or upon his or her attainment of age 65, while employed by an employer, whichever occurs first.

#### **SACT**

Participants contribute through payroll deductions and may contribute from 1% to 100% of their base salary, as defined. 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 the Trust. Upon termination of employment and withdrawal from the basic retirement systems, a participant must also withdraw his/her account under the Trust as a lump-sum settlement.

#### (d) Other Post-employment Benefit (OPEB) Plans

The Division administers the defined benefit OPEB plans as further described below:

Plan	Established as of	Legislation	Membership
SHBP—State SHBP—Local	1961	Title 52, Article 14-17.25 et seq	Offers medical and prescription drug coverage to qualified State and local government public employees, retirees, and eligible dependents; and dental coverage to qualified State and local government/education public employees, retirees, and their eligible dependents. Local employers must adopt a resolution to participate in the SHBP.
SHBP— Education	2007	Title 52, Article 14-17.46 et seq	Offers medical and prescription drug coverage to qualified local education public employees, retirees, and eligible dependents. Local education employers must adopt a resolution to participate in the SHBP.

#### **Plan Membership and Contributing Employers**

Membership and contributing employers of the defined benefit OPEB plans consisted of the following at June 30, 2015:

	Active	Retired	Total	Contributing Employers
SHBP—State	108,544	62,805	171,349	1
SHBP-Local	44,975	38,219	83,194	590
SHBP—Education	210,343	133,833	344,176	1

#### **Contribution Requirements and Benefit Provisions**

Contributions to pay for the health benefit premiums of participating employees in SHBP - State, Local, and Education (including the prescription drug programs (PDP)) are collected from the State of New Jersey, participating local employers, active and retired members, and former active and retired members who have elected to participate under the rules of the Consolidated Omnibus Budget Reconciliation Act (COBRA). The State of New Jersey provides contributions for State employees through State appropriations. These appropriations are generally distributed to SHBP - State on a monthly basis. Local and Education employers remit employer contributions on a monthly basis. Active and retired member contributions are generally received on a monthly basis.

The State, employers participating in SHBP - Local and employers participating in SHBP - Education made contributions of \$1.9 billion, \$1.3 billion and \$2.7 billion for State fiscal year 2015, respectively.

Chapter 78, P.L. 2011, effective June 28, 2011, established new employee contribution requirements towards the cost of employer provided health benefit coverage. Employees are required to contribute a certain percentage of the cost of coverage. The rate of contribution is determined based on the employee's annual salary and the selected level of coverage. The increased employee contributions are being phased in over a four-year period for those employed prior to June 28, 2011, with a minimum contribution required to be at least 1.5% of salary. For those employed on or after June 28, 2011, the four-year phase-in does not apply, and contributions based on the full percentage rate of contribution are required. Under Chapter 78, certain future retirees eligible for state-paid health care coverage at retirement are also required to pay a percentage of the cost of their medical coverage determined on the basis of their annual retirement benefit.

SHBP - State provides medical coverage to qualified active and retired participants. Under Chapter 136, P.L. 1977, the State of New Jersey pays for the health insurance coverage of all enrolled retired State employees (regardless of age) whose pensions are based upon 25 years or more of credited service or a disability retirement regardless of years of service. Retirees who are not eligible for state-paid health coverage at retirement can continue in the program by paying the cost of the insurance for themselves and their covered dependents. The PDP was established in December 1974, under N.J.S.A. 52:14 17.29 to provide coverage to employees and their eligible dependents for drugs which under federal or State law may be dispensed only upon a prescription written by a physician. State employees are eligible for PDP coverage after 60 days of employment.

SHBP - Local provides medical coverage to qualified local active and retired participants. Partially funded benefits are also provided to local police officers and firefighters who retire with 25 years of service (or on disability) from an employer who does not provide coverage under the provisions of Chapter 330, P.L. 1997. Also, local employees are eligible for the PDP coverage after 60 days of employment.

SHBP - Education provides medical coverage to qualified local education active and retired participants. Members of TPAF who retire from a board of education or county college with 25 years of service or on a disability retirement receive state-paid post-retirement medical coverage. Under the provisions of Chapter 126, P.L. 1992, the program also provides state-paid coverage to members of PERS and ABP who retire from a board of education or county college with 25 years of service or on a disability retirement if the member's employer does not provide this coverage. Certain local participating employers also provide post-retirement medical coverage to their employees. Retirees who are not eligible for state-paid health coverage at retirement can continue in the program if their employer participates in this program or if they are participating in the health benefits plan of their former employer and are enrolled in Medicare Parts A and B by paying the cost of the insurance for themselves and their covered dependents. Also, education employees are eligible for the PDP coverage after 60 days of employment.

#### (e) Agency Funds

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

### (2) Summary of Significant Accounting Policies

#### (a) Reporting Entity

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

#### (b) Measurement Focus and Basis of Accounting

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

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

#### **Fiduciary Funds**

The Division reports the following types of funds:

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

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

#### (c) Receivables

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

#### (d) Capital Assets

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

#### (e) Investments

The Division of Investment, Department of the Treasury, State of New Jersey (Division of Investment) manages and invests certain assets of seven of the defined benefit pension plans (JRS, POPF, SPRS, CPFPF, TPAF, PFRS, and PERS) and two defined contribution pension plans (SACT and certain accounts in NJSEDCP). The Division of Investment accounts included in the Division of Pensions and Benefits report are: Common Pension Fund D and Common Pension Fund E (collectively known as the Common Pension Funds), Police and Firemen's Mortgage Program accounts, and other investments owned directly by the seven defined benefit pension plans. Common Pension Fund D invests primarily in global equity and fixed income securities. Common Pension Fund E invests primarily in alternative investments, which includes private equity, real estate, real asset, absolute return strategy funds, and global diversified credit funds. The Police and Firemen's Retirement System includes a mortgage loan program administered by the New Jersey Housing and Mortgage Finance Agency that provides participants with mortgages from the program at rates which are fixed by formula. The law establishing the program provides that the pension fund may not sell the mortgages, and no independent market exists for them.

Prudential Retirement is the third-party administrator for the NJSEDCP. Prudential Retirement provides recordkeeping, administration services and access to 22 investments 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.

Investments are reported at fair value as follows:

- U.S. Government and Agency, Sovereign, and Corporate obligations prices quoted by a major dealer in such securities.
- Police and Firemen's mortgages estimated market prices obtained from an independent broker.
- Domestic and Foreign Equity Securities, Exchanged Traded Funds, Forward Foreign Exchange Contracts closing prices as reported on the primary market or exchange on which they trade.
- · Money Market Instruments amortized cost which approximates fair value.
- Cash Management Fund closing net position on the last day of trading during the period as determined by the Transfer Agent.
- Alternative investments (private equity, real estate, real asset, and absolute return strategy funds) and global diversified credit funds -Fair values for the individual funds are based upon the net asset values provided by external investment managers. The valuation techniques vary based upon investment type and involve a certain degree of expert judgment. The most significant input into the net asset value of an entity is the value of its investment holdings. The net asset value is provided by the general partner and/or investment manager and reviewed by management. The net asset values are audited annually. The strategy of alternative investment funds and global diversified credit funds are long term and illiquid in nature which can prevent the investment from being readily marketable. Alternative investment funds and global diversified credit funds may be subject to redemption restrictions which can limit distributions and restrict the ability of a limited partner to exit a partnership. For alternative investments and global diversified credit funds, the realized value received upon the sale of these investments in the open market might be different than the fair value reported in the accompanying financial statements.
- · Common Pension Funds net position of the fund on the last day of the period as determined by the custodian.

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. Net increase in the fair value of investments includes the net realized and unrealized gains (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 2015, the interest rate is 5.25%. There is an \$8 processing fee per loan. Members who retire with an outstanding loan have the option of paying the loan in full prior to receiving any benefits or continuing their monthly loan payment schedule into retirement.

#### (g) Administrative Expenses

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

In certain funds (JRS, SPRS, TPAF, PFRS, and PERS) miscellaneous expenses and reimbursements from the fund that comprise various adjustments to member and employer accounts are incorporated into the administrative expense amounts included in the accompanying financial statements. These miscellaneous items are not part of the supplementary information included in the Schedule of Administrative Expenses (Schedule 6). Additionally, State Health Benefit Program Funds - State, Local, and Education administrative expenses are included in administrative expenses in the accompanying financial statements but are not included in the supplementary information in Schedule 6.

#### (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). The ABP and DCRP received a determination letter that they comply with the qualification requirements of the IRC in September 2012 and January 2013, respectively.

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

#### (i) Commitments

The Common Pension Fund E is obligated, under certain private equity, real estate, real asset, absolute return strategy, and global diversified credit fund agreements to make additional capital contributions up to contractual levels over the investment period specified for each investment. As of June 30, 2015, the Common Pension Fund E had unfunded commitments totaling approximately \$8.2 billion.

#### (i) Use of Estimates

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

#### (k) Accounting Pronouncements Applicable to the Division, Issued but Not Yet Effective

In February 2015, the GASB issued Statement No. 72, Fair Value Measurement and Application (GASB 72). GASB 72 addresses accounting and financial reporting issues related to fair value measurements of assets and liabilities. GASB 72 identifies various approaches to measuring fair value and levels of inputs based on the objectivity of the data used to measure fair value. GASB 72 will be effective for periods beginning after June 15, 2015. The Division is currently evaluating the impact of GASB 72 for its 2016 financial statements.

In June 2015, the GASB issued Statement No. 73, Accounting and Financial Reporting for Pensions and Related Assets That Are Not Within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68 (GASB 73). This statement establishes requirements for defined benefit pensions and defined contribution pensions that are not within the scope of GASB 68 and amends certain provisions of GASB Statement No. 67, Financial Reporting for Pension Plans, and GASB 68. GASB 73 will be effective for periods beginning after June 15, 2015. The Division is currently evaluating the impact of GASB 73 for its 2016 financial statements.

In June 2015, the GASB issued Statement No 74, Financial Reporting for Post-employment Benefit Plans Other Than Pension Plans (GASB 74). GASB 74 provides new requirements for the stand-alone reporting of other post-employment benefit (OPEB) plans or trusts. As compared to current requirements, the requirements in GASB 74 generally would incorporate changes in actuarial provisions, as well as enhanced note disclosures and required supplementary information in the stand-alone OPEB plan financial statements. GASB 74 will be effective for periods beginning after June 15, 2016. The Division is currently evaluating the impact of GASB 74 for its 2017 financial statements.

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

### **Components of Net Pension Liability**

The components of the net pension liability of the participating employers for the defined benefit plans at June 30, 2015, are as follows:

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS
Total pension liability	\$ 970,025,483	7,226,313	4,643,817,556	10,218,402	89,182,662,000	47,517,765,905	74,723,698,562
Plan fiduciary net position	212,783,371	6,704,568	1,867,709,110	2,427,950	25,604,797,560	25,106,858,921	28,553,566,906
Net pension liability	\$ 757,242,112	521,745	2,776,108,446	7,790,452	63,577,864,440	22,410,906,984	46,170,131,656
Plan fiduciary net position as a percentage of the total pension liability	21.94%	92.78%	40.22%	23.76%	28.71%	52.84%	38.21%

The total pension liability was determined by actuarial valuations as of July 1, 2014, which was rolled forwarded to June 30, 2015, using the following actuarial assumptions, applied to all periods in the measurement:

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS
Inflation rate	3.04%	3.04%	3.04%	3.04%	2.50%	3.04%	3.04%
Salary increases Through 2021	2.50%	N/A	3.45%	N/A	Varies based on experience	2.60-9.48% based on age	2.15-4.40% based on age
Thereafter	3.50%	N/A	4.45%	N/A	Varies based on experience	3.60-10.48% based on age	3.15-5.40% based on age
Investment rate of return	7.90%	3.80%	7.90%	3.80%	7.90%	7.90%	7.90%
Mortality rate table	RP-2000	RP-2000	RP-2000	RP-2000	RP-2000	RP-2000	RP-2000
Period of actuarial experience study upon which actuarial assumptions were based	July 1, 2008– June 30, 2011	N/A	July 1, 2008— June 30, 2011	N/A	July 1, 2009— June 30, 2012	July 1, 2010— June 30, 2013	July 1, 2008— June 30, 2011

 ${\it N/A-This}$  is a closed plan, therefore there are no active employees.

Adjustment for mortality improvements are based on Society of Actuaries Scale AA.

#### **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 rate of return (expected returns, net of pension plans investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the pension plans' target asset allocation as of June 30, 2015, (see the discussion of the pension plans' investment policy) are summarized in the following table:

Asset Class	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS
Cash	1.04%	1.04%	1.04%	1.04%	0.53%	1.04%	1.04%
U.S.Treasuries	1.64	_	1.64	_	_	1.64	1.64
U.S. government bonds	_	_	_	_	1.39	_	_
U.S. credit bonds	_	_	_	_	2.72	_	_
Investment grade credit	1.79	_	1.79	_	_	1.79	1.79
Mortgages	1.62	_	1.62	_	2.54	1.62	1.62
High yield bonds	4.03	_	4.03	_	4.57	4.03	4.03
Inflation-indexed bonds	3.25	_	3.25	_	1.47	3.25	3.25
Broad US Equities	8.52	_	8.52	_	5.63	8.52	8.52
Developed Foreign Equities	6.88	_	6.88	_	6.22	6.88	6.88
<b>Emerging Market Equities</b>	10.00	_	10.00	_	8.46	10.00	10.00
Private Equity	12.41	_	12.41	_	9.15	12.41	12.41
Hedge Funds/Absolute Return	4.72	_	4.72	_	_	4.72	4.72
Multi Strategy	_	_	_	_	4.59	_	_
Equity Hedge	_	_	_	_	5.68	_	_
Distressed	_	_	_	_	4.30	_	_
Real Estate (Property)	6.83	_	6.83	_	3.97	6.83	6.83
Commodities	5.32	_	5.32	_	3.58	5.32	5.32
Timber	_	_	_	_	4.09	_	_
Farmland	_	_	_	_	4.61	_	_
Global Debt excluding U.S.	(0.40)	_	(0.40)	_	_	(0.40)	(0.40)
Real estate investment trusts	5.12	_	5.12	_	_	5.12	5.12

#### **Discount Rate**

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

Plan	Discount Rate
JRS	4.08%
POPF	3.80
SPRS	4.64
CPFPF	3.80
TPAF	4.13
PFRS	5.79
PERS	4.90

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	Through June 30, 2022	Not applicable	Through June 30, 2033	Not applicable	Through June 30, 2027	Through June 30, 2045	Through June 30, 2033
Municipal Bond rate*	From July 1, 2022 and thereafter	All periods	From July 1, 2033 and thereafter	All periods	From July 1, 2027 and thereafter	From July 1, 2045 and thereafter	From July 1, 2033 and thereafter

<sup>\*</sup> The municipal bond return rate used is 3.80%. The source is the Bond Buyer Go 20-Bond Municipal Bond Index, which includes tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

#### **Sensitivity of Net Pension Liability**

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

Diam (makes used)	At 1%	At current	At 1%
Plan (rates used)	decrease	discount rate	increase
JRS (3.08%, 4.08%, 5.08%)	\$ 869,159,680	757,242,112	662,771,679
POPF (2.80%, 3.80%, 4.80%)	880,826	521,745	196,015
SPRS (3.64%, 4.64%, 5.64%)	3,479,367,045	2,776,108,446	2,209,811,272
CPFPF (2.80%, 3.80%, 4.80%)	8,213,139	7,790,452	7,403,670
TPAF (3.13%, 4.13%, 5.13%)	75,559,915,440	63,577,864,440	53,254,610,440
PFRS (4.79%, 5.79%, 6.79%)	29,053,805,391	22,410,906,984	16,996,545,615
PERS (3.90%, 4.90%, 5.90%)	55,702,235,475	46,170,131,656	38,191,749,890

#### (4) Investments

The Plans' investments (including investments held directly by the Common Pension Funds) as of June 30, 2015 are as follows:

	Total	Select Pension Trust Funds <sup>(4)</sup>	Other Funds <sup>(3)</sup>
Cash management funds	\$ 1,937,358,247	994,456,102	942,902,145
Domestic equities	24,354,087,874	22,453,419,901	1,900,667,973
International equities	14,318,088,974	13,990,046,151	328,042,823
Domestic fixed Income	11,629,247,993	10,181,184,898	1,448,063,095
Absolute return strategy funds	9,822,870,487	9,822,870,487	_
Private equity funds	7,473,103,168	7,473,103,168	_
Real estate funds	3,115,666,450	3,115,666,450	_
Global diversified credit funds	2,281,758,554	2,281,758,554	_
International fixed income (1)	2,314,347,622	2,261,939,945	52,407,677
Real assets	1,594,443,344	1,594,443,344	_
Police and Firemen's mortgages	840,098,565	840,098,565	_
Opportunistic private equity investments	203,305,831	203,305,831	_
Put options	5,690,700	5,690,700	_
Other <sup>(2)</sup>	 3,760,651,530	3,760,651,530	
	\$ 83,650,719,339	78,978,635,626	4,672,083,713

<sup>(1)</sup> Primarily US dollar denominated securities

New Jersey State statute provides for a State Investment Council (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, nonconvertible preferred stocks, covered call options, put options, futures contracts, obligations of the U.S. Treasury, government agencies, corporations, international governments and agencies, global diversified credit investments, swap transactions, state and municipal general obligations, public authority revenue obligations, collateralized notes and mortgages, commercial paper, certificates of deposit, repurchase agreements, money market funds, private equity funds, real estate funds, other real assets, absolute return strategy funds, and the State of New Jersey Cash Management Fund (CMF). The CMF is a short-term cash fund and is open to state and certain non-state participants.

<sup>(2)</sup> Includes assets (other than investments) and liabilities included in the net position of the Common Pension Funds

<sup>(3)</sup> Includes CPF, ABPLTD, DCRP, NJSEDCP, SACT, OPEB plans, and Agency Funds

<sup>(4)</sup> Includes JRS, POPF, SPRS, CPFPF, TPAF, PFRS, and PERS

The Plans' investment in the CMF is not evidenced by securities that exist in physical or book entry form held by the funds.

The asset allocation policy as of June 30, 2015, for JRS, POPF, CPFPF, SPRS, TPAF, PFRS, and PERS, collectively known as the Pension Funds, is as follows:

Asset Class	Target
Absolute return/risk mitigation	4.00%
Total risk mitigation	4.00
Cash equivalents	5.00
U.S. Treasury TIPS	1.50
U.S. Treasuries	1.75
Total liquidity	8.25
Investment grade credit	10.00
Public high yield	2.00
Global diversified credit	3.50
Credit oriented hedge funds	4.00
Debt related private equity	1.00
Debt related real estate	1.00
Police and Firemen's Mortgage Program	1.10
Total income	22.60
Commodities	1.00
Private real asset	2.00
Equity related real estate	4.25
Total real return	7.25
U.S. equity	27.25
Non-U.S. developed markets equity	12.00
Emerging markets equity	6.40
Equity oriented hedge funds	4.00
Buyouts/venture capital	8.25
Total global growth	57.90
Total	100.00

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

#### **Rate of Return**

The annual money-weighted rate of return for the Pension Funds was 4.05% for the fiscal year ended June 30, 2015. 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 moneyweighted 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 United States 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.

The credit ratings and limits for the Pension Funds as of June 30, 2015, are as follows:

	Mir	nimum ratin	g <sup>(1)</sup>	Limitation		
Category	Moody's	S&P	Fitch	of issuer's outstanding debt/stock	Limitation of issue	Other limitations
Certificates of deposit						Split rating allowable.
Domestic International	A3/P-1 Aa3/P-1	A-/A-1 AA-/A-1	A-/F1 AA-/F1	-	-	Cannot exceed 10% of issuer's primary capital. Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Collateralized notes and mortgages	ВааЗ	BBB-	BBB-	-	25%	Not more than 5% of pension fund assets can be invested in this cate- gory. Not more than 5% of pension fund assets can be invested in anyone issuer and affiliated entities.
Commercial paper	P-1	A-1	F1	-	-	Split rating allowable.  Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
Global debt obligations	ВааЗ	BBB-	BBB-	10%	-	Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities
Global diversified credit investments:  Direct bank loans  Funds	Baa3 Baa3	BBB- BBB-	BBB- BBB-	10% _	-	Not more than 7% of pension fund assets can be invested in this category. Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities.
International government and agency obligations	Baa3	BBB-	BBB-	25%	25%	Not more than 5% of pension fund assets can be invested in this category.
Money market funds	-	-	-	-	-	Not more than 5% of pension fund assets can be invested in money market funds; limited to 5% of shares or units outstanding.
Mortgage backed  pass-through securities	А3	A-	A-	-	-	Not more than 10% of pension fund assets can be invested in mortgage backed securities.
senior debt securities	_	_	_	_	25%	

	Mini	mum ratin	g <sup>(1)</sup>	Limitation of		
Category	Moody's	S&P	Fitch	issuer's outstanding debt/stock	Limitation of issue	Other limitations
Nonconvertible preferred stocks	Baa3	BBB-	BBB-	10%	25%	Not more than 5% of pension fund assets can be invested in any one issuer and affiliated entities
Repurchase agreements:						
Bank or trust company	_	-	_	_	_	-
Broker	P-1	A-1	F1	_	_	-
State, municipal, and public authority obligations	АЗ	A-	A-	10%	10%	Not more than 2% of pension fund assets can be invested in debt of any one obligor.
Swap transactions	Baa2	BBB	BBB	-	-	Notional value of net exposure to any one counterparty shall not exceed 1% of pension fund assets. Notional value of all swap transactions shall not exceed 5% of pension fund assets but may be increased to 10% for a fixed period of time.

<sup>(1)</sup> Short term ratings (e.g. P-1, A-1, F1) are used for commercial paper and certificates of deposit.

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

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 these equity and fixed income obligations 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. There are no restrictions in the amount that can be invested in U.S. Treasury and government agency obligations. Corporate fixed income obligations must have a minimum credit rating of Baa3, BBB- and BBB- as measured by Moody's, S&P, and Fitch, respectively. The total amount of corporate debt issues directly purchased or acquired cannot exceed 10% of the outstanding long term debt of the issuer.

The funds managed by Prudential Retirement investments for the NJSEDCP consist of a number of individual investment managers, which individually have investment guidelines that they comply with and follow. For Prudential Retirement, the NJSEDCP is a participant directed program offering a range of diversified investment alternatives. The options that include bond investments 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-thecounter 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.

For securities in the fixed income portfolio, the following tables disclose aggregate market value, by major credit quality rating category as of June 30, 2015. The tables include the fixed income securities held directly by the Common Pension Funds, as well as those managed by Prudential Retirement. The first table includes fixed income securities rated by Moody's. The second table discloses Standard & Poor's ratings for fixed income securities not rated by Moody's (in thousands).

	Moody's rating									
	Aaa	Aa	A	Baa	Ba	В	Caa	Ca	C	Total
Corporate obligations	\$622,662	883,398	1,539,938	1,438,154	604,210	597,892	321,730	911	63	6,008,958
United States Treasury TIPS	1,671,570	-	-	-	-	_	-	-	_	1,671,570
Foreign government obligations	411,443	1,142,819	95,724	3,871	873	279	-	_	_	1,655,009
United States Treasury bonds	1,526,758	-	-	-	-	_	-	_	_	1,526,758
Federal agency obligations	332,297	-	271,967	-	-	_	-	_	-	604,264
International corporate obligations	25,174	9,608	258,936	98,876	96,278	79,323	18,093	-	-	586,288
Bank loans	_	_	_	_	32,754	53,139	14,263	-	_	100,156
Mortgages (FHLMC/FNMA/GNMA)	363,286	-	_	_	-	-	_	-	-	363,286
SBA pass through certificates	20,349	-	-	-	-	_	-	-	_	20,349
Asset Backed Securities	47,211	4,377	439	_	1,478	1,129	560	242	-	55,436
Other	51,764	436,826	197,433	446	-	-	-	-	-	686,469
	5,072,514	2,477,028	2,364,437	1,541,347	735,593	731,762	354,646	1,153	63	13,278,543

	Standard and Poor's rating									
	AAA	AA	A	BBB	ВВ	В	ccc	D	Totals	
Corporate obligations	\$-	10,854	1,747	224,689	30,763	2,928	1,203	3,745	275,929	
Federal agency obligations	_	265	_	_	_	_	_	_	265	
International corporate obligations	_	_	_	_	12,375	8,757	_	_	21,132	
Asset backed securities	\$7,825	6,400	948	_	_	_	_	289	15,462	
Other	_	45,237	17,807	_	_	_	_	_	63,044	
	7,825	62,756	20,502	224,689	43,138	11,685	1,203	4,034	375,832	

The tables do not include certain domestic and international corporate obligations and certain exchange traded funds (ETFs) totaling \$289,221,227 which invest in an underlying portfolio of fixed income securities and do not have a Moody's or Standard & Poor's rating. The above tables also do not include Police and Firemen's mortgages totaling \$840,098,565, and investment in the Cash Management Fund totaling \$1,937,358,247, which are 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 pension funds to enter into foreign exchange contracts for the purpose of hedging the international portfolio. As of June 30, 2015, the credit ratings of the counterparties to the forward currency contracts held by the Common Pension Funds had a Moody's credit rating of no less than A.

The following table summarizes the maturities (or, in the case of Remics, Police and Firemen's Mortgages and mortgage-backed securities, the expected average life) of the fixed income portfolio as of June 30, 2015. The table includes investments held directly by the Common Pension Funds, as well as those held by Prudential Retirement (in thousands).

		Mat	urities in yea	rs	
Fixed income investment type	Less than 1	1-5	6—10	More than 10	Total fair value
Corporate obligations	\$410,420	2,335,632	2,579,785	990,005	6,315,842
United States Treasury TIPS	_	623,719	1,047,851	_	1,671,570
Foreign government obligations	_	638,760	800,715	215,534	1,655,009
United States Treasury bonds	175,034	716,657	584,419	50,648	1,526,758
Police and Firemen's mortgage program	_	933	22,139	817,027	840,099
Federal agency obligations	2,701	206,965	373,393	21,470	604,529
International corporate obligations	59,975	173,196	297,226	80,280	610,677
Bank loans	424	30,433	71,113	_	101,970
Mortgages (FHLMC/FNMA/GNMA)	72	1,129	12,581	349,504	363,286
SBA pass through certificates	_	20,349	_	_	20,349
Asset backed obligations	_	1,771	7,606	65,679	75,056
Other	110,811	122,743	128,788	636,208	998,550
	\$759,437	4,872,287	5,925,616	3,226,355	14,783,695

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 and funds managed by Prudential Retirement had the following foreign currency exposure as of June 30, 2015 (expressed in U.S. dollars):

Currency	Equities	Fixed Income	Alternative investments	Total fair value
Australian dollar	\$ 512,736,305	_	_	512,736,305
Brazilian real	257,955,677	_	_	257,955,677
Canadian dollar	649,139,864	81,507,569	_	730,647,433
Chilean peso	2,326,922	_	_	2,326,922
Columbian peso	845,899	1,438,074	_	2,283,973
Czech koruna	52,585,333	_	_	52,585,333
Danish krone	135,312,208	_	_	135,312,208
Egyptian pound	345,848	_	_	345,848
Euro	2,193,258,122	458,698	627,948,657	2,821,665,477
Hong Kong dollar	746,243,220	_	_	746,243,220
Hungarian forint	20,267,286	_	_	20,267,286
Indonesian rupiah	103,356,150	_	_	103,356,150
Japanese yen	1,694,214,342	_	_	1,694,214,342
Malaysian ringgit	26,251,260	_	_	26,251,260
Mexican peso	87,275,095	_	_	87,275,095
New Taiwan dollar	22,766,697	_	_	22,766,697
Norwegian krone	63,382,583	_	_	63,382,583
Pakistan rupee	28,942,696	_	_	28,942,696
Philippine peso	58,543,046	_	_	58,543,046
Polish zloty	54,930,633	_	_	54,930,633
Pound sterling (U.K.)	1,528,592,023	_	176,633,939	1,705,225,962
Qutari rial	1,396,946	_	_	1,396,946
Singapore dollar	102,903,990	_	_	102,903,990
South African rand	256,278,997	_	_	256,278,997
South Korean won	410,167,473	_	_	410,167,473
Swedish krona	218,564,647	_	_	218,564,647
Swiss franc	779,654,343	_	_	779,654,343
Thailand baht	95,945,334	_	_	95,945,334
Turkish lira	74,127,850	_	_	74,127,850
UAE dirham	4,576,453	_	_	4,576,453
Other	23,194,763			23,194,763
	\$ 10,206,082,005	83,404,341	804,582,596	11,094,068,942

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

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

As of June 30, 2015, the net position of Common Pension Fund E includes receivables of \$351 million related to the secondary sale of real estate funds and redemption of hedge funds.

#### (5) Securities Lending Collateral

The State Investment Council policies permit the Common Pension Funds and several of the direct pension plan portfolios to participate in securities lending programs, whereby securities are loaned to brokers or other borrowers and, in return, the pension funds have rights to the collateral received. All of the publicly traded securities held in Common Pension Funds, and certain securities held directly by the pension plans, are eligible for the securities lending program. Collateral received may consist of cash, letters of credit, or government securities having a market 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 market value of the collateral falls below 100% of the market value of the outstanding loaned securities to an individual borrower, or the market 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 market 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 market 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 market 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, 2015, the Common Pension Funds had no aggregate credit risk exposure to borrowers because the collateral amount held by the Common Pension Funds exceeded the market value of the securities on loan.

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

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

For securities exposed to credit risk in the collateral portfolio, the following table discloses aggregate fair value, by major credit quality rating category as of June 30, 2015 (in thousands).

	Rating						
	Aaa/AAA	Not rated	Totals				
Repurchase agreements	\$ 841,000	_	841,000				
State Street institutional							
liquid reserves fund	_	250,000	250,000				
Cash overdraft	_	(31,648)	(31,648)				
	\$ 841,000	218,352	1,059,352				

Custodial credit risk for investments is the risk that in the failure of the counterparty to the transaction, the pension funds will not recover the value of the investments that are in the possession of an outside party. The repurchase agreement's underlying securities are held in the pension funds'

As of June 30, 2015, the pension funds had outstanding loaned investment securities with an aggregate market value of \$1,028,118,684 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.

#### (6) Derivatives

The pension funds (JRS, SPRS, TPAF, PFRS, and PERS) invest in derivative securities through the Common Pension Funds. A derivative security is an investment whose value is derived from other financial instruments such as commodity prices, bonds and stock prices, or a market index. The Common Pension Funds' derivative securities are considered investment derivative instruments. The fair value of all derivative securities is reported in the statement of fiduciary net position, and the change in fair value is recorded in the statement of changes in fiduciary net position as net increase 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 future 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 of a specified price (futures or strike price) and date, or be settled in cash. Future contracts must be traded on a securities exchange or over the counter market. The net change in the future contracts value is settled daily in cash with the exchanges. The cash to fulfill these obligations is held in a margin account. As the market value of the futures contract varies from the original contract price, a gain or loss is paid to or received from the clearinghouse and recognized in the statement of changes in fiduciary net position. The Common Pension Funds had no investments in futures at June 30, 2015.

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

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

As of June 30, 2015, Common Pension Fund's derivative investments included foreign currency forward contracts and options:

	Notional value (local currency)	Receivable	Payable	Change in fair value
Foreign currency forward contracts:				
Buy:				
Pound sterling	100,000,000	\$ 157,233,405	158,260,000	(1,026,595)
Sell:				
Euro	325,000,000	360,322,000	362,682,242	(2,360,242)
Japanese yen	35,000,000,000	288,875,466	286,540,299	2,335,167
Pound sterling	100,000,000	149,345,000	157,233,405	(7,888,405)
Total Forward contracts		\$ 955,775,871	964,715,946	(8,940,075)

	Notional value	Fair value	Change in fair	
Options:				
Purchased Options:				
Put	2,092,784,255	\$ 5,690,700	(1,612,398)	
Written Options:				
Put	2,092,784,255	(3,052,350)	1,266,851	
Call	275,367,733	(2,231,131)	1,801,945	
Total Options	4,460,936,243	\$ \$ 407,219	1,456,398	

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.

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

As discussed in Note 1, in the fiscal year ended June 30, 2009, the State passed Chapter 19, P.L. 2009, to allow local employers of PFRS and PERS to contribute 50% of the normal and accrued liability contributions amounts, while deferring the remaining amount for a 15 year period with payments beginning in the fiscal year ended June 30, 2012. At June 30, 2015, the remaining receivable balances related to Chapter 19, P.L. 2009, were \$140.7 million and \$47.8 million for PFRS and PERS, respectively.

## Notes to Financial Statements — June 30, 2015, continued

#### (8) OPEB Plans Funded Status

The following represents the funded status of each of the State Health Benefit Plans as of the most recent actuarial valuation date of July 1, 2014.

	SHBP — State	SHBP — Local	SHBP — Education
Actuarial value of assets	\$ _	_	_
Actuarial accrued liability	24,470,500,000	16,408,500,000	40,575,700,000
Unfunded (overfunded) actuarial accrued liability	24,470,500,000	16,408,500,000	40,575,700,000
Funded ratio	_	_	_
Covered payroll	\$ 7,554,955,233	3,067,600,000	12,526,744,767
Unfunded (overfunded) actuarial accrued liability as a percentage of covered payroll	323.90%	534.90%	323.90%

#### **Actuarial Assumptions**

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future, and these amounts and assumptions are subject to continual revision as actual results are compared to past expectations. Calculations are based on the benefits provided under the terms of the plan in effect and the pattern of cost sharing between employees and the employer. Actuarial calculations reflect a long-term perspective and employ methods and assumptions that are designed to reduce shortterm volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations. A summary of the significant actuarial methods and assumptions used by SHBP - State, SHBP - Local, and SHBP - Education as of the most recent actuarial date of July 1, 2014, are as follows:

	SHBP — State	SHBP — Local	SHBP — Education
Actuarial cost method	Projected unit credit	Projected unit credit	Projected unit credit
Amortization method	Level dollar, open	Level dollar, open	Level dollar, open
Remaining amortization period	30 years	30 years	30 years
Actuarial assumptions:			
Interest rate	4.50 %	4.50%	4.50%
	(assuming no prefunding)	(assuming no prefunding)	(assuming no prefunding)
Salary range	N/A	N/A	N/A
Cost-of-living adjustments	N/A	N/A	N/A

OPEB used the projected unit credit as actuarial cost method. The actuarial assumptions for OPEB included 4.50% for investment rate of return.

For pre-Medicare PPO medical benefits, this amount initially is 7.5% and decreases to a 5.0% long-term trend rate after five years. For post-65 PPO medical benefits, the trend rate is 5.0%. For HMO medical benefits, the trend rate is initially 7.0% and decreases to a 5.0% long-term trend rate after four years. For prescription drug benefits, the initial trend rate is 13.0% decreased to a 5.0% long-term trend rate after eight years. For the Medicare Part B reimbursement, the trend rate is 5.0%. This reflects the known underlying cost of the Part B premium.

Refer to schedules 4 and 5 for multi-year required supplementary information related to these OPEB plans.

#### (9) 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 (\$53,742,671); SPRS (\$188,252,687); TPAF (\$11,199,306,391); PFRS (\$3,510,869,351); PERS (\$13,430,119,120)

## Notes to Financial Statements — June 30, 2015, continued

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

#### Contingent Reserve – JRS (\$-50,433,481); SPRS (\$835,694,402); TPAF (\$-21,101,427,906); PERS (\$-12,922,527,043)

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

### Retirement Reserve - JRS (\$209,474,181); SPRS (\$843,762,021); TPAF (\$35,506,919,075); PFRS (\$22,829,348,125); PERS (\$27,761,492,779)

The Retirement Reserve (N.J.S.A.: 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 (7.90% for State fiscal year 2015) is credited to the Retirement Reserve.

#### Retirement Reserve - POPF (\$6,704,568)

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

#### Noncontributory Group Insurance Premium Reserve – PFRS – Local (\$20,840,242); PERS – Local (\$63,104,676)

The Noncontributory Group Insurance Premium Reserve (N.J.S.A.: 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 a zero balance as these premium expenses are funded on a monthly basis.

#### Pension Accumulation Reserve – PFRS (\$-1,254,198,797)

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

#### Pension Reserve - CPFPF (\$2,427,950)

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

#### Alternate Benefit - Long-Term Disability Reserve (\$1,632,645)

The reserve balance of the ABPLTD (N.J.S.A.: 18A:66-177) is available for future payments to participants.

#### Benefit Enhancement Reserve - PERS - Local (\$221,377,374)

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

## Notes to Financial Statements — June 30, 2015, continued

#### **SHBP Reserve Fund - State (\$-121,617,607)**

The State uses this fund (N.J.S.A.: SHBP 52:14-17.42) to cover claims payments.

#### **SHBP Reserve Fund - Local (\$294,086,934)**

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

#### SHBP Reserve Fund – Education (\$144,868,784)

The net position of SHBP - Education (N.J.S.A.: SHBP 52:14-17.42) are available to pay claims of future periods. These reserves are maintained by the fund to stabilize rates and to meet unexpected increase in claims.

Various reserve balances as of June 30, 2015, are as follows:

	Pension Reserves	Other Post-employment Benefit Plan Reserves
Members' Annuity Savings Reserve and Accumulated Interest Reserve	\$ 28,382,290,220	_
Contingent Reserve	(33,238,694,028)	_
Retirement Reserve	87,157,700,749	_
Noncontributory Group Insurance Premium Reserve	83,944,918	_
Pension Accumulation Reserve	(1,254,198,797)	_
Pension Reserve	2,427,950	_
Alternate Benefit — Long-term Disability Reserve	1,632,645	_
SHBP Reserve	_	317,338,111
Benefit Enhancement Reserve	221,377,374	_
Variable Accumulation Reserve (N.J.S.A.: DCRP (43:15C-1), NJSEDCP (52:18A-164), SACT (52:18A-109))	3,716,857,660	-
Variable Benefits Reserve (N.J.S.A: SACT 52:18A-109)	36,779,181	
Total	\$ 85,110,117,872	317,338,111

#### (10) 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, 2015

	 2015	2014
Total pension liability:		
Service cost	\$ 30,702,986	32,123,341
Interest on total pension liability	41,473,055	40,332,123
Effect of economic/demographic (gains) or losses	(1,733,197)	_
Effect of assumptions changes or inputs	49,187,372	26,907,821
Transfers from other systems	2,081,523	_
Benefit payments	(52,430,016)	(49,604,080)
Net change in total pension liability	69,281,723	49,759,205
Total pension liability-beginning	900,743,760	850,984,555
Total pension liability-ending (a)	\$ 970,025,483	900,743,760
Plan fiduciary net pension:		
Contributions-employer	\$ 17,031,026	15,874,857
Contributions-employee	6,310,124	5,096,577
Net investment income	8,475,641	34,448,036
Transfers from other systems	2,081,523	_
Benefit payments, including refunds of employee contributions	(52,430,016)	(49,604,080)
Administrative expense	(168,762)	(162,372)
Net change in Plan fiducriary net position	(18,700,464)	5,653,018
Plan fiduciary net position-beginning	231,483,835	225,830,817
Plan fiduciary net position-ending (b)	212,783,371	231,483,835
Plan's net pension liability-ending (a)-(b)	\$ 757,242,112	669,259,925
Plan fiduciary net position as a percentage of the total pension liability	21.94%	25.70%
Covered-employee payroll	\$ 66,028,491	67,810,110
Net pension liability as a percentage of covered-employee payroll	1146.84%	986.96%

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

#### **Notes to Schedule:**

Changes in benefit terms:	None
Changes in assumptions:	
Discount rate as of June 30, 2015	4.08%
Discount rate as of June 30, 2014	4.58%

### **Required Supplementary Information**

## Schedule of Changes in Net Pension Liability and Related Ratios — Defined **Benefit Pension Plans — Prison Officers' Pension Fund (Unaudited) June 30, 2015**

		2015	2014
Total pension liability:			
Service cost	\$	_	_
Interest on total pension liability		331,362	401,659
Effect of economic/demographic (gains) or losses		(296,620)	_
Effect of assumptions changes or inputs		163,490	129,449
Transfers from other systems		_	_
Benefit payments		(1,377,505)	(1,583,408)
Net change in total pension liability		(1,179,273)	(1,052,300)
Total pension liability-beginning		8,405,586	9,457,886
Total pension liability-ending (a)	\$	7,226,313	8,405,586
Plan fiduciary net pension:			
Contributions-employer	\$	698,360	793,174
Net investment income		6,355	7,368
Benefit payments, including refunds of employee contributions		(1,377,505)	(1,583,408)
Administrative expense		(5,843)	(5,853)
Net change in Plan fiducriary net position		(678,633)	(788,719)
Plan fiduciary net position-beginning		7,383,201	8,171,920
Plan fiduciary net position-ending (b)		6,704,568	7,383,201
Plan's net pension liability-ending (a)-(b)	\$	521,745	1,022,385
Plan fiduciary net position as a percentage of the total pension liability		92.78%	87.84%
Covered-employee payroll		N/A	N/A
Net pension liability as a percentage of covered-employee payroll		N/A	N/A
Schedule is intended to show information for 10 years. Additional years will be	displayed as they be	come available.	
Notes to Schedule:			
Changes in benefit terms:		None	
Changes in assumptions:			
Discount rate as of June 30, 2015		3.80%	
Discount rate as of June 30, 2014		4.29%	

#### Adjustments to June 30, 2014, reported amounts:

In the previous year, the net pension liability for POPF was recorded using a discount rate of 5.00%. However, the discount rate should have been 4.29%, which is the Bond Buyer Go 20-Bond Municipal Bond Index. This adjustment is reflected in the 2014 figures above. The net pension liability was also adjusted to reflect benefits previously excluded in the form of cost of living adjustments due to retirees in effect prior to the Chapter 78, P.L. 2011, that are funded on an annual basis by the respective employers.

### **Required Supplementary Information**

# Schedule of Changes in Net Pension Liability and Related Ratios — Defined Benefit Pension Plans — State Police Retirement System (Unaudited) June 30, 2015

		2015	2014
Total pension liability:			
Service cost	\$	93,740,921	93,623,020
Interest on total pension liability		216,980,562	209,010,706
Effect of economic/demographic (gains) or losses		35,245,543	_
Effect of assumptions changes or inputs		258,002,875	92,686,900
Transfers from other systems		222,557	_
Benefit payments		(206,493,625)	(197,958,938)
Net change in total pension liability		397,698,833	197,361,688
Total pension liability-beginning		4,246,118,723	4,048,757,035
Total pension liability-ending (a)	\$	4,643,817,556	4,246,118,723
Plan fiduciary net pension:			
Contributions-employer	\$	38,527,297	36,436,923
Contributions-employee		22,315,431	24,034,496
Net investment income		75,532,779	287,098,217
Transfers from other systems		222,557	_
Benefit payments, including refunds of employee contributions		(206,493,625)	(197,958,938)
Administrative expense		(351,723)	(280,026)
Net change in Plan fiducriary net position		(70,247,284)	149,330,672
Plan fiduciary net position-beginning		1,937,956,394	1,788,625,722
Plan fiduciary net position-ending (b)		1,867,709,110	1,937,956,394
Plan's net pension liability-ending (a)-(b)	\$	2,776,108,446	2,308,162,329
Plan fiduciary net position as a percentage of the total pension liability		40.22%	45.64%
Covered-employee payroll		262,496,289	262,063,829
Net pension liability as a percentage of covered-employee payroll		1,057.58%	880.76%
Schedule is intended to show information for 10 years. Additional years will be d	isplayed as they	become available.	
Notes to Schedule:			
Changes in benefit terms:		None	
Changes in assumptions:			
Discount rate as of June 30, 2015		4.64%	
Discount rate as of June 30, 2014		5.12%	

Other changes in assumptions:

New assumptions related to future increases in Social Security Wage Base and the 401(a)(17) compensation limit have been added as follows:

401(a)(17) Pay Limit: \$260,000 for 2014, increasing 3.00% per annum, compounded annually

Social Security Wage Base: \$117,000 for 2014, increasing 4.00% per annum, compounded annually

#### **Required Supplementary Information**

## Schedule of Changes in Net Pension Liability and Related Ratios — Defined **Benefit Pension Plans — Consolidated Police and Firemen's Pension Fund (Unaudited) June 30, 2015**

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		2015	2014
Total pension liability:			
Service cost	\$	_	_
Interest on total pension liability		504,066	632,080
Effect of economic/demographic (gains) or losses		(993,528)	_
Effect of assumptions changes or inputs		193,719	163,528
Benefit payments		(2,445,627)	(2,942,035)
Net change in total pension liability		(2,741,370)	(2,146,427)
Total pension liability-beginning		12,959,772	15,106,199
Total pension liability-ending (a)	\$	10,218,402	12,959,772
Plan fiduciary net pension:			
Contributions-employer	\$	1,577,751	1,900,831
Net investment income		198	585
Benefit payments, including refunds of employee contributions		(2,445,627)	(2,942,035)
Administrative expense		(8,003)	(9,566)
Net change in Plan fiducriary net position		(875,681)	(1,050,185)
Plan fiduciary net position-beginning		3,303,631	4,353,816
Plan fiduciary net position-ending (b)		2,427,950	3,303,631
Plan's net pension liability-ending (a)-(b)	\$	7,790,452	9,656,141
Plan fiduciary net position as a percentage of the total pension liability		23.76%	25.49%
Covered-employee payroll		N/A	N/A
Net pension liability as a percentage of covered-employee payroll		N/A	N/A
Schedule is intended to show information for 10 years. Additional years will be d	isplaved as thev be	,	,
Notes to Schedule:			
Changes in benefit terms:		None	
Changes in assumptions:			
Discount rate as of June 30, 2015		3.80%	
Discount rate as of June 30, 2014		4.29%	

#### Adjustments to June 30, 2014, reported amounts:

In the previous year, the net pension liability for CPFPF was recorded using a discount rate of 2.52%. However, the discount rate should have been 4.29%, which is the Bond Buyer Go 20-Bond Municipal Bond Index. This adjustment is reflected in the 2014 figures above. The net pension liability was also adjusted to reflect benefits previously excluded in the form of cost of living adjustments due to retirees in effect prior to the Chapter 78, P.L. 2011, that are funded on an annual basis by the respective employers.

### **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, 2015

		2015	2014
Total pension liability:			
Service cost	\$	2,022,411,197	1,870,901,832
Interest on total pension liability		3,797,032,970	3,794,362,523
Effect of economic/demographic (gains) or losses		365,228,279	(24,898,221)
Effect of assumptions changes or inputs		5,913,556,000	2,614,173,709
Transfers from other systems		4,117,141	_
Benefit payments		(4,015,003,587)	(3,837,859,513)
Net change in total pension liability		8,087,342,000	4,416,680,330
Total pension liability-beginning		81,095,320,000	76,678,639,670
Total pension liability-ending (a)	\$	89,182,662,000	81,095,320,000
Plan fiduciary net pension:			
Contributions-employer	\$	807,246	4,688,045
Contributions-non-employer		539,796,289	423,012,101
Contributions-employee		740,296,265	716,183,306
Net investment income		1,066,062,926	4,100,273,453
Transfers from other systems		4,117,141	_
Other		358,899	_
Benefit payments, including refunds of employee contributions		(4,015,003,587)	(3,837,859,513)
Administrative expense		(13,890,080)	(12,170,971)
Net change in Plan fiducriary net position		(1,677,454,901)	1,394,126,421
Plan fiduciary net position-beginning		27,282,252,461	25,888,126,040
Plan fiduciary net position-ending (b)		25,604,797,560	27,282,252,461
Plan's net pension liability-ending (a)-(b)	\$	63,577,864,440	53,813,067,539
Plan fiduciary net position as a percentage of the total pension liability		28.71%	33,64%
Covered-employee payroll		10,162,263,470	10,038,792,896
Net pension liability as a percentage of covered-employee payroll		625.63%	536.05%
Schedule is intended to show information for 10 years. Additional years will be d	displayed as they	become available.	

### **Notes to Schedule:**

Changes in benefit terms:	None
Changes in assumptions:	
Discount rate as of June 30, 2015	4.13%
Discount rate as of June 30, 2014	4.68%

#### **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, 2015

	2015	2014
Total pension liability:		
Service cost	\$ 994,248,683	1,079,166,175
Interest on total pension liability	2,680,664,300	2,535,619,539
Effects of economic/demographic (gains) or losses	(215,122,438)	_
Effect of assumptions changes or inputs	3,755,474,472	649,814,155
Transfers from other systems	800,782	_
Benefit payments	(2,205,464,297)	(2,105,829,011)
Net change in total pension liability	5,010,601,502	2,158,770,858
Total pension liability-beginning	42,507,164,403	40,348,393,545
Total pension liability-ending (a)	\$ 47,517,765,905	42,507,164,403
Plan fiduciary net pension:		
Contributions-employer	\$ 883,776,917	858,047,628
Contributions-non-employer	76,038,000	_
Contributions-employee	386,991,641	385,660,096
Net investment income	922,598,676	3,381,553,869
Transfers from other systems	800,782	_
Employer specific contribution-additional contribution	535,424	_
Employer specific contributions-delayed appropriation	865,936	_
Employer specific contributions-delayed enrollments	224,629	_
Employer specific contributions-retroactive	24,536,440	_
Benefit payments, including refunds of employee contributions	(2,205,464,297)	(2,105,829,011)
Administrative expense	(4,531,012)	(3,884,342)
Net change in Plan fiducriary net position	86,373,136	2,515,548,240
Plan fiduciary net position-beginning	25,020,485,785	22,504,937,545
Plan fiduciary net position-ending (b)	25,106,858,921	25,020,485,785
Plan's net pension liability-ending (a)-(b)	\$ 22,410,906,984	17,486,678,618
Plan fiduciary net position as a percentage of the total pension liability	52.84%	58.86%
Covered-employee payroll	3,682,677,356	3,678,910,266
Net pension liability as a percentage of covered-employee payroll	608.55%	475.32%

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

#### **Notes to Schedule:**

Changes in benefit terms:	None
Changes in assumptions:	
Discount rate as of June 30, 2015	5.79%
Discount rate as of June 30, 2014	6.32%

#### Other changes in assumptions:

Demographic assumptions with respect to non-vested withdrawal, disability, service retirement, active death, salary increase rates and inactive mortality were revised in accordance with the results of the July 1, 2010-June 30, 2013 experience study and approved by the Board of Trustees at the February 9, 2015, Board meeting.

#### **Required Supplementary Information**

# Schedule of Changes in Net Pension Liability and Related Ratios — Defined Benefit Pension Plans — Public Employees' Retirement System (Unaudited) June 30, 2015

	2015	2014
Total pension liability:		
Service cost	\$ 1,523,631,386	1,592,214,831
Interest on total pension liability	3,647,688,354	3,506,486,225
Effects of economic/demographic (gains) or losses	1,050,795,158	_
Effect of assumptions changes or inputs	4,091,557,460	1,222,437,554
Transfers from other systems	1,651,542	_
Benefit payments	(3,441,046,065)	(3,259,290,114)
Net change in total pension liability	6,874,277,835	3,061,848,496
Total pension liability-beginning	67,849,420,727	64,787,572,231
Total pension liability-ending (a)	\$ 74,723,698,562	67,849,420,727
Plan fiduciary net pension:		
Contributions-employer	\$ 1,085,237,214	917,689,000
Contributions-employee	805,232,235	797,818,225
Net investment income	1,117,827,113	4,102,964,869
Transfers from other systems	1,651,542	_
Employer specific contribution-additional contribution	111,824	_
Employer specific contributions-delayed appropriation	1,664,415	_
Employer specific contributions-delayed enrollments	594,843	_
Employer specific contributions-retroactive	6,504,878	-
Other	(31,006)	(3,259,290,114)
Benefit payments, including refunds of employee contributions	(3,441,046,065)	_
Administrative expense	(23,761,860)	(21,756,019)
Net change in Plan fiducriary net position	(446,014,867)	2,537,425,961
Plan fiduciary net position-beginning	28,999,581,773	26,462,155,812
Plan fiduciary net position-ending (b)	28,553,566,906	28,999,581,773
Plan's net pension liability-ending (a)-(b)	\$ 46,170,131,656	38,849,838,954
Plan fiduciary net position as a percentage of the total pension liability	38.21%	42.74%
Covered-employee payroll	11,441,433,226	11,448,531,265
Net pension liability as a percentage of covered-employee payroll	403.53%	339.34%

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

#### **Notes to Schedule:**

Changes in benefit terms:	None
Changes in assumptions:	
Discount rate as of June 30, 2015	4.90%
Discount rate as of June 30, 2014	5.39%

Other changes in assumptions:

New assumptions related to future increases in Social Security Wage Base and the 401(a)(17) compensation limit have been added as follows:

401(a)(17) Pay Limit: 3.00% per annum Social Security Wage Base: 4.00% per annum

### **Required Supplementary Information**

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

		Actuarially determined contribution	Actual employer contribution	employer deficiency		Contribution as a percentage of covered payroll				
Judicial Retirement System										
Year ended June 30:	:									
2015	\$	45,136,504	17,031,026	28,105,478	66,028,491	25.79%				
2014		43,922,167	15,874,681	28,047,486	67,810,110	23.41				
2013		45,415,467	12,308,227	33,107,240	67,497,660	18.24				
2012		42,475,660	5,969,713	36,505,947	67,437,125	8.85				
2011		38,450,553	651,718	37,798,835	71,746,413	0.91				
2010		32,540,704	1,032,857	31,507,847	70,133,372	1.47				
2009		29,809,782	1,696,843	28,112,939	67,159,516	2.53				
2008		27,171,100	12,913,890	14,257,210	63,144,685	20.45				
2007		25,174,191	12,741,898	12,432,293	62,492,250	20.39				
2006		23,212,502	7,972,000	15,240,502	60,506,750	13.18				
			Prison Officers	' Pension Fund						
Year ended June 30:	:									
2015	\$	_	_	_	N/A	N/A				
2014		_	_	_	N/A	N/A				
2013		_	_	_	N/A	N/A				
2012		_	_	_	N/A	N/A				
2011		_	_	_	N/A	N/A				
2010		_	_	_	N/A	N/A				
2009		_	_	_	N/A	N/A				
2008		_	_	_	N/A	N/A				
2007		_	_	_	N/A	N/A				
2006		_	_	_	N/A	N/A				

**SCHEDULE 2**, continued

## **Required Supplementary Information**

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

		Actuarially determined contribution	Actual Contribution employer deficiency contribution (excess)		Covered payroll	Contribution as a percentage of covered payroll					
State Police Retirement System											
Year ended June 30:	Year ended June 30:										
2015	\$	110,904,703	38,527,297	72,377,406	262,496,289	14.68%					
2014		105,093,378	36,379,273	68,714,105	262,063,829	13.88					
2013		99,876,582	27,777,047	72,099,535	283,219,927	9.81					
2012		98,869,662	13,545,607	85,324,055	275,219,752	4.92					
2011		114,120,061	2,201,604	111,918,457	289,980,657	0.76					
2010		91,411,237	1,018,200	90,393,037	287,267,502	0.35					
2009		86,385,254	5,574,860	80,810,394	281,087,566	1.98					
2008		78,761,279	36,443,502	42,317,777	275,301,995	13.24					
2007		56,502,006	29,268,194	27,233,812	263,220,592	11.12					
2006		47,196,900	12,941,000	34,255,900	241,813,372	5.35					
Consolidated Police and Firemen's Pension Fund											
Year ended June 30:											
2015	\$	_	_	_	N/A	N/A					
2014		864,041	_	864,041	N/A	N/A					
2013		1,095,632	896,883	198,749	N/A	N/A					
2012		1,240,860	174,000	1,066,860	N/A	N/A					
2011		528,714	_	528,714	N/A	N/A					
2010		1,678,690	_	1,678,690	N/A	N/A					
2009		1,824,798	1,256,000	568,798	N/A	N/A					
2008		2,388,591	523,000	1,865,591	N/A	N/A					
2007		8,474,210	1,784,000	6,690,210	N/A	N/A					
2006		13,854,805	6,397,000	7,457,805	N/A	N/A					

**SCHEDULE 2, continued** 

## **Required Supplementary Information**

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

		Actuarially determined contribution	Actual employer contribution	Contribution deficiency (excess)	Covered payroll	Contribution as a percentage of covered payroll					
Teachers' Pension and Annuity Fund											
Year ended June 30:											
2015	\$	2,306,611,715	539,796,289	1,766,815,426	10,162,263,470	5.31%					
2014		2,158,287,358	392,035,985	1,766,251,373	10,038,792,896	3.91					
2013		2,331,811,395	647,059,335	1,684,752,060	9,779,212,916	6.62					
2012		2,269,823,968	317,927,358	1,951,896,610	9,682,318,739	3.28					
2011		2,123,175,951	30,655,332	2,092,520,619	10,025,401,658	_					
2010		1,796,358,016	33,199,655	1,763,158,361	9,747,020,060	_					
2009		1,601,478,508	95,863,972	1,505,614,536	9,419,083,203	1.02					
2008		1,550,503,836	695,275,811	855,228,025	9,077,628,813	7.66					
2007		1,407,249,580	690,794,259	716,455,321	8,748,623,186	7.90					
2006		1,177,674,055	94,226,363	1,083,447,692	8,454,072,109	1.11					
Police and Firemen's Retirement System											
Year ended June 30:											
2015	\$	1,217,110,411	941,950,336	275,160,075	3,682,677,356	25.58%					
2014		1,150,719,106	880,431,697	270,287,409	3,678,910,266	23.93					
2013		1,279,412,723	895,743,379	383,669,344	3,656,218,573	24.50					
2012		1,238,132,402	826,461,015	411,671,387	3,649,416,297	22.65					
2011		1,337,424,856	889,724,548	447,700,308	3,720,534,369	23.91					
2010		1,161,763,447	758,722,185	403,041,262	3,673,674,523	20.65					
2009		1,048,234,663	716,491,044	331,743,619	3,596,254,177	19.92					
2008		960,856,263	780,799,395	180,056,868	3,459,839,699	22.57					
2007		801,216,011	550,911,183	250,304,828	3,278,999,899	16.80					
2006		676,774,386	334,527,583	342,246,803	3,101,807,870	10.78					

**SCHEDULE 2**, continued

### **Required Supplementary Information**

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

	Actuarially determined contribution	Actual employer contribution	Contribution deficiency (excess)	Covered payroll	Contribution as a percentage of covered payroll
	1	Public Employees' I	Retirement System		
Year ended June 30:					
2015	\$ 1,935,315,246	1,067,584,583	867,730,663	11,441,433,226	9.33%
2014	1,797,073,081	941,023,184	856,049,897	11,448,531,265	8.22
2013	1,911,359,009	1,087,389,140	823,969,869	11,433,091,635	9.51
2012	1,895,158,413	976,093,907	919,064,506	11,609,042,726	8.41
2011	1,824,391,081	832,016,186	992,374,895	11,981,354,783	6.94
2010	1,422,475,763	640,282,996	782,192,767	11,995,447,141	5.34
2009	1,285,791,399	627,989,949	657,801,450	11,815,800,825	5.31
2008	1,145,564,136	646,690,366	498,873,770	11,418,467,816	5.66
2007	762,290,568	457,860,138	304,430,430	10,983,873,428	4.17
2006	256,055,116	142,066,208	113,988,908	10,444,293,814	1.36

## FINANCIAL INFORMATION

**SCHEDULE 2. continued** 

## 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	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Norma	al Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization method	Level Dollar, open	Level Dollar, open	Level Dollar, open	Level Dollar, ope	en Level Dollar, open	Level Dollar, open	Level Dollar, open
Remaining amortization period	30 years	30 years	30 years	30 years	30 years	30 years	30 years
Asset valuation method	Five-year average of market values	Five-year average of market values	Five-year average of market values	Five-year averag of market value	•	Five-year average of market values	Five-year average of market values
Inflation	3.04%	3.04%	3.04%	3.04%	2.50%	3.04%	3.04%
Projected salary increase 2012-2021	2.50%	N/A^	3.45%	N/A^	Varies based on experience	2.60-9.48% based on age	2.15%-4.40% based on age
Thereafter	3.50%	N/A^	4.45%	N/A^	Varies based on experience	3.60-10.48% based on age	3.15%-5.40%% based on age
Projected COLAs	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*
Investment rate of return	7.90%	3.80%	7.90%	3.80%	7.90%	7.90%	7.90%

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

Contributions: Contributions reported on Schedule 1 include actual contributions by State and local employers, where applicable, the local employer's contribution revenue recorded in fiscal year 2015 that is due in fiscal year 2016 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 Lofe Insurance Premium Fund.

<sup>^</sup> This is a closed plan, therefore there are no active employees.

## **Required Supplementary Information**

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

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS
Year ended June 30:							
2015	4.05%	0.09%	4.05%	0.34%	4.05%	4.05%	4.05%
2014	16.64	0.09	16.64	0.02	16.64	16.64	16.64

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

### **Required Supplementary Information**

**SCHEDULE 4** 

Unfunded

## Other Post-Employment Benefits Schedule of Funding Progress — **Defined Benefit (Unaudited)**

Actuarial valuation date		Actuarial value of assets (a)	Actuarial accrued liability (b)	Unfunded (overfunded) actuarial accrued liability (b-a)	Funded ratio (a/b)	Covered payroll (c)	(overfunded) actuarial accrued liability as a percentage of covered payroll* ((b-a)/c)				
		\$	State Health Bend	efits Program — S	itate						
July 1, 2014	\$	_	24,470,500,000	24,470,500,000	-%	\$ 7,554,955,233	323.9%				
July 1, 2013		_	19,746,700,000	19,746,700,000	_	7,811,194,620	252.8				
July 1, 2012		_	19,319,700,000	19,319,700,000	_	7,695,193,894	4 251.1				
July 1, 2011		_	18,077,800,000	18,077,800,000	_	7,491,835,889	9 241.3				
		•	State Health Bend	efits Program — L	ocal						
July 1, 2014	\$	_	16,408,500,000	16,408,500,000	-%	\$ 3,067,600,000	534.9%				
July 1, 2013		_	13,804,500,000	13,804,500,000	_	3,156,000,000	37.4				
July 1, 2012		_	12,378,100,000	12,378,100,000	_	2,937,000,000	0 421.4				
July 1, 2011		_	11,127,000,000	11,127,000,000	_	2,831,000,000	393.0				
	State Health Benefits Program — Education										
July 1, 2014	\$	_	40,575,700,000	40,575,700,000	-%	\$12,526,744,76	7 323.9%				
July 1, 2013		_	33,253,400,000	33,253,400,000	_	13,153,105,380	252.8				
July 1, 2012		_	32,182,900,000	32,182,900,000	_	12,818,706,100	5 251.1				
July 1, 2011		_	30,871,900,000	30,871,900,000	_	12,794,864,112	1 241.3				

**SCHEDULE 4, continued** 

#### **Required Supplementary Information**

## Other Post-Employment Benefits Schedule of Funding Progress — **Additional Actuarial Information (Unaudited)**

Significant actuarial methods and assumptions used in the most recent 2014 actuarial valuation include the following:

#### **State Health Benefits Program Funds**

**Actuarial cost method** Projected unit credit Amortization method Level dollar, open Remaining amortization period 30 years **Actuarial assumptions:** Interest rate 4.50% (assuming no prefunding) Salary range N/A Cost-of-living adjustments N/A Valuation date July 1, 2014

For pre-Medicare PPO medical benefits, this amount initially is 7.5% and decreases to a 5.0% long-term trend rate after five years. For post-65 PPO medical benefits, the trend rate is 5.0%. For HMO medical benefits, the trend rate is initially 7.0% and decreases to 5.0% long-term trend rate after four years. For prescription drug benefits, the initial trend rate is 13.0% decreased to a 5.0% long-term trend rate after eight years. For the Medicare Part B reimbursement, the trend rate is 5.0%. This refects the unknown underlying cost of the Part B premium.

## **Required Supplementary Information**

## Other Post-Employment Benefits Schedule of Employer Contributions — **Defined Benefit (Unaudited)**

		Annual required contribution (1)	Employer Contributions	Percentage contributed						
	State Health	Benefits Program — S	State							
Year ended June 30, 2015	\$	2,396,900,000	613,079,000	25.6%						
Year ended June 30, 2014		1,935,100,000	569,367,000	29.4						
Year ended June 30, 2013		1,911,400,000	562,698,000	29.4						
Year ended June 30, 2012		1,802,200,000	505,481,000	28.0						
	State Health	Benefits Program — L	.ocal							
Year ended June 30, 2015	\$	1,535,100,000	396,900,000	25.9%						
Year ended June 30, 2014		1,324,400,000	369,600,000	27.9						
Year ended June 30, 2013		1,200,700,000	322,300,000	26.8						
Year ended June 30, 2012		1,098,200,000	274,800,000	25.0						
State Health Benefits Program — Education										
Year ended June 30, 2015	\$	4,034,800,000	1,032,021,000	25.6%						
Year ended June 30, 2014		3,346,800,000	984,733,000	29.4						
Year ended June 30, 2013		3,238,900,000	953,502,000	29.4						
Year ended June 30, 2012		3,115,800,000	873,919,000	28.0						

The annual required contribution reflects a 30-year, 4.0% annual increasing amortization of the unfunded actuarial accrued liability. Based on expected benefit payments plus retiree drug subsidy for the applicable fiscal year end.

# Schedule of Administrative Expenses Year ended June 30, 2015

	-7	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	NJSEDCP	Total
Personnel services:										
Salaries and wages	<del>\$</del>	105,971	2,257	117,321	3,189	5,593,394	1,472,525	9,472,973	188,559	16,956,189
Employee benefits		35,445	991	48,680	1,546	2,439,893	586,081	4,042,784	75,651	7,231,071
Total personnel services		141,416	3,248	166,001	4,735	8,033,287	2,058,606	13,515,757	264,210	24,187,260
Professional services:										
Actuarial services		5,751	536	34,901	672	220,441	483,264	467,927	I	1,213,492
Data processing		3,926	366	23,824	458	975,467	329,889	1,656,125	14,033	3,004,088
Information systems		8,019	798	45,244	1,016	2,195,525	562,470	3,803,760	I	6,616,832
Other professional (1)		2,298	214	14,171	268	571,735	196,018	971,788	170,000	1,926,492
Medical reviews (exams/hearings)		I	I	8,757	I	329,544	452,725	829,769	I	1,620,795
Elections		I	I	I	I	I	43,053	95,208	ı	138,261
Internal audit and legal		1,867	174	11,329	218	463,879	156,877	787,564	98	1,421,994
Total professional services		21,861	2,088	138,226	2,632	4,756,591	2,224,296	8,612,141	184,119	15,941,954
Communication:										
Travel		∞	1	20	1	5,045	4,548	8,091	I	17,744
Telephone		362	34	2,200	42	90,067	30,459	152,913	2,800	278,877
Postage		870	80	5,277	102	216,058	73,068	366,818	1,000	663,273
Motor pool		∞	1	51	1	2,081	704	3,533	I	6,379
Printing and office		449	42	2,726	53	111,631	37,753	189,525	ı	342,179
Total communication		1,697	158	10,304	199	424,882	146,532	720,880	3,800	1,308,452
Miscellaneous:										
Office space		3,525	329	21,395	412	876,011	296,255	1,487,272	I	2,685,199
Maintenance		33	က	203	4	8,302	2,807	14,095	ı	25,447
Equipment		182	17	1,102	21	45,120	15,258	76,604	I	138,304
Other services and charges		ı	ı	ı	ı	ı	ı	ı	12,000	12,000
Total miscellaneous		3,740	349	22,700	437	929,433	314,320	1,577,971	12,000	2,860,950
Total administrative expenses	\$	168,714	5,843	337,231	8,003	14,144,193	4,743,754	24,426,749	464,129	44,298,616

See accompanying independent auditors' report.

Portion of consulting

# **Schedule of Investment Expenses** Year ended June 30, 2015

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	NJSEDCP	Total
Investment expense	\$ 18,881	1,969	113,363	2,689	4,753,479	1,594,249	8,209,186	206,528	14,900,344

See accompanying independent auditors' report.

# **Schedule of Expenses for Consultants** Year ended June 30, 2015

**SCHEDULE 8** 

-	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	Total
Actuarial:								
Buck Consultants	\$ 5,751	536	34,901	672	_	483,264	467,927	993,051
Milliman	_	_	_	_	220,441	_	_	220,441
Medical reviews (exams/hearings)	_	_	8,757	_	329,544	452,725	829,769	1,620,795
Board elections:								
Global support	_	_	_	-	_	43,053	95,208	138,261
Total expenses for consultants	\$ 5,751	536	43,658	672	549,985	979,042	1,392,904	2,972,548

# Schedule of Fiduciary Net Position — Fiduciary Funds June 30, 2015

	,	Pension Trust Funds	Other Post-employment Benefit Plans	Total
Assets:				
Cash and cash equivalents	\$	6,699,629	2,689,187	9,388,816
Receivables:				
Contributions:				
Members		187,537,771	3,314,824	190,852,595
Employers		2,020,253,525	170,896,706	2,191,150,231
Accrued interest and dividends		4,363,138	_	4,363,138
Securities sold in transit		17,466,901	_	17,466,901
Other		22,560,821	2,086,259	24,647,080
Total receivables		2,252,182,156	176,297,789	2,428,479,945
Investments, at fair value:				
Cash Management Fund		1,020,054,735	873,253,981	1,893,308,716
Common Pension Fund D		51,222,834,892	_	51,222,834,892
Common Pension Fund E		25,921,246,067	_	25,921,246,067
Common stocks		210,119,031	_	210,119,031
Mortgages		840,098,565	_	840,098,565
Domestic equities		1,690,548,942	_	1,690,548,942
International equities		328,042,823	_	328,042,823
Domestic fixed income		1,448,063,095	_	1,448,063,095
International fixed income		52,407,677	_	52,407,677
Total investments		82,733,415,827	873,253,981	83,606,669,808
Securities lending collateral		1,060,832,090	_	1,060,832,090
Member Loans		1,157,974,931	_	1,157,974,931
Total assets		87,211,104,633	1,052,240,957	88,263,345,590
Liabilities:				
Accounts payable and accrued expenses		166,484,742	732,780,130	899,264,872
Retirement benefits payable		828,772,890	_	828,772,890
Noncontributory group life insurance premiums payable		27,443,236	_	27,443,236
Administrative expense payable		18,381,888	2,122,716	20,504,604
Cash overdraft		424,213	_	424,213
Securities lending collateral and rebates payable		1,059,479,792		1,059,479,792
Total liabilities		2,100,986,761	734,902,846	2,835,889,607
Net position:				
Restricted for pension and other post-employment benefits	\$	85,110,117,872	317,338,111	85,427,455,983

# Schedule of Changes in Fiduciary Net Position — Fiduciary Funds Year ended June 30, 2015

	Pension Trust Funds	Other Post-employment Benefit Plans	Total
Additions:			
Contributions:			
Members	\$ 2,154,149,401	497,483,666	2,651,633,067
Employers	2,029,207,620	5,871,536,760	7,900,744,380
Non-employer	615,834,289	_	615,834,289
Employer specific	46,538,152	_	46,538,152
Total contributions	4,845,729,462	6,369,020,426	11,214,749,888
Investment income:			
Net increase (decrease) in fair value of investments	1,552,622,560	(27,444)	1,552,595,116
Interest	1,787,620,222	1,202,567	1,788,822,789
Dividends	14,764,547	_	14,764,547
	3,355,007,329	1,175,123	3,356,182,452
Less investment expense	14,900,344	_	14,900,344
Net investment income	3,340,106,985	1,175,123	3,341,282,108
Total additions	8,185,836,447	6,370,195,549	14,556,031,996
Deductions:			
Benefits	9,919,429,573	6,290,847,391	16,210,276,964
Refunds of contributions	204,178,357	_	204,178,357
Administrative and miscellaneous expenses	43,181,412	9,142,428	52,323,840
Total deductions	10,166,789,342	6,299,989,819	16,466,779,161
Change in net position	(1,980,952,895)	70,205,730	(1,910,747,165)
Net position restricted for pension and other post-employment benefits:			
Beginning of year	87,091,070,767	247,132,381	87,338,203,148
End of year	\$ 85,110,117,872	317,338,111	85,427,455,983

# **Combining Schedule of Fiduciary Net Position Information —** Fiduciary Funds — Select Pension Trust Funds **June 30, 2015**

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	Total
Assets:								
Cash and cash equivalents	\$ 129,439	204,808	1,218,409	86,110	2,305,252	2,282,551	389,872	6,616,441
Receivables:								
Contributions:								
Members	315,037	_	1,056,221	_	80,079,148	47,026,382	58,691,867	187,168,655
Employers	49,025	_	247,407	_	34,158,260	988,189,776	997,609,057	2,020,253,525
Accrued interest and dividends	146	4	151	8	3,012	3,403,162	5,520	3,412,003
Securities sold in transit	-	_	_	_	_	17,466,901	_	17,466,901
Other	2,247,577	54,418	275,103	397,028	4,931,424	5,766,449	7,338,822	21,010,821
Total receivables	2,611,785	54,422	1,578,882	397,036	119,171,844	1,061,852,670	1,063,645,266	2,249,311,905
Investments, at fair value:								
Cash Management Fund	7,914,882	6,557,907	29,092,618	2,163,866	384,497,341	243,030,252	321,199,236	994,456,102
Common Pension Fund D	135,248,837	_	1,213,236,046	_	16,583,641,041	15,300,971,183	17,989,737,785	51,222,834,892
Common Pension Fund E	70,551,166	_	625,060,781	_	8,682,210,214	7,535,806,030	9,007,617,876	25,921,246,067
Mortgages	_	_	_	_	_	840,098,565	_	840,098,565
Total investments	213,714,885	6,557,907	1,867,389,445	2,163,866	25,650,348,596	23,919,906,030	27,318,554,897	78,978,635,626
Securities lending collateral	2,801,022	_	25,126,289	_	343,449,530	316,885,258	372,569,991	1,060,832,090
Members' loans	838,263	_	15,218,604	_	247,772,712	320,129,331	574,016,021	1,157,974,931
Total assets	220,095,394	6,817,137	1,910,531,629	2,647,012	26,363,047,934	25,621,055,840	29,329,176,047	83,453,370,993
Liabilities:								
Accounts payable and accrued expens	es 210	708	77,038	_	66,386,024	4,887,810	93,727,796	165,079,586
Retirement benefits payable	4,413,919	110,160	17,253,857	217,505	337,238,435	184,105,304	284,798,925	828,138,105
Noncontributory group life insurance premiums payable	49,025	_	247,407	_	5,511,853	6,685,530	14,949,421	27,443,236
Administrative expense payable	51,417	1,701	149,958	1,557	6,102,345	2,036,967	10,037,943	18,381,888
Securities lending collateral and rebates payable	2,797,452	_	25,094,259	_	343,011,717	316,481,308	372,095,056	1,059,479,792
Total liabilities	7,312,023	112,569	42,822,519	219,062	758,250,374	514,196,919	775,609,141	2,098,522,607
Net position restricted for pensions	\$212,783,371	6,704,568	1,867,709,110	2,427,950	25,604,797,560	25,106,858,921	28,553,566,906	81,354,848,386

# **Combining Schedule of Changes in Fiduciary Net Position Information —** Fiduciary Funds — Select Pension Trust Funds Year ended June 30, 2015

	JRS	POPF	SPRS	CPFPF	TPAF	PFRS	PERS	Total
Additions:								
Contributions:								
Members:								
State	\$ 6,310,124	_	22,315,431	-	740,296,265	52,636,087	317,328,033	1,138,885,940
Local	-	-	-	-	-	334,355,554	487,904,202	822,259,756
Employers:								
State	17,031,026	-	38,527,297	-	807,246	70,820,878	225,505,410	352,691,857
Local	-	-	-	-	-	812,956,039	859,731,804	1,672,687,843
Non-employers	-	-	-	-	539,796,289	76,038,000	_	615,834,289
Employer specific	2,081,523	698,360	222,557	1,577,751	4,476,040	26,963,211	10,496,496	46,515,938
Total contributions	25,422,673	698,360	61,065,285	1,577,751	1,285,375,840	1,373,769,769	1,900,965,945	4,648,875,623
Investment income:								
Net increase (decrease) in fair value of investments	4,113,081	(452)	35,950,418	(270)	512,147,543	372,976,317	492,515,109	1,417,701,746
Interest	4,381,441	8,776	39,695,724	3,157	558,668,862	551,216,608	633,521,190	1,787,495,758
	8,494,522	8,324	75,646,142	2,887	1,070,816,405	924,192,925	1,126,036,299	3,205,197,504
Less investment expense	18,881	1,969	113,363	2,689	4,753,479	1,594,249	8,209,186	14,693,816
Net investment income	8,475,641	6,355	75,532,779	198	1,066,062,926	922,598,676	1,117,827,113	3,190,503,688
Total additions	33,898,314	704,715	136,598,064	1,577,949	2,351,438,766	2,296,368,445	3,018,793,058	7,839,379,311
Deductions:								
Benefits:								
Benefit Expense- Retirement Allowances	51,904,990	1,377,505	205,240,378	2,445,627	3,920,924,263	2,161,647,846	3,229,729,400	9,573,270,009
Non Contributory Group Insurance Expense	525,026	_	1,169,297	_	36,283,535	35,424,340	73,430,329	146,832,527
Refunds of contributions	_	_	83,950	_	57,795,789	8,392,111	137,886,336	204,158,186
Administrative and miscellaneous ex	penses 168,762	5,843	351,723	8,003	13,890,080	4,531,012	23,761,860	42,717,283
Total deductions	52,598,778	1,383,348	206,845,348	2,453,630	4,028,893,667	2,209,995,309	3,464,807,925	9,966,978,005
Change in net position	(18,700,464)	(678,633)	(70,247,284)	(875,681)	(1,677,454,901)	86,373,136	(446,014,867)	(2,127,598,694)
Net position restricted for pensions:								
Beginning of year	231,483,835	7,383,201	1,937,956,394	3,303,631	27,282,252,461	25,020,485,785	28,999,581,773	83,482,447,080
End of year	\$212,783,371	6,704,568	1,867,709,110	2,427,950	25,604,797,560	25,106,858,921	28,553,566,906	81,354,848,386

# **Combining Schedule of Fiduciary Net Position Information —** Fiduciary Funds — State Health Benefit Program Fund — State **June 30, 2015**

	Health Benefit Program Fund State	Prescription Drug Program Fund State	Total State Health Benefit Program Fund State
Assets:			
Cash and cash equivalents	\$ 969,688	94,926	1,064,614
Receivables:			
Contributions:			
Members	720,522	531,716	1,252,238
Employers	25,738,431	(161)	25,738,270
Other	81,716	572,206	653,922
Total receivables	26,540,669	1,103,761	27,644,430
Investments, at fair value:			
Cash Management Fund	77,448,627	28,584,730	106,033,357
Total investments	77,448,627	28,584,730	106,033,357
Total assets	104,958,984	29,783,417	134,742,401
Liabilities:			
Accounts payable and accrued expenses	222,150,614	33,413,375	255,563,989
Administrative expense payable	796,019	_	796,019
Total liabilities	 222,946,633	33,413,375	256,360,008
Net position:			
Restricted for other post-employment benefits	\$ (117,987,649)	(3,629,958)	(121,617,607)

# **Combining Schedule of Changes in Fiduciary Net Position Information —** Fiduciary Funds — State Health Benefit Program Fund — State Year ended June 30, 2015

	Health Benefit	Prescription Drug	Total State Health Benefit
	Program Fund State	Program Fund State	Program Fund State
Additions:			
Contributions:			
Members	\$ 272,735,794	119,322,578	392,058,372
Employers	1,434,627,398	490,506,828	1,925,134,226
Total contributions	1,707,363,192	609,829,406	2,317,192,598
Investment income:			
Net increase (decrease) in fair value of investments	2,929	(7,162)	(4,233)
Interest	122,048	69,913	191,961
Net investment income	124,977	62,751	187,728
Total additions	1,707,488,169	609,892,157	2,317,380,326
Deductions:			
Benefits	1,659,090,399	634,691,295	2,293,781,694
Administrative expenses	3,428,411	_	3,428,411
Total deductions	1,662,518,810	634,691,295	2,297,210,105
Change in net position	44,969,359	(24,799,138)	20,170,221
Net position restricted for other post-employment benefits:			
Beginning of year	 (162,957,008)	21,169,180	(141,787,828)
End of year	\$ (117,987,649)	(3,629,958)	(121,617,607)

# Combining Schedule of Fiduciary Net Position Information — Fiduciary Funds — State Health Benefit Program Fund — Local June 30, 2015

	Health Benefit Program Fund Local	Prescription Drug Program Fund Local	Total State Health Benefit Program Fund Local
Assets:			
Cash and cash equivalents	\$ 117,365	323,468	440,833
Receivables:			
Contributions:			
Members	735,003	406,171	1,141,174
Employers	70,533,247	12,189,507	82,722,754
Other	31,370	428,617	459,987
Total receivables	71,299,620	13,024,295	84,323,915
Investments, at fair value:			
Cash Management Fund	287,397,965	81,780,278	369,178,243
Total investments	287,397,965	81,780,278	369,178,243
Total assets	358,814,950	95,128,041	453,942,991
Liabilities:			
Accounts payable and accrued expenses	143,246,600	16,221,000	159,467,600
Administrative expense payable	388,457	_	388,457
Total liabilities	143,635,057	16,221,000	159,856,057
Net position:			
Restricted for other post-employment benefits	\$ 215,179,893	78,907,041	294,086,934

# **Combining Schedule of Changes in Fiduciary Net Position Information —** Fiduciary Funds — State Health Benefit Program Fund — Local Year ended June 30, 2015

	Health Benefit	Prescription Drug	Total State Health Benefit
	Program Fund Local	Program Fund Local	Program Fund Local
Additions:			
Contributions:			
Members	\$ 34,666,203	17,881,293	52,547,496
Employers	1,021,272,396	258,714,758	1,279,987,154
Total contributions	1,055,938,599	276,596,051	1,332,534,650
Investment income:			
Net increase in fair value of investments	(9,743)	(955)	(10,698)
Interest	465,804	89,721	555,525
Net investment income	456,061	88,766	544,827
Total additions	1,056,394,660	276,684,817	1,333,079,477
Deductions:			
Benefits	996,336,797	298,410,618	1,294,747,415
Administrative expenses	1,673,063	_	1,673,063
Total deductions	998,009,860	298,410,618	1,296,420,478
Change in net position	58,384,800	(21,725,801)	36,658,999
Net position restricted for other post-employment benefits:			
Beginning of year	 156,795,093	100,632,842	257,427,935
End of year	\$ 215,179,893	78,907,041	294,086,934

# **Combining Schedule of Fiduciary Net Position Information —** Fiduciary Funds — State Health Benefit Program Fund — Education **June 30, 2015**

			<b>Total State</b>
	<b>Health Benefit</b>	<b>Prescription Drug</b>	<b>Health Benefit</b>
	<b>Program Fund</b>	<b>Program Fund</b>	<b>Program Fund</b>
	Education	Education	Education
Assets:			
Cash and cash equivalents	\$ 298,345	885,395	1,183,740
Receivables:			
Contributions:			
Members	515,824	405,588	921,412
Employers	48,889,036	13,546,646	62,435,682
Other	51,483	920,867	972,350
Total receivables	49,456,343	14,873,101	64,329,444
Investments, at fair value:			
Cash Management Fund	359,058,659	38,983,722	398,042,381
Total investments	359,058,659	38,983,722	398,042,381
Total assets	408,813,347	54,742,218	463,555,565
Liabilities:			
Accounts payable and accrued expenses	280,056,546	37,691,995	317,748,541
Administrative expense payable	938,240	_	938,240
Total liabilities	280,994,786	37,691,995	318,686,781
Net position:	 		
Restricted for other post-employment benefits	\$ 127,818,561	17,050,223	144,868,784

## **Combining Schedule of Changes in Fiduciary Net Position Information —** Fiduciary Funds — State Health Benefit Program Fund — Education Year ended June 30, 2015

	Health Benefit Program Fund Education	Prescription Drug Program Fund Education	Total State Health Benefit Program Fund Education
Additions:			
Contributions:			
Members	\$ 31,175,956	21,701,842	52,877,798
Employers	2,136,174,603	530,240,777	2,666,415,380
Total contributions	2,167,350,559	551,942,619	2,719,293,178
Investment income:			
Net increase in fair value of investments	(11,081)	(1,432)	(12,513)
Interest	403,192	51,889	455,081
Net investment income	392,111	50,457	442,568
Total additions	2,167,742,670	551,993,076	2,719,735,746
Deductions:			
Benefits	2,105,320,572	596,997,710	2,702,318,282
Administrative expenses	4,040,954	_	4,040,954
Total deductions	2,109,361,526	596,997,710	2,706,359,236
Change in net position	58,381,144	(45,004,634)	13,376,510
Net position restricted for other post-employment benefits:			
Beginning of year	69,437,417	62,054,857	131,492,274
End of year	\$ 127,818,561	17,050,223	144,868,784

# **Combining Schedule of Balance sheet Information —** Fiduciary Funds — Agency Funds **June 30, 2015**

	Bei	Alternate nefit Program Fund	Pension Adjustment Fund	Dental Expense Program Fund	Total Agency Funds
Assets:					
Cash and cash equivalents	\$	528,538	560,467	11,207	1,100,212
Receivables:					
State related employer contributions		_	426,251	_	426,251
Other		34,362,245	641	1,424,253	35,787,139
Total receivables		34,362,245	426,892	1,424,253	36,213,390
Investments, at fair value:					
Cash Management Fund		1,171,987	1,838,470	41,039,074	44,049,531
Total investments		1,171,987	1,838,470	41,039,074	44,049,531
Total assets	\$	36,062,770	2,825,829	42,474,534	81,363,133
Liabilities:					
Accounts payable and accrued expenses	\$	35,887,485	_	42,148,134	78,035,619
Cash overdraft		_	_	326,400	326,400
Assets held for local contributing employers		_	2,350,663	_	2,350,663
Pension adjustment payroll payable		_	175,351	_	175,351
Due to State of New Jersey		175,285	42,185	_	217,470
Due to other funds			257,630	<u>-</u>	257,630
Total liabilities	\$	36,062,770	2,825,829	42,474,534	81,363,133

# **Combining Schedule of Changes in Fiduciary Net Position Information —** Fiduciary Funds — Agency Funds Year ended June 30, 2015

	Alternate Benefit Program Fund		Pension Adjustment Fund	Dental Expense Program Fund	Total Agency Funds
Additions:					
Contributions:					
Members	\$	879,142	_	94,826,539	95,705,681
Employers		184,029,617	2,081,933	37,308,360	223,419,910
Total contributions		184,908,759	2,081,933	132,134,899	319,125,591
Investment income:					
Net increase in fair value of investments		(356)	(77)	(1,463)	(1,896)
Interest		3,678	2,586	54,751	61,015
Total investment income		3,322	2,509	53,288	59,119
Total additions		184,912,081	2,084,442	132,188,187	319,184,710
Deductions:					
Benefits		184,720,028	2,361,868	129,245,526	316,327,422
Refunds of contributions		192,053	(277,426)	2,942,661	2,857,288
Total deductions		184,912,081	2,084,442	132,188,187	319,184,710
Changes in net position		_	_	_	_
Net position — beginning of year		_	_	_	_
Net position — end of year	\$	-	_	_	_

## **Combining Schedule of Balance sheet Information — Agency Fund — Dental Expense Program Fund June 30, 2015**

			Total Agency Fund — Dental Expense
	State	Local	Program Fund
Assets:			
Cash and cash equivalents	\$ _	11,207	11,207
Receivables:			
Other	1,391,268	32,985	1,424,253
Total receivables	1,391,268	32,985	1,424,253
Investments, at fair value:			
Cash Management Fund	29,387,552	11,651,522	41,039,074
Total investments	29,387,552	11,651,522	41,039,074
Total assets	\$ 30,778,820	11,695,714	42,474,534
Liabilities:			
Accounts payable and accrued expenses	\$ 30,452,420	11,695,714	42,148,134
Cash Overdraft	326,400	_	326,400
Total liabilities	\$ 30,778,820	11,695,714	42,474,534

# Combining Schedule of Changes in Fiduciary Net Position Information — Agency Fund — Dental Expense Program Fund Year ended June 30, 2015

	State	Local	Total Agency Fund — Dental Expense Program Fund
Additions:			
Contributions:			
Members	\$ 52,965,864	41,860,675	94,826,539
Employers	32,337,236	4,971,124	37,308,360
Total contributions	85,303,100	46,831,799	132,134,899
Investment income:			
Net increase in fair value of investments	(1,390)	(73)	(1,463)
Interest	38,655	16,096	54,751
Total investment income	37,265	16,023	53,288
Total additions	85,340,365	46,847,822	132,188,187
Deductions:			
Benefits	82,541,145	46,704,381	129,245,526
Refunds of contributions and to the general fund	2,799,220	143,441	2,942,661
Total deductions	85,340,365	46,847,822	132,188,187
Changes in net position	 _	_	_
Net position — beginning of year	_	_	_
Net position — end of year	\$ 		_

# Schedule of Changes in Assets and Liabilities Information — Agency Fund — Alternate Benefit Program Fund June 30, 2015

	Balance				Balance
	Ju	ne 30, 2014	Additions	Deductions	June 30, 2015
Assets:					
Cash and cash equivalents	\$	1,089,144	163,239,013	163,799,619	528,538
Receivables:					
Other		31,946,931	34,362,245	31,946,931	34,362,245
Investments, at fair value:					
Cash Management Fund		3,564,683	184,304,215	186,696,911	1,171,987
Total assets	\$	36,600,758	381,905,473	382,443,461	36,062,770
Liabilities:					
Accounts payable and accrued expenses	\$	36,596,836	36,515,294	37,224,645	35,887,485
Due to State of New Jersey		3,922	175,285	3,922	175,285
Total liabilities	\$	36,600,758	36,690,579	37,228,567	36,062,770

# Schedule of Changes in Assets and Liabilities Information — **Agency Fund — Pension Adjustment Fund June 30, 2015**

		Balance			Balance
	Ju	ne 30, 2014	Additions	Deductions	June 30, 2015
Assets:					
Cash and cash equivalents	\$	634,586	1,506,789	1,580,908	560,467
Receivables:					
State related employer contributions		546,046	1,764,012	1,883,807	426,251
Other		2,449	9,421	11,229	641
Investments, at fair value:					
Cash Management Fund		1,616,653	2,301,020	2,079,203	1,838,470
Total assets	\$	2,799,734	5,581,242	5,555,147	2,825,829
Liabilities:					
Assets held for local contributing employers	\$	2,597,165	120	246,622	2,350,663
Pension adjustment payroll payable		206,027	2,306,251	2,336,927	175,351
Due to State of New Jersey		73,109	42,185	73,109	42,185
Due to other funds		(76,567)	1,599,946	1,265,749	257,630
Total liabilities	\$	2,799,734	3,948,502	3,922,407	2,825,829

 $See\ accompanying\ independent\ auditors'\ report.$ 

# Schedule of Changes in Assets and Liabilities Information — Agency Fund — Dental Expense Program Fund — Total **June 30, 2015**

		Balance			Balance
	Ju	ne 30, 2014	Additions	<b>Deductions</b>	June 30, 2015
Assets:					
Cash and cash equivalents	\$	1,047,815	35,639,132	36,675,740	11,207
Receivables:					
Other		3,606,153	138,530,206	140,712,106	1,424,253
Investments, at fair value:					
Cash Management Fund		34,012,522	187,425,286	180,398,734	41,039,074
Total assets	\$	38,666,490	361,594,624	357,786,580	42,474,534
Liabilities:					
Accounts payable and accrued expenses	\$	38,666,490	42,905,570	39,423,926	42,148,134
Cash overdraft		_	326,400	_	326,400
Total liabilities	\$	38,666,490	43,231,970	39,423,926	42,474,534

See accompanying independent auditors' report.

# Schedule of Changes in Assets and Liabilities Information — Agency Fund — Dental Expense Program Fund — State **June 30, 2015**

		Balance			Balance
	Ju	ne 30, 2014	Additions	Deductions	June 30, 2015
Assets:					
Cash and cash equivalents	\$	1,006,442	28,462,398	29,468,840	_
Receivables:					
Other		3,596,468	91,909,220	94,114,420	1,391,268
Investments, at fair value:					
Cash Management Fund		22,855,306	135,043,058	128,510,812	29,387,552
Total assets	\$	27,458,216	255,414,676	252,094,072	30,778,820
Liabilities:					
Accounts payable and accrued expenses	\$	27,458,216	31,425,345	28,431,141	30,452,420
Cash overdraft		_	326,400	_	326,400
Total liabilities	\$	27,458,216	31,751,745	28,431,141	30,778,820

 $See\ accompanying\ independent\ auditors'\ report.$ 

# Schedule of Changes in Assets and Liabilities Information — Agency Fund — Dental Expense Program Fund — Local **June 30, 2015**

	Ju	Balance ne 30, 2014	Additions	Deductions	Balance June 30, 2015
Assets:					
Cash and cash equivalents	\$	41,373	7,176,734	7,206,900	11,207
Receivables:					
Other		9,685	46,620,986	46,597,686	32,985
Investments, at fair value:					
Cash Management Fund		11,157,216	52,382,228	51,887,922	11,651,522
Total assets	\$	11,208,274	106,179,948	105,692,508	11,695,714
Liabilities:					
Accounts payable and accrued expenses	\$	11,208,274	11,480,225	10,992,785	11,695,714
Total liabilities	\$	11,208,274	11,480,225	10,992,785	11,695,714

See accompanying independent auditors' report.

# INVESTMENT SECTION

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**CHRIS CHRISTIE** Governor

KIM GUADAGNO 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

FORD M. SCUDDER Acting State Treasurer

CHRIS MCDONOUGH Director

June 30, 2015

The Division of Investment ("Division"), under the jurisdiction of the State Investment Council (the "Council"), 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, the Police and Firemen's Retirement System, the Prison Officers' Pension Fund, the Public Employees' Retirement System, the State Police Retirement System, 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 Council to formulate investment procedures and policies to be followed by the Director. The statute vests investment authority in the Director, who is appointed by the State Treasurer from candidates nominated by the Council. New and amended regulations adopted by the Council after public comments are filed with the Office of Administrative Law and reported in the *New* Jersey Register.

The Council is comprised of 16 members, appointed to fixed terms. Nine members are appointed by the Governor for staggered five-year terms, and are drawn traditionally from the investment community. Eight of these nine hold appointments subject to the advice and consent of the Senate, and one appointee is selected by the Governor from nominees submitted jointly by the President of the Senate and Speaker of the Assembly. Two members are appointed by the Governor for five-year terms from nominees submitted by the New Jersey State ALF-CIO, with at least one appointed member being a member of a union representing police officers or firefighters. Two members are appointed by the Governor for three-year terms from nominees submitted by the New Jersey Education Association and the State Troopers Fraternal Organization. Three members are designated to the Council for three-year terms by the respective pension system's board of trustees for the Public Employees' Retirement System, the Police and Firemen's Pension Fund, and the Teachers' Pension and Annuity Trust. 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 (P.L. 1997, c.26). 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.

> **Christopher McDonough Director, Division of Investment**

Mylley

# **State Investment Council Policies Regarding the Investment of Pension Fund Assets** (at June 30, 2015)

- Investment of pension assets is governed by the State Investment Council Regulations (N.J.A.C. 17:16) (the "Regulations") as well as an annual asset allocation plan approved the State Investment 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 investments is permitted in securities issued by the U.S. Government and designated agencies.
- Investment in global debt obligations, non-convertible preferred stocks, global diversified credit investment, 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 and 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 ensure that the portfolio is adequately diversified and that competitive market pricing is obtained.
- Investments in alternative investments are limited to no more than 38% of the portfolio in the aggregate, with individual category limitations for private equity (12%), real estate (9%), real assets (7%), and hedge funds (15%).

### **Proxy Voting**

- The Proxy Voting Policy summerizes guidelines for addressing key proxy issues. Business judgement 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.

## **Pension Fund Rate of Return**

		Annua	alized
	Fiscal 2015	3 Years	5 Years
Domestic Equity with Cash, Hedges, Miscellaneous	7.48%	17.91%	17.60%
S&P 1500 Composite	7.31	17.47	17.43
Equity Only (Ex Cash)	7.48	18.26	17.96
Domestic Fixed Income with Cash, Hedges, Miscellaneous	1.80	3.69	6.49
Fixed Income Blended Benchmark	0.52	2.90	5.55
Investment Grade	1.53	2.17	5.66
Investment Grade Blended Benchmark	0.83	1.60	6.16
High Yield	2.88	10.69	11.43
Barclays High Yield Index	(0.40)	6.81	8.61
International Equity with Cash, Hedges, Miscellaneous	(4.56)	8.44	5.97
MSCI All World Country Index (ex US)	(5.26)	9.44	7.76
Custom International Equity Markets Index	(4.54)	8.80	_
Developed Markets Equity	(3.81)	11.79	_
Custom International Equity Developed Markets Index	(4.69)	11.44	_
Emerging Markets Equity	(7.11)	2.78	_
Custom International Equity Emerging Markets Benchmark	(4.54)	4.13	_
Alternative Investments	8.20	11.53	10.66
Hedge Funds	4.21	9.05	7.21
HFRI Fund of Funds Composite (One month lag)	6.10	6.52	4.14
Private Equity	17.71	18.84	16.45
Cambridge Associates (One quarter lag)	10.55	14.42	15.25
Real Estate	12.92	13.43	13.19
Real Estate Index (One quarter lag)	12.40	11.95	12.91
Real Assets/Commodities	(10.47)	(0.88)	2.47
Bloomberg Commodity Index Total Return	(23.71)	(8.76)	(3.91)
Police and Fire Mortgage Program	2.44	2.45	3.42
Plan Cash <sup>1</sup>	1.11	0.56	0.43
US Treasury Bills (3 month)	0.02	0.05	0.06
Total Pension Fund	4.14	10.71	10.38
Total Fund Benchmark	2.93	9.76	9.20

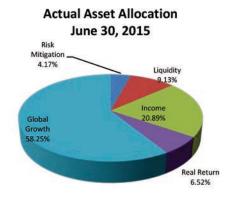
<sup>&</sup>lt;sup>1</sup> Plan Cash comprises the seven plan cash accounts.

# Pension Fund Asset Allocation — June 30, 2015

	Actual Allocation %	Target %	Difference %	Allocation \$
Absolute Return/Risk Mitigation	4.17%	4.00%	0.17%	3,296.02
Risk Mitigation	4.17%	4.00%	0.17%	3,296.02
Cash Equivalents (1)	4.82%	5.00%	(0.18%)	3,804.60
Short Term Cash Equivalents	1.01%	0.00%	1.01%	796.05
TIPS	2.14%	1.50%	0.64%	1,691.02
US Treasuries	1.17%	1.75%	(0.58%)	924.82
Total Liquidity	9.13%	8.25%	0.88%	7,216.49
Investment Grade Credit	9.67%	10.00%	(0.33%)	7,640.29
Public High Yield	2.08%	2.00%	0.08%	1,646.08
Global Diversified Credit	2.92%	3.50%	(0.58%)	2,304.49
Credit Oriented Hedge Funds	3.64%	4.00%	(0.36%)	2,872.83
Debt Related Private Equity	0.98%	1.00%	(0.02%)	774.56
Debt Related Real Estate	0.51%	1.00%	(0.49%)	405.02
Police and Fire Mortgage Program	1.09%	1.10%	(0.01%)	860.93
Total Income	20.89%	22.60%	(1.71%)	16,504.20
Commodities	0.76%	1.00%	(0.24%)	598.06
Private Real Assets	1.57%	2.00%	(0.43%)	1,242.03
Equity Related Real Estate	4.19%	4.25%	(0.06%)	3,308.59
Total Real Return	6.52%	7.25%	(0.73%)	5,148.68
US Equity	28.25%	27.25%	1.00%	22,318.31
Non-US Developed Markets Equity	11.46%	12.00%	(0.54%)	9,051.22
Emerging Markets Equity	5.62%	6.40%	(0.78%)	4,443.45
Equity Oriented Hedge Funds	4.44%	4.00%	0.44%	3,506.48
Buyouts/Venture Capital	8.48%	8.25%	0.23%	6,698.55
Total Global Growth	58.25%	57.90%	0.35%	46,018.01
Opportunistic Private Equity	0.26%	0.00%	0.26%	203.31
Other Cash and Receivables	0.78%	0.00%	0.78%	614.14
Total Pension Fund	100.00%	100.00%	0.00%	79,000.85

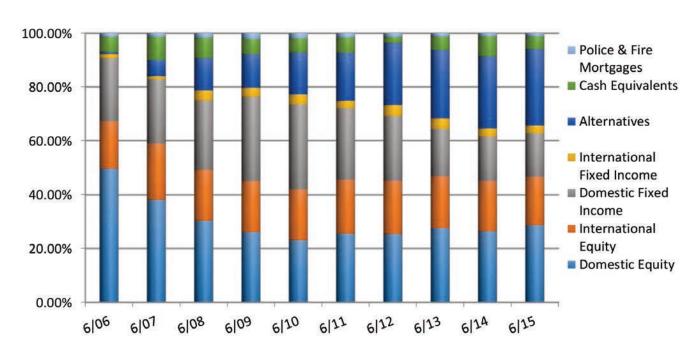
<sup>(1)</sup> The cash aggregate comprises the two common fund cash accounts, in addition to the seven plan cash accounts.

Totals may not equal sum of components due to rounding.

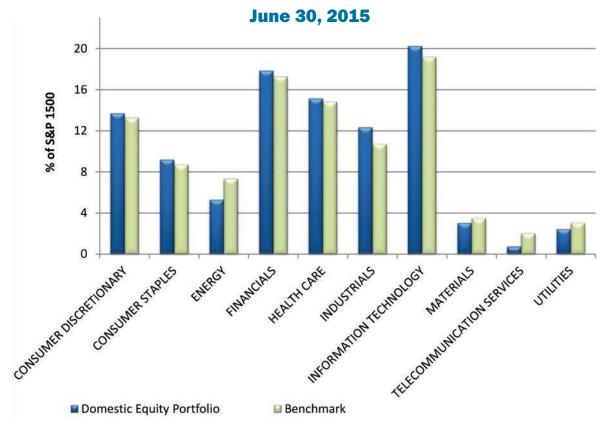




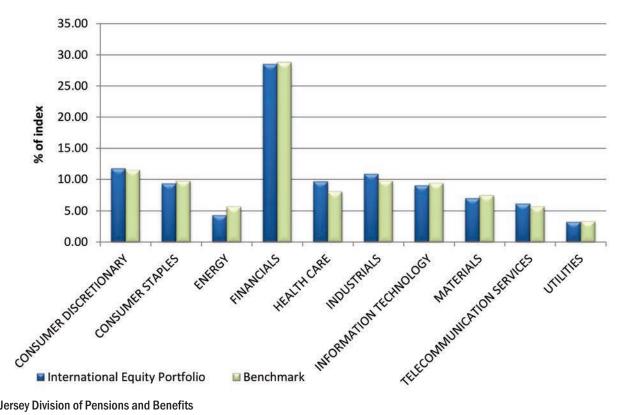
# **Pension Fund Composite Asset Allocation History**



**U.S. Equities Market — Portfolio Sector Weightings** 



**International Equities Markets — Portfolio Sector Weightings June 30, 2015** 



# **List of Largest Assets Held by the Pension Fund Largest Domestic Equity Holdings June 30, 2015**

Shares	Security Name	Fair Value (USD)
7,600,000	Apple Inc.	953,230,000
11,500,000	Microsoft Corp.	507,725,000
4,300,000	Walt Disney Co.	490,802,000
6,772,000	Wells Fargo & Co.	380,857,280
681,849	Google Inc.	354,909,223
5,063,000	JPMorgan Chase & Co.	343,068,880
3,235,000	Johnson & Johnson	315,283,100
11,700,000	General Electric Co.	310,869,000
5,205,000	Merk & Co. Inc.	296,320,650
8,602,236	Pfizer Inc.	288,432,973

# **Largest Domestic Fixed Income Holdings June 30, 2015**

Par	Security Name	Coupon	Due	Fair Value (USD)
614,076,000	US Treasury TIPS	0.125%	4/15/2018	623,718,835
435,608,000	US Treasury TIPS	0.125%	1/15/2023	427,916,905
368,656,900	US Treasury TIPS	0.125%	7/15/2024	359,526,743
275,000,000	US Treasury Notes	1.250%	1/31/2020	271,304,550
221,709,550	US Treasury TIPS	1.125%	1/15/2021	234,509,729
175,000,000	US Treasury Notes	1.875%	5/31/2022	173,058,550
150,000,000	US Treasury Notes	2.000%	6/30/2022	150,632,850
150,000,000	US Treasury Notes	1.375%	2/28/2019	150,527,400
150,000,000	Exxon Mobil Corp.	0.921%	3/15/2017	150,065,700
125,000,000	Oracle Corp.	2.950%	5/15/2025	120,302,500

# **List of Largest Assets Held Largest International Equity Holdings June 30, 2015**

Shares	Security Name	Fair Value (USD)
12,050,000	Vanguard FTSE Emerging Markets	492,604,000
8,800,000	IShares MSCI Emerging Markets	348,656,000
4,100,000	IShares MSCI EAFE ETF	260,309,000
3,270,000	Wisdomtree Japan Hedged Equity	187,044,000
3,805,000	IShares Core MSCI Emerging Markets	182,792,200
2,850,000	Wisdomtree Europe Hedged Equity	175,531,500
1,597,945	Novartis AG	157,563,139
531,548	Roche Holding AG	149,018,860
1,719,936	Nestle SA	124,226,291
2,000,000	IShares MSCI Emerging Markets	115,360,000

# **Largest International Fixed Income Holdings June 30, 2015**

Par	Security Name	Coupon	Due	Fair Value (USD)
150,000,000	Province of British Columbia	1.875%	5/21/2020	149,525,400
69,000,000	Hydro Quebec	8.500%	12/1/2029	104,101,266
100,000,000	Province of British Columbia	2.650%	9/22/2021	102,867,600
60,000,000	Province of Quebec	7.500%	9/15/2029	86,816,880
60,000,000	Province of Manitoba	9.625%	12/1/2018	75,178,020
72,000,000	Province of Manitoba	2.100%	9/6/2022	70,440,840
67,000,000	Province of Ontario	2.450%	6/29/2022	67,057,218
63,000,000	Province of New Brunswick	2.750%	6/15/2018	65,670,696
65,000,000	Province of British Columbia	2.000%	10/23/2022	63,667,305
45,000,000	Province of Saskatchewan	8.500%	7/15/2022	61,219,620

# **Fiscal Year 2015 Commissions on Global Securities**

		Total	Commissions
Broker	Shares (2)	Commissions (2)	per Share
Abel/Noser Corp.	1,500,000	\$75,000	\$0.050
ABG Sundal Collier Inc.	980,221	8,728	0.009
Aqua Securities, L.P.	2,148,024	21,480	0.010
B. Riley & Co., LLC	1,326,500	39,795	0.030
Barclays Capital Inc.	44,764,072	809,171	0.018
BMO Capital Markets Corp.	19,381,960	192,970	0.010
Buckingham Research Group Inc. (The)	2,699,500	81,735	0.030
C.L. King & Associates, Inc.	18,918,672	188,487	0.010
Capital Institutional Services, Inc.	27,364,835	1,368,242	0.050
CF Global Trading, LLC	20,299,337	72,520	0.004
Citigroup Global Markets, Inc.	70,940,712	596,177	0.008
CLSA Americas, LLC	6,934,050	189,985	0.027
Cowen and Company, LLC	9,613,300	288,399	0.030
Craig-Hallum Capital Group LLC	9,495,650	284,870	0.030
Credit Suisse Securities LLC	23,742,150	1,004,387	0.042
DBS Vickers Securities Inc.	17,192,224	62,236	0.004
Deutsche Bank AG	7,271,548	218,146	0.030
FBN Securities, Inc.	21,414,000	138,780	0.006
FBR Capital Markets & Co.	1,256,000	43,865	0.035
Fidenetiis Equities S.V., S.A.	218,890	1,949	0.009
Goldman, Sachs & Co.	8,322,400	211,893	0.025
Gordon, Haskett & Co.	11,701,100	585,055	0.050
Instinet, LLC	70,152,491	1,831,545	0.026
International Strategy & Investment Group	5,351,363	160,541	0.030
ITG Inc.	29,910,782	156,673	0.005
J.P. Morgan Securities LLC	48,343,729	1,019,846	0.021
Janney Montgomery Scott LLC	2,964,350	91,331	0.031
Jefferies LLC	9,909,529	146,497	0.015
JMP Securities LLC	1,250,850	37,526	0.030
KeyBanc Capital Markets Inc.	4,321,142	136,084	0.031
Leerink Partners LLC			
Macquarie Capital Inc.	3,821,900	121,657	0.032
•	3,826,000	114,780	0.030
Meridian Equity Partners, Inc.	26,484,785	255,698	0.010
Merrill Lynch, Pierce, Fenner & Smith, Inc.	10,220,790	306,624	0.030
Morgan Stanley & Co. LLC	102,119,736	627,719	0.006
Oppenheimer & Co. Inc.	4,596,250	148,070	0.032
Piper Jaffray & Co.	1,067,850	32,036	0.030
Raymond James & Associates, Inc.	3,239,480	104,174	0.032
Sanford C. Bernstein & Co., LLC	22,974,424	198,603	0.009
Scotia Capital Inc.	1,412,000	25,740	0.018
Sidoti & Company, LLC	2,050,324	65,430	0.032
Sterne, Agee & Leach, Inc.	1,874,150	60,316	0.032
Stifel, Nicolaus & Company, Inc.	6,881,348	211,695	0.031
SunTrust Robinson Humphrey, Inc.	1,848,445	58,668	0.032
Themis Trading LLC	26,574,306	261,548	0.010

# Fiscal Year 2015 Commissions on Global Securities, continued

Broker	Shares (1)	Total Commissions (1)	Commissions per Share
UBS Securities LLC	15,816,616	\$330,304	\$0.021
WallachBeth Capital, LLC	40,685,300	313,189	0.008
Wells Fargo Securities LLC	6,142,400	184,272	0.030
William Blair & Company, LLC	3,452,450	109,929	0.032
Williams Capital Group, L.P.	18,280,140	177,051	0.010
	803,058,075	\$13,771,413	\$0.017
Trades executed through advisers with various brokers	1,054,364,629	\$3,516,763	\$0.003

### Note:

# Schedule of Fees Year ending June 30, 2015

		Pension Fund			
		Net Assets			
(000's)	u	nder Management	Fees	Basis Points	
Investment Advisers' fees:					
Fixed Income advisers	\$	1,322,015	\$	5,344	
Emerging Market advisers		3,014,101		21,394	
	\$	4,336,117		26,738	61.663
Alternative investment, opportunistic and global diversified credit funds	\$	24,617,827		373,028	151.528
Other investment service fees:					
Custodian		_		437	
Security Lending Fees		_		2,122	
Investment consultants		_		2,227	
				4,786	
Total	\$	79,000,854	\$	404,552	51.209

<sup>&</sup>lt;sup>(1)</sup> Includes commissions for all funds under Division of Investment management

<sup>(2)</sup> Excludes \$456,421 in commissions related to options on approximately 53.3 million shares and \$37,575 in commissions paid on futures.

# **ACTUARIAL SECTION**

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### STATE OF NEW JERSEY **DIVISION OF PENSIONS AND BENEFITS** PUBLIC EMPLOYEES' RETIREMENT SYSTEM

### ACTUARIAL INFORMATION



June 29, 2016

The Board of Trustees Public Employees' Retirement System of New Jersey

**Re: Actuary's Certification Letter** 

### **Aaron Shapiro**

Principal, Consulting Actuary

Xerox HR Services Buck Consultants, LLC 500 Plaza Drive Secaucus, N.J. 07096-1533

aaron.shapiro@xerox.com tel 201 902 2706 fax 201.553.6402

### Members of the Board:

An actuarial valuation of the Public Employees' Retirement System of New Jersey ("PERS") is performed annually to measure the ongoing costs of the System (with required contributions determined separately for the State and Local employers) and the progress towards the funding goals of the System over time. In general, the financial goals of the PERS are a pattern of contributions, which is sufficient to cover the normal cost of the System plus the contribution towards the unfunded accrued liability.

In accordance with the New Jersey statutes, employers are required to make two contributions to the System, a normal contribution and an accrued liability contribution. The normal contribution for basic allowances is defined under the Projected Unit Credit funding method as the present value of the benefits accruing during the current year. Prior to the July 1, 2010 valuation, the unfunded accrued liability contribution for basic allowances and cost of living adjustments (COLAs) was determined as a level percentage of pay required to amortize the unfunded accrued liability over 30 years in annual payments increasing by 4% per year. The funding reform provisions of Chapter 78, P.L. 2011 changed the methodology used to amortize the unfunded accrued liability. 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.

The valuation reflects the reduction in the fiscal year 2014 recommended State Pension contribution from \$993,064,820 to \$141,154,573. In addition, the valuation also reflects a reduction in the fiscal year 2015 State Pension contribution from \$1,058,157,699 to \$128,665,970. This amount reflects the State's planned fiscal year 2015 contribution of \$138,151,208, the recommended employer normal cost, discounted to the valuation date. This amount may be subject to change per the requirements of the State's fiscal year 2015 spending plan.

A State contribution of \$1,182,038,756 is recommended for the fiscal year beginning July 1, 2015. This amount is comprised of an unfunded accrued liability payment of \$1,038,473,627 plus a normal contribution of \$143,565,129. This amount excludes the Worker Compensation Judges Part contribution of \$678,348, which is payable by fund transfer from the Second Injury Fund and the estimated Non-Contributory Group Insurance Premium of \$34,616,000. This amount may be subject to change per the requirements of the State's fiscal year 2016 spending plan.

The valuation again reflects the provisions of Chapter 42, P.L. 2002, which allowed Local employers to issue refunding bonds to retire the unfunded accrued liability due to certain early retirement incentive programs.

The valuation reflects Chapter 19, P.L. 2009, which allowed the State Treasurer to reduce Local employers' normal and accrued liability contributions to 50% of the amount certified for the State fiscal year 2009. In addition, certain Local employers who were eligible under Chapter 19, P.L. 2009 to defer 50% of their State fiscal year 2009 pension contribution but did not were permitted to defer 50% of their State fiscal year 2010 recommended pension contribution. This 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 provides that a Local employer may pay 100% of the recommended contributions for State fiscal years 2009 and 2010. Such an employer will be credited with the full payments and any such amounts will not be included in their unfunded liability.

The underlying demographic data is maintained and provided by the New Jersey Division of Pensions and Benefits. The data is analyzed by Buck Consultants, for internal completeness and consistency and compared with the prior valuation data to again ensure consistency.

### **ACTUARIAL INFORMATION**

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
PUBLIC EMPLOYEES' RETIREMENT SYSTEM

As required under Chapter 84, P.L. 1954, an actuarial investigation of the demographic experience of the members and beneficiaries of PERS is made once in every three-year period. The contributions for the fiscal year beginning July 1, 2014, were based on the actuarial assumptions that were determined from the July 1, 2008 to June 30, 2011 Experience Study and approved by the Board of Trustees at the September 19, 2012 Board meeting.

The valuation reflects the economic assumptions which include a rate of investment return of 7.90% per annum. Additionally, the current salary increase assumption projects future salary increases that are 1.00% per annum higher for fiscal years ending 2022 and thereafter. These assumptions will remain in effect for valuation purposes until such time the Board or the Treasurer recommends revised economic assumptions.

The valuation cost method used is the projected unit credit method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains and losses are recognized in future accrued liability contributions. The asset valuation method used was a five-year average of market values with write-up. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of the potential range of future results is beyond the scope of this valuation.

Use of this report for any other purpose or by anyone other than the Board or staff of the State of New Jersey's Division of Pensions and Benefits may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, or inapplicability of the report for that purpose. You should ask Buck to review any statement you wish to make on the results contained in this report. Buck will accept no liability for any such statement made without prior review by Buck.

The actuarial assumptions and methods used by the Public Employees' Retirement System for financial reporting meet the requirements set forth in Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68. Information necessary to comply with the reporting requirements of GASB Statement Nos. 67 and No. 68 were provided in separate Actuarial Reports, which are available on the Division of Pensions and Benefits web site. Please refer to the separate Actuarial Reports for supplementary information documentation and support for the actuarial analysis and information presented herein.

In my opinion, the attached schedules of valuation results fairly represent the status of the PERS and present an accurate view of historical data. The underlying assumptions and methods are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the System.

The following supporting schedules in the Actuarial Section were prepared by Buck Consultants:

- · Summary of Actuarial Assumptions and Methods
- . Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls
- · Schedule of Active Member Valuation Data

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- Solvency Test
- · Analysis of Past Financial Experience Reconciliation of Employer Contribution Rates
- Brief Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes

In addition, Buck Consultants prepared the "Schedule of Funding Progress" and the "Schedule of Employer Contributions" in the Financial Section. The Schedule of Funding Progress and the Schedule of Employer Contributions are provided for informational purposes only since the reporting requirements of Statements No. 67 and No. 68 will be effective as of the June 30, 2014 and June 30, 2015 reporting dates, respectively.

This report was prepared under my supervision. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Academy's qualification Standards to issue this Statement of Actuarial Opinion. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and I am available to answer questions concerning it.

Respectfully submitted,

Aaron Shapiro, FSA, EA, MAAA

# **Summary of Actuarial Assumptions and Methods**

Chapter 84, P.L. 1954, provides that once in every three-year period the actuary shall examine in detail the demographic experience of the members and beneficiaries of the PERS to assure that the tables used for determining expected liabilities are consistent with recent experience.

The demographic assumptions used for the July 1, 2014 actuarial valuation of the PERS were based on the results of the experience study, which covered the period from July 1, 2008, to June 30, 2011, which were approved by the Board of Trustees, and the revised economic assumptions, which were established for the July 1, 2012 valuation.

An outline of the actuarial assumptions and methods used for the July 1, 2014 valuation is as follows:

Valuation Interest Rate: 7.90% per annum, compounded annually.

**Employee Contribution Interest Rate:** 7.90% per annum.

COLA: No future COLA is assumed.

Compensation Limit Increase: 401(a)(17) Limit - 3.00% per annum, Social Security Wage Base - 4.00% per annum.

Separations from Service and Salary Increases: Representative values of the assumed annual rates of separation and annual rates of salary increases are as follows:

		Annual Rate of										
	Select Withdrawal							Ultimate Withdrawal¹				
	1st Year		2nd Year		3rd Year		Prior to Eligibility For Benefit		After Eligibility For Benefit			
Age	State	Local	State	Local	State	Local	State	Local	State	Local		
25	28.90%	32.15%	13.53%	15.12%	9.52%	12.19%	4.69%	6.31%	_	_		
30	28.90	31.07	13.53	14.67	9.52	11.10	3.82	6.11	_	0.03%		
35	20.91	26.81	10.83	11.74	7.99	8.28	2.86	3.80	0.05%	0.04		
40	17.32	25.64	8.86	10.52	6.37	7.62	1.80	2.77	0.05	0.06		
45	16.33	24.81	8.26	10.08	5.79	7.14	1.22	2.46	0.24	0.19		
50	16.33	22.71	7.65	9.58	5.21	6.60	0.90	1.85	1.10	0.75		
55	16.33	22.37	7.65	9.40	5.21	6.26	0.88	1.52	1.50	0.90		

The rates of withdrawal prior to eligibility for a benefit assume a refund of contributions. The rates assumed for members withdrawing with a benefit are the sum of the rates of withdrawal after eligibility for a benefit and those prior to eligibility.

# **Summary of Actuarial Assumptions and Methods, continued**

					Annual	Rate of				
	Ordinary Death <sup>2</sup>				Accidental Death			nary bility	Accid Disa	ental bility
	Sta	ate	Lo	cal						
Age	Male	Female	Male	Female	State	Local	State	Local	State	Local
25	0.04%	0.02%	0.04%	0.02%	0.001%	0.001%	0.01%	_	0.001%	0.002%
30	0.04	0.02	0.04	0.02	0.001	0.001	0.10	0.07%	0.003	0.004
35	0.06	0.03	0.06	0.02	0.001	0.001	0.24	0.22	0.009	0.004
40	0.09	0.05	0.10	0.04	0.001	0.001	0.34	0.30	0.017	0.009
45	0.12	0.07	0.13	0.06	0.001	0.001	0.51	0.36	0.019	0.013
50	0.17	0.11	0.19	0.09	0.001	0.001	0.58	0.51	0.029	0.016
55	0.25	0.17	0.26	0.14	0.001	0.001	0.70	0.69	0.039	0.022
60	0.36	0.25	0.40	0.21	0.001	0.001	1.23	0.89	0.041	0.025
65	0.59	0.39	0.65	0.33	0.001	0.001	1.49	1.10	0.061	0.027
69	0.81	0.54	0.86	0.47	0.001	0.001	1.77	1.31	0.062	0.029

<sup>&</sup>lt;sup>2</sup> RP-2000 Employee Pre-retirement Mortality Table for male and female active participants. For State, mortality tables are set back 3 years for males and 5 years for females. For Employees of Local employers, mortality tables are set back 2 years for males and 7 years for females. In addition, the tables provide for future improvements in mortality from the base year of 2012 using a generational approach based on Projection Scale AA. Rates shown above are unadjusted for Projection Scale AA.

	Annual Rate of								
	Service R	etirement	Salary Increases						
Age	State	Local	FY2012 to FY2021	FY2022 and Thereafter					
25	-	_	4.40%	5.40%					
30	-	-	4.15	5.15					
35	-	-	3.90	4.90					
40	-	-	3.65	4.65					
45	-	-	3.40	4.40					
50	-	-	3.15	4.15					
55	17.50%	11.70%	2.90	3.90					
60	9.00	7.80	2.65	3.65					
65	18.00	16.54	2.15	3.15					
69	15.00	11.55	2.15	3.15					

# **Summary of Actuarial Assumptions and Methods, continued**

### Prosecutors Part (Chapter 366, P.L. 2001)

This legislation introduced special retirement eligibility for certain benefits. The valuation used the following annual rates of service retirement:

		Annual Rates of Retirement									
	Less than	20 Years		21 to 24 Years	25 or Mo	re Years					
Age	State	Local	20 Years		State	Local					
40	0.00%	0.00%	2.50%	0.00%	23.10%	15.40%					
45	0.00	0.00	2.50	0.00	23.10	15.40					
50	0.00	0.00	3.75	0.00	23.10	15.40					
55	2.59	3.06	5.00	0.00	26.22	17.48					
60	2.63	3.06	5.00	0.00	34.17	22.78					
65	2.63	3.06	37.50	0.00	100.00	100.00					
69	2.63	3.06	37.50	0.00	100.00	100.00					

### **Deaths after Retirement**

The RP-2000 Combined Healthy Male and Female Mortality Tables (set back 1 year for males and females) for service retirement and beneficiaries of former members. The RP-2000 Disabled Mortality Tables (set back 3 years for males and set back 1 year for females) are used to value disabled retirees. In addition, the tables for service retirement and beneficiaries of former members provide for future improvements in mortality from the base year of 2012 using a generational approach based on Projection Scale AA. Illustrative rates of mortality unadjusted for Projection Scale AA are shown below:

	Service Retirements			Disability R	Retirements
Age	Men	Women	Age	Men	Women
55	0.32%	0.24%	35	2.26%	0.75%
60	0.60	0.44	40	2.26	0.75
65	1.13	0.86	45	2.26	0.75
70	1.98	1.49	50	2.51	1.06
75	3.39	2.55	55	3.16	1.55
80	5.79	4.15	60	3.80	2.08
85	9.98	6.95	65	4.50	2.66

### ACTUARIAL INFORMATION

STATE OF NEW JERSEY **DIVISION OF PENSIONS AND BENEFITS** PUBLIC EMPLOYEES' RETIREMENT SYSTEM

# **Summary of Actuarial Assumptions and Methods, continued**

### **Marriage**

Husbands are assumed to be three years older than wives. Among the active population, 100% of participants are assumed to be married.

### **Valuation Method**

Projected Unit Credit Method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains or losses are recognized in future accrued liability contributions. 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.

### **Asset Valuation Method**

A five year average of market values with write-up was used. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis.

### **Changes in Actuarial Assumptions and Methods**

The following are changes to the actuarial assumptions and methods from those used in the prior valuation:

- 1. 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. The compensation limit for the 2014 valuation is \$260,000. Effective with the July 1, 2014 valuation, the compensation limit is assumed to increase annually at a rate of 3% per annum.
- 2. Chapter 103, P.L. 2007, provided that for members hired on or after July 1, 2007, 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. The maximum contribution base for the 2014 valuation is \$117,000. Effective with the July 1, 2014 valuation, the maximum contribution base is assumed to increase annually at a rate of 4% per annum.
- 3. The employer receivable contribution included in the Market Value of Assets and the Actuarial Value of Assets has been discounted at the valuation rate of 7.90% from the expected payable date of June 30, 2015, to the valuation date.

# **Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls**

### **State**

	Adde	Added to Rolls		ed from Rolls	Rolls at End of Year		% Increase in	Average
Valuation Date	Number	Annual Allowance	Number	Annual Allowance	Number <sup>1</sup>	Annual Allowance <sup>2</sup>	Annual Allowance	Annual Allowance
7/1/14	3,183	\$93,940,693	1,696	\$30,809,304	51,714	\$1,313,713,988	5.09%	\$25,403
7/1/13	2,864	82,357,835	1,685	29,723,562	50,227	1,250,142,686	4.41	24,890
7/1/12	3,192	92,356,665	1,734	29,433,960	49,048	1,197,305,307	5.66	24,411
7/1/11	4,365	135,383,063	1,782	28,241,754	47,590	1,133,192,150	11.40	23,812
7/1/10	2,628	74,214,851	1,456	22,991,138	45,007	1,017,211,463	5.32	22,601
7/1/09	3,691	114,125,640	1,587	23,763,321	43,835	965,850,034	13.38	22,034

### **Local Employers**

	Adde	Added to Rolls		Removed from Rolls F		Rolls at End of Year		Average
Valuation Date	Number	Annual Allowance	Number	Annual Allowance	Number <sup>1</sup>	Annual Allowance <sup>2</sup>	Annual Allowance	Annual Allowance
7/1/14	7,003	\$137,416,194	4,288	\$52,540,322	109,002	\$1,792,563,653	5.02%	\$16,445
7/1/13	6,911	123,953,479	4,169	49,483,971	106,287	1,706,902,310	4.60	16,059
7/1/12	7,334	137,596,316	4,284	49,626,477	103,545	1,631,782,901	5.83	15,759
7/1/11	9,296	195,153,024	4,529	48,064,677	100,495	1,541,951,837	11.54	15,344
7/1/10	6,182	115,153,073	3,805	42,585,361	95,728	1,382,400,685	5.56	14,441
7/1/09	5,826	101,661,331	3,761	39,550,280	93,351	1,309,554,538	7.86	14,028

### **Total System**

	Adde	ed to Rolls	Remove	ed from Rolls	Rolls at End of Year		Rolls Rolls at End of Year % Increase		% Increase in	Average
Valuation Date	Number	Annual Allowance	Number	Annual Allowance	Number <sup>1</sup>	Annual Allowance <sup>2</sup>	Annual Allowance	Annual Allowance		
7/1/14	10,186	\$231,356,887	5,984	\$83,349,626	160,716	\$3,106,277,641	5.05%	\$19,328		
7/1/13	9,775	206,311,314	5,854	79,207,533	156,514	2,957,044,996	4.52	18,893		
7/1/12	10,526	229,952,981	6,018	79,060,437	152,593	2,829,088,208	5.75	18,540		
7/1/11	13,661	330,536,087	6,311	76,306,431	148,085	2,675,143,987	11.48	18,065		
7/1/10	8,810	189,367,924	5,261	65,576,499	140,735	2,399,612,148	5.46	17,051		
7/1/09	9,517	215,786,971	5,348	63,313,601	137,186	2,275,404,572	10.14	16,586		

<sup>&</sup>lt;sup>1</sup> These values include beneficiaries in receipt but exclude deferred vested terminations.

<sup>&</sup>lt;sup>2</sup> The benefit amounts shown are the annualized benefits as of the valuation date and are not the actual benefits paid during the fiscal year.

# **Schedule of Active Members Valuation Data**

### **State**

Valuation Date	Number of Active Contributing Members	Annual Compensation	Average Compensation	% Increase in Average Compensation
7/1/14	72,952	\$4,543,384,095	\$62,279	1.64%
7/1/13	74,365	4,556,719,103	61,275	1.02
7/1/12	75,355	4,570,958,470	60,659	1.48
7/1/11	77,109	4,608,926,826	59,772	6.44
7/1/10	81,288	4,564,850,886	56,157	0.86
7/1/09	83,102	4,627,092,235	55,680	2.91

### **Local Employers**

Valuation Date	Number of Active Contributing Members	Annual Compensation	Average Compensation	% Increase in Average Compensation
7/1/14	156,101	\$6,898,049,131	\$44,190	2.75%
7/1/13	160,253	6,891,812,162	43,006	2.78
7/1/12	164,005	6,862,133,165	41,841	2.74
7/1/11	171,881	7,000,115,900	40,727	2.98
7/1/10	187,526	7,416,503,897	39,549	3.37
7/1/09	192,582	7,368,354,906	38,261	2.23

### **Total System**

Valuation Date	Number of Active Contributing Members	Annual Compensation	Average Compensation	% Increase in Average Compensation
7/1/14	229,053	\$11,441,433,226	\$49,951	2.37%
7/1/13	234,618	11,448,531,265	48,796	2.16
7/1/12	239,360	11,433,091,635	47,765	2.45
7/1/11	248,990	11,609,042,726	46,625	4.61
7/1/10	268,814	11,981,354,783	44,571	2.43
7/1/09	275,684	11,995,447,141	43,512	2.28

# **Solvency Test**

### **State**

	Accrued Liabilities For				Percentage of Accrued Liabilities Covered by Net Assets Available			
Valuation Date	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members	Net Assets Available for Benefits <sup>1</sup>	(1)	(2)	(3)	
7/1/14	\$5,169,631,309	\$11,857,858,226	\$3,815,201,383	\$9,128,235,998	100.00%	33.38%	0.00%	
7/1/13	4,885,643,785	11,293,634,256	3,814,679,391	9,614,698,050	100.00	41.87	0.00	
7/1/12	4,562,712,648	10,849,987,028	3,970,884,963	9,774,698,097	100.00	48.04	0.00	
7/1/11	4,295,868,689	10,055,639,293	3,939,321,039	10,062,648,618	100.00	57.35	0.00	
7/1/10	4,218,496,038	8,891,761,902	4,318,920,081	10,253,254,901	100.00	67.87	0.00	
7/1/09	3,917,520,867	9,576,933,235	5,452,740,477	10,713,340,747	100.00	70.96	0.00	

### **Local Employers**

	Accrued Liabilities For				_	Percentage of Accrued Liabilities Covered by Net Assets Available			
Valuation Date	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members	Net Assets Available for Benefits <sup>1</sup>	(1)	(2)	(3)		
7/1/14	\$7,477,372,802	\$15,523,266,419	\$5,254,437,999	\$20,766,663,796	100.00%	85.61%	0.00%		
7/1/13	7,060,416,742	14,775,793,049	5,169,572,726	19,978,598,632	100.00	87.43	0.00		
7/1/12	6,614,992,298	14,150,003,241	5,244,042,802	19,376,646,934	100.00	90.19	0.00		
7/1/11	6,244,282,760	13,077,334,135	5,357,478,680	18,997,383,783	100.00	97.52	0.00		
7/1/10	6,130,352,551	11,541,556,714	6,246,748,779	18,481,952,370	100.00	100.00	12.97		
7/1/09	5,692,517,632	12,298,679,145	7,532,011,799	18,165,835,669	100.00	100.00	2.32		

### **Total System**

	Accrued Liabilities For				Percentage of Accrued Liabilities Covered by Net Assets Available			
Valuation Date	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members	Net Assets Available for Benefits <sup>1</sup>	(1)	(2)	(3)	
7/1/14	\$12,647,004,111	\$27,381,124,645	\$9,069,639,382	\$29,894,899,794	100.00%	62.99%	0.00%	
7/1/13	11,946,060,527	26,069,427,305	8,984,252,117	29,593,296,682	100.00	67.69	0.00	
7/1/12	11,177,704,946	24,999,990,269	9,214,927,765	29,151,345,031	100.00	71.89	0.00	
7/1/11	10,540,151,449	23,132,973,428	9,296,799,719	29,060,032,401	100.00	80.06	0.00	
7/1/10	10,348,848,589	20,433,318,616	10,565,668,860	28,735,207,271	100.00	89.98	0.00	
7/1/09	9,610,038,499	21,875,612,380	12,984,752,276	28,879,176,416	100.00	88.09	0.00	

<sup>&</sup>lt;sup>1</sup> Actuarial Value including receivable amounts.

# Analysis of Past Financial Experience — Reconciliation of Employer Contribution Rates

### **State**

Valuation Year	July 1, 2014	July 1, 2013	July 1, 2012	July 1, 2011	July 1, 2010	July 1, 2009
Prior Year Contribution Rate	22.99%³	22.97%³	20.06% <sup>3</sup>	19.15%³	16.28% <sup>3</sup>	12.59%³
Adjustment for Full Member Contributions to Offset Normal Cost	N/A	(1.45)	N/A	N/A	N/A	N/A
Revised Prior Year Contribution Rate	N/A	21.52%	N/A	N/A	N/A	N/A
Net Change Due to:						
Current New Entrants	(0.04)	(0.03)	0.02	0.00	0.04	0.09
Excess Salary Increases	(0.10)	(0.23)	(0.14)	0.24	(0.22)	(0.05)
Assumption/Method Changes	0.04	0.00	0.80	(1.28)	0.00	1.40
COLA Increases and Phase-In	0.00	0.00	0.02	(0.13)	(0.07)	0.17
Active Experience	(0.01)	(0.19)	0.07	0.27	0.15	0.02
Other Experience	0.32	0.35	0.19	(0.16)	0.23	0.14
Investment Loss/(Gain)	0.17	0.47	0.67	0.48	0.65	0.90
Chapter 133 Benefit Improvements <sup>2</sup>	0.00	0.00	0.00	0.00	0.00	0.00
Net Effect of Chapter 1331	0.00	0.00	0.00	0.00	0.00	0.00
Chapter 366 Benefit Improvement	0.01	0.00	(0.01)	0.00	0.01	0.00
Net Effect of Chapter 366	0.02	0.00	0.01	0.01	0.03	0.00
Appropriation Act <sup>4</sup>	2.37	1.10	1.28	1.48	1.03	0.78
Chapter 21, P.L. 2008	N/A	N/A	N/A	N/A	N/A	0.24
Chapter 103, P.L. 2007	N/A	N/A	N/A	N/A	N/A	N/A
Chapter 78, P.L. 2011	N/A	N/A	N/A	N/A	1.02	N/A
Recommended Contribution Rate:						
<ul> <li>Prior to reflecting Chapter 1, P.L. 2010</li> </ul>	25.77%³	22.99%³	22.97%³	20.06% <sup>3</sup>	19.15%³	16.28%³
<ul> <li>After reflecting Chapter 1, P.L. 2010</li> </ul>	N/A	13.14%³	9.85%³	5.73%	2.74%³	N/A

<sup>1</sup> The additional annual employer normal contribution for the increase in benefits is funded by assets accumulated in the Benefit Enhancement Fund.

<sup>&</sup>lt;sup>2</sup> Includes the effect of additional cost due to Chapter 353, P.L. 2000.

<sup>&</sup>lt;sup>3</sup> Excludes contribution rates payable to the Non-Contributing Group Insurance Premium Fund. The contribution rates are 0.076% for 2014, 0.75% for 2013, 0.73% for 2012, 0.74% for 2011, 0.71% for 2010, and 0.64% for 2009.

<sup>&</sup>lt;sup>4</sup> Net change due to Appropriation Act for July 1, 2010 includes 0.03% change due to the Fiscal Year 2010 Appropriation Act and 1.00% change due to the Fiscal Year 2011 Appropriation Act. Net change for July 1, 2011, July 1, 2012, and July 1, 2013, are due to the provisions of Chapter 1, P.L. 2010.

# **Analysis of Past Financial Experience — Reconciliation of Employer Contribution Rates**

### Local

Valuation Year	July 1, 2014	July 1, 2013	July 1, 2012	July 1, 2011	July 1, 2010	July 1, 2009
Prior Year Contribution Rate <sup>4</sup>	11.85%³	12.68%³	11.29%³	11.32%³	11.12%³	8.67%³
Adjustment for Full Member Contributions to Offset Normal Cost	N/A	(1.24)	N/A	N/A	N/A	N/A
Revised Prior Year Contribution Rate	N/A	11.44%	N/A	N/A	N/A	N/A
Net Change Due to:						
<b>Current New Entrants</b>	(0.03)	(0.02)	0.02	0.03	0.08	0.16
Excess Salary Increases	0.05	0.02	(0.02)	(0.12)	(0.08)	(0.10)
Assumption/Method Changes	0.06	0.00	0.38	(0.93)	0.00	1.21
COLA Increases and Phase-In	0.00	0.00	0.02	(0.11)	(0.05)	0.14
Active Experience	(0.02)	(0.36)	0.04	0.26	0.10	(0.05)
Other Experience	0.43	0.19	0.13	0.21	(0.04)	0.07
Investment Loss/(Gain)	0.16	0.59	0.83	0.77	0.77	0.98
Chapter 133 Benefit Improvements <sup>2</sup>	0.00	0.00	0.00	(0.13)	0.00	0.03
Net Effect of Chapter 133 <sup>1</sup>	(0.64)	(0.67)	(0.68)	(0.69)	(0.81)	(0.81)
Chapter 366 Benefit Improvement	(0.01)	(0.01)	(0.01)	(0.01)	0.00	0.01
Net Effect of Chapter 366	(0.02)	(0.02)	(0.02)	(0.02)	(0.04)	(0.04)
Chapter 108, P.L. 2003	0.00	0.00	0.00	0.00	0.00	0.00
Chapter 103, P.L. 2007	0.00	0.00	0.00	0.00	0.00	0.00
Chapter 78, P.L. 2011	N/A	N/A	N/A	N/A	(0.58)	N/A
Recommended Contribution Rate <sup>5</sup>	11.83%³	11.16%³	11.98%³	10.58% <sup>3</sup>	10.47%³	10.27%³

<sup>1</sup> The additional annual employer normal contribution for the increase in benefits is funded by assets accumulated in the Benefit Enhancement Fund.

<sup>&</sup>lt;sup>2</sup> Includes the effect of additional cost due to Chapter 353, P.L. 2000.

Excludes contribution rates payable to the Non-Contributing Group Insurance Premium Fund. The contribution rates are 0.63% for 2014, 0.76% for 2013, 0.18% for 2012, 0.63% for 2011, 0.67% for 2010, and 0.78% for 2009.

<sup>&</sup>lt;sup>4</sup> Prior to the reallocation of State paid Local obligations due to Chapter 133, P.L. 2001, and Chapter 366, P.L. 2001.

<sup>&</sup>lt;sup>5</sup> After the reallocation of State paid Local obligations due to Chapter 133, P.L. 2001, and Chapter 366, P.L. 2001.

### 1. Definitions

### **Final Compensation (FC)**

Average annual compensation for the three years of creditable service immediately preceding retirement or the highest three fiscal years of membership 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. Chapter 103, P.L. 2007, provides that for Class D, Class E, Class F, and Class G members, 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. Chapter 1, P.L. 2010, provides that for Class F and Class G members FC is the average annual compensation for the five years of creditable service immediately preceding retirement or the highest five fiscal years of membership service.

### **Accumulated Deductions**

Sum of all required amounts deducted from the compensation of a member or contributed by him.

### **Class B Member**

Any member who was hired prior to July 1, 2007.

### **Class D Member**

Any member who was hired on or after July 1, 2007, but prior to November 2, 2008.

### **Class E Member**

Any member who was hired after November 1, 2008, but prior to May 22, 2010.

### **Class F Member**

Any member who was hired on or after May 22, 2010, but prior to June 28, 2011.

### **Class G Member**

Any member who was hired on or after June 28, 2011.

### 2. Benefits<sup>1</sup>

### **Service Retirement**

Eligible at age 60. Benefit equals a member annuity plus an employer pension, which together, equal 1/55th of FC for each year of service. Chapter 89, P.L. 2008, changed the eligibility age to age 62 for Class E members, Chapter 1, P.L. 2010, changed the eligibility age to age 62 for Class F members and changed the basic accrual rate from 1/55th to 1/60th of FC for each year of service for Class F and Class G members and Chapter 78, P.L. 2011, changed the eligibility age to age 65 for Class G members.

### **Ordinary Disability Retirement**

Eligible after 10 years of service. Benefit equals a member annuity plus an employer pension which, together, equal 1.64% of FC for each year of service; minimum benefit of 43.6% of FC. Class F and Class G members are not eligible for an Ordinary Disability Retirement benefit in accordance with Chapter 3, P.L. 2010.

### **Accidental Disability**

Eligible upon total and permanent disability prior to age 65 as a result of a duty injury. Benefit equals a member annuity plus an employer pension which, together, equal 72.7% of contributory compensation at the date of injury. Class F and Class G members are not eligible for an Accidental Disability Retirement benefit in accordance with Chapter 3, P.L. 2010.

### **Lump Sum Withdrawal**

Eligible upon service termination prior to age 60 (age 62 for Class E and Class F members and age 65 for Class G members) and prior to 10 years of service. Benefit equals refund of accumulated deductions plus, if the member has completed three years of service, interest allowed thereon.

### **Vested Retirement**

Eligible after 10 years of service. Benefit equals the lump sum benefit described above or a deferred retirement benefit, commencing at age 60 (age 62 for Class E and Class F members and age 65 for Class G members), equal to the service retirement benefit based on service and FC at date of termination.

### **Early Retirement**

Eligible after 25 years of service (30 years of service for Class G members). Benefit equals the lump sum benefit described above or the vested benefit reduced by 1/4 percent for each month the retirement date precedes age 55. Chapter 103, P.L. 2007, provides that for Class D members, the reduction shall be 1/12 percent for each month (up to 60 months) the retirement date precedes age 60 plus 1/4 percent for each month the retirement date precedes age 55. Chapter 89, P.L. 2008, and Chapter 1, P.L. 2010, provides that for Class E and Class F members, the reduction shall be 1/12 percent for each month (up to 84 months) the retirement date precedes age 62 plus 1/4 percent for each month the retirement date precedes age 55. Chapter 78, P.L. 2011, provides that for Class G members, the reduction shall be 1/4 percent for each month the retirement date precedes age 65.

<sup>1</sup> Special benefits for veterans, law enforcement officers, legislators, prosecutors, and workers' compensation judges are summarized at the end of this section.

### **Ordinary Death (Insured)**

### **Before Retirement**

Eligible if active. Benefit equals accumulated deductions with interest plus an amount equal to 1-1/2 times contributory compensation at date of death.

### **After Retirement - Before Age 60**

Eligible if disabled or vested terminated. Benefit equals 1-1/2 times last contributory compensation if disabled, accumulated deductions only if vested terminated.

### **After Retirement - After Age 60 or Early Retirement**

Eligible after early retirement or after attainment of age 60 for other types of retirement (if not disabled, 10 years of service credit required on members enrolling after July 1, 1971). Benefit equals 3/16 of last contributory compensation.

### **Voluntary Death Benefit**

An additional, employee-paid, death benefit is also available through the purchase of group insurance with an outside carrier.

### **Accidental Death**

Eligible upon death resulting during performance of duty. Benefit varies as follows:

### Widow(er)

50% of contributory compensation paid as pension.

### Child(ren)

No spouse - 20% (1 child), 35% (2 children), 50% (3 or more children) of contributory compensation paid as pension to age 18 or life if disabled.

### **Surviving dependent parent**

No spouse or child - 25% (1 parent) or 40% (2 parents) of contributory compensation paid as pension.

### No relation above

Accumulated deductions paid to other beneficiary or estate.

In addition the employer-paid lump sum ordinary death benefit is paid.

### **Optional Benefits**

Various forms of payment of equivalent actuarial value are available to retirees.

### **Special Benefits**

### **Veterans**

### **Service Retirement**

Eligible if member on January 2, 1955, attains age 60, completes

20 years of service. Benefit equals 54.5% of final contributory compensation (veteran members after January 2, 1955, must attain age 55 with 25 years of service or age 60 with 20 years of service).

### **Chapter 220 Benefit**

Eligible if age 55 and completes 35 years of service. Benefit equals 1/55th of the compensation for the 12-month period of membership that provides the largest possible benefit multiplied by the member's total years of service.

### **Law Enforcement**

### **Service Retirement**

Eligible at age 55 after 20 years of service. Benefit equals a member annuity plus an employer pension which, together, equal 2% of final contributory compensation for each of the first 25 years of service plus 1% of such compensation for non-contributory service or service over 25 years plus 1-2/3% for non-law enforcement service.

### Chapter 4, P.L. 2001 **Special Retirement**

After completion of 25 years of service, an additional retirement benefit equal to 5% of final contributory pay is added to the above service related retirement benefit. There is a maximum total benefit of 70% of final contributory pay.

### **Ordinary Disability**

Eligible after five years of service. Benefit is the same as for regular members.

### **Death After Retirement**

Eligible upon death after an accidental disability retirement. Benefit is the same as for a regular member with a \$5,000 minimum.

### **Legislators**

### **Service Retirement**

Eligible at age 60 and termination of all public service. Benefit is equal to a member annuity plus an employer pension which, together, equal 3% of final contributory compensation for each year of service to a maximum of 2/3 of final compensation.

### **Vested Retirement**

Eligible after eight years of legislative service. Benefit is a service retirement benefit deferred to age 60 or, alternatively, a lump sum equal to his accumulated deductions.

### **Prosecutors Part (Chapter 366, P.L. 2001)** Service Retirement

Eligibility means age 55 or 20 years of credited service. Mandatory

retirement at age 70. Benefit is an annual retirement allowance equal to a member annuity plus an employer pension, which together equals the greater of:

- i. 1/60th of FC for each year service; or
- ii. 2% of FC multiplied by years of service up to 30 plus 1% of FC multiplied by years of service over 30; or
- iii. 50% of final contributory compensation if the member has 20 or more years of service.

Chapter 366 also requires that, in addition to the 50% of final contributory compensation benefit, any member as of January 7, 2002, who will have 20 or more years of service and is required to retire upon attaining age 70, shall receive an additional benefit equal to 3% of final contributory compensation for each year of service over 20 years but not over 25 years.

### **Special Retirement**

After completion of 25 years of service. The annual retirement benefit is equal to a member annuity plus an employer pension which together equal 65% of final contributory compensation plus 1% of final contributory compensation for each year of service over 25. There is a maximum benefit of 70% of final contributory compensation.

### **Vested Termination**

Eligible upon termination of service prior to age 55 and after 10 years of Service (but less than 20 years). The benefit is a deferred retirement benefit, commencing at age 55, equal to a member annuity plus an employer pension which together provide a retirement allowance equal to 2% of final contributory compensation multiplied by service up to 30 plus 1% of final contributory compensation multiplied by years of service in excess of 30.

### **Death Benefits**

### **Ordinary Death Benefit - Lump Sum**

After retirement but prior to age 55, the benefit is as follows:

- i. For death while a Disabled Retiree the benefit is equal to 1-1/2 times Compensation.
- ii. For death while a Deferred Retiree the benefit is equal to his Accumulated Deductions.
- iii. For death while a Retiree who has completed 20 years of Service, the benefit is equal to ½ times final contributory compensation.

After retirement and after age 55, the benefit payable is equal to ½ times final contributory compensation.

Chapter 1, P.L. 2010, closes the Prosecutors Part of the System to new members enrolled on or after May 22, 2010.

### **Workers' Compensation Judges Part** (Chapter 259, P.L. 2001)

### Service Retirement

- Mandatory retirement at age 70. Voluntary retirement prior to age 70 as follows:
  - Age 70 and 10 years of service as a judge of compensa-
  - ii. Age 65 and 15 years of service as a judge of compensa-
  - iii. Age 60 and 20 years of as of judge of compensation service.

Benefit is an annual retirement allowance equal to the greater of 75% of final salary or the regular service retirement benefit above.

- Age 65 while serving as a judge of compensation, five consecutive years of service as a judge of compensation and 15 years in the aggregate of public service; or
  - Age 60 while serving as a judge, five consecutive years of service as a judge of compensation and 20 years in the aggregate of public service.
  - Benefit is an annual retirement allowance equal to the greater of 50% of final salary or the regular service retirement benefit above.
- Age 60 while serving as a judge of compensation, five consecutive years of service as a judge of compensation and 15 years in the aggregate of public service. Benefit is an annual retirement allowance equal to the greater 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 or the regular service retirement benefit above.
- Age 60 while serving as a judge of compensation. Benefit is an annual retirement allowance equal to the greater of 2% of final salary for each year of service as a judge of compensation up to 25 years plus 1% for each year in excess of 25 years or the regular service retirement benefit above.

### **Early Retirement**

Prior to age 60 while serving as a judge of compensation, five consecutive years of service as a judge of compensation 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.

### **Vested Termination**

Termination of service prior to age 60, with 5 consecutive years of service as a judge of compensation 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% for service in excess of 25 years.

### **Death Benefits (Insured)**

### **Before Retirement**

Death of an active member of the plan. Benefit is equal to

- i. Lump sum payment equal to 1-1/2 times final salary, plus
- ii. Spousal life annuity of 25% of final salary plus 10% (15%) to one (two or more) surviving children payable until spouse's death or remarriage. 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 (children). If there is no surviving spouse (or dependent children), 20% or 30% of final salary to one or two dependent parents.

### **After Retirement**

Death of a retired member of the plan. Benefit is equal to a lump sum of 25% of final salary for a member retired under normal, early retirement or vested termination. If a member were receiving a disability benefit, a lump sum 1-1/2 times final salary if death occurred before the member attained age 60 and 1/4 times final salary if death occurred after age 60.

Chapter 92, P.L. 2007, closes the Workers' Compensation Judges Part of the System to new members enrolled after June 8, 2007.

### 3. Contributions

### **By Members**

Members enrolling in the retirement system on or after July 1, 1994, will contribute 5% of compensation. Members enrolled prior to July 1, 1994, will contribute 5% of compensation to the retirement system effective July 1, 1995, unless they previously had contributed less than 6% in which case they will contribute 4% of compensation beginning July 1, 1995, and 5% of compensation beginning July 1, 1996. Chapter 103, P.L. 2007, increases the contribution rate to 5.5% of compensation effective, generally, July 1, 2007, for State employees and July 1, 2008, for Local employees. Chapter 78, P.L. 2011, increases the contribution rate from 5.5% to 6.5% of compensation with the increase effective October 2011. Further, beginning July 2012, the member contribution rate will increase by 1/7th of 1% each July until a 7.5% member contribution rate is reached in July 2018.

A 7.50% member contribution rate for members who are eligible to retire under the Prosecutors Part of the Retirement System as provided by Chapter 366, P.L. 2001, was used prior to July 1, 2008. Effective July 1, 2008 the member contribution rate was increased to 8.50%. Chapter 78, P.L. 2011, increases the contribution rate from 8.5% to 10.0% of compensation with the increase effective October

### **By Employers**

### **Normal Contribution**

The State and Local employers pay annually a normal contribution to the retirement System. This contribution is determined each year on the basis of the annual valuation and represents the value of the benefits to be earned in the year following the valuation date. The normal contributions for active members' COLA are being phased in. Chapter 78, P.L. 2011, suspended future COLAs for current and future retirees and beneficiaries until reactivated as permitted by law.

In accordance with the provisions of Chapter 79, P.L. 1960, the monies appropriated for payment of the noncontributory life insurance coverage shall be held separate from the retirement System monies.

In accordance with the provisions of Chapter 133, P.L. 2001, the Benefit Enhancement Fund (BEF) was established to fund the additional annual employer normal contribution due to the law's increased benefits. (Chapter 353, P.L. 2001, extended this coverage to this law'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.

In accordance with the provisions of Chapter 259, P.L. 2001, the additional normal contributions for increased benefits to judges of compensation for a valuation period will be funded by transfers from the Second Injury Fund.

Chapter 19, P.L. 2009, provides that the State Treasurer will reduce for Local employers the normal contribution to 50% of the amount certified for fiscal year 2009. This 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 provides that a Local employer may pay 100% of the recommended contribution for fiscal vear 2009. Local employers who were eligible but did not elect to take advantage of Chapter 19, P.L. 2009, were permitted to elect to defer 50% of the 2010 fiscal year required contribution with the first payment due in the fiscal year ending June 30, 2012.

### **Accrued Liability Contributions**

The State and Local employers pay contributions to cover any unfunded accrued liability. An unfunded accrued liability was established for active life COLAs. The amortization periods for funding these liabilities were set initially at 40 years. Experience gains or losses for the 10 valuation years following the March 31, 1992 valuation will increase or decrease the unfunded accrued liability. Thereafter, actuarial gains or losses will increase or decrease the amortization period unless an increase will cause it to exceed 30 years. Chapter 78, P.L. 2011, suspended future COLAs for current and future retirees and beneficiaries until reactivated as permitted by law and changed the methodology used to amortize the unfunded accrued liability. 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.

Chapter 366, P.L. 2001, 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 accrued liability in the Retirement System arising from the benefits established for the Prosecutors Part are to be amortized over a period of 30 years in the manner provided for other such liability in the Retirement System.

In accordance with the provisions of Chapter 259, P.L. 2001, the additional accrued liability contribution for increased benefits to judges of compensation for a valuation period will be funded by transfers from the Second Injury Fund.

Chapter 19, P.L. 2009, provides that the State Treasurer will reduce for Local employers the accrued liability contribution to 50% of the amount certified for fiscal year 2009. This 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 provides that a Local employer may pay 100% of the recommended contribution for fiscal year 2009. Local employers who were eligible but did not elect to defer 50% of the 2009 fiscal year contribution were permitted to elect to defer 50% of the 2010 fiscal year contribution with the first payment due in the fiscal year ending June 30, 2012.

### ACTUARIAL INFORMATION

STATE OF NEW JERSEY **DIVISION OF PENSIONS AND BENEFITS** TEACHERS' PENSION AND ANNUITY FUND



July 8, 2016

1550 Liberty Ridge Drive, Suite 200 Wayne, PA 19087-5572 Tel +1 610 687 5644 Fax +1 610.687.4236 www.milliman.com

The Board of Trustees Teachers' Pension and Annuity Fund of New Jersey

### **Re: Actuary's Certification Letter**

### Members of the Board:

This letter constitutes the actuary's certification letter for the Comprehensive Annual Financial Report (CAFR) of the Teachers' Pension and Annuity Fund of New Jersey (TPAF) for the fiscal year ending June 30, 2015. It reflects the results of the June 30, 2014 Annual Actuarial Valuation (dated April 1, 2015) of TPAF. Please refer to the entire Actuarial Valuation report for more information.

The information provided is based on Governmental Accounting Standards Board (GASB) Statement No. 25. GASB 25 is no longer effective and has been replaced by GASB Statement No. 67 effective for fiscal year 2014. Please refer to our report issued March 4, 2016, for disclosure information on GASB 67. This information is being provided as requested for consistency to information provided in prior years.

The funding requirements of the plan, as modified by Chapter 1, P.L. 2010, and Chapter 78, P.L. 2011, is to have the State phase-in to paying 100% of the statutorily required contribution over a 7-year period beginning with fiscal year 2012. For the 2015 fiscal year, the phase-in percentage is 57.14% (4/7th). However, the State contributed 21.9% of the full statutory contribution for 2015 representing the entire normal contribution plus an additional amount of \$124.4 million. For the 2016 fiscal year, the State anticipates contributing 30% of the full statutory contribution in accordance with a 10-year phase-in schedule beginning in year 3.

The full statutory contribution is equal to the normal cost of the plan plus a 30-year level dollar amortization of the unfunded pension accrued liability. The maximum amortization period will be reduced by one each year beginning with the 2021 fiscal year, but not less than 20 years (the 2030 fiscal year). The State portion of the normal cost is reduced by expected employee contributions.

The valuation was based on a set of demographic actuarial assumptions (described in detail in the section headed "Summary of Actuarial Assumptions and Methods") which was adopted by the Board of Trustees as a result of a study of actual experience under the Teachers' Pension Annuity Fund during the 3-year period ending June 30, 2012.

The valuation is also based on a set of economic assumptions as prescribed by the State Treasurer, specifically an investment return assumption of 7.9%. Based on our most recent analysis, this assumption is near the 75th percentile of projected annualized 30-year returns. If the investment return was lowered, the actuarial accrued liability and statutory contributions would increase and the funded ratio would decrease. Determining results at an alternative investment return assumption is outside the scope of our assignment.

The demographic actuarial assumptions and methods used for funding purposes meet the parameters set forth in GASB Statement No. 25 except with respect to the funding of the contributory and non-contributory group life benefits. The Annual Required Contribution shown on the attached exhibit reflects an actuarial determination of the contributory and non-contributory group life benefits.

The following supporting schedules in the Actuarial Section were prepared by Milliman:

- Summary of Actuarial Assumptions and Methods
- Summary of Retired Member Valuation Data (including schedule of retirants and beneficiaries added to and removed from rolls)
- Schedule of Active Member Valuation Data
- Solvency Test
- Analysis of Financial Experience
- Summary of Principal Plan Provisions

In addition, Milliman prepared the "Schedule of Funding Progress", the "Schedule of Employer Contributions", and the "Reconciliation of Net Pension Obligation" in the Financial Section.

### ACTUARIAL INFORMATION

STATE OF NEW JERSEY **DIVISION OF PENSIONS AND BENEFITS** TEACHERS' PENSION AND ANNUITY FUND

Milliman's work is prepared solely for the internal business use of the State of New Jersey Division of Pension and Benefits. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exception:

 The System may provide a copy of Milliman's work, in its entirety, to the System's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the System.

This report has been prepared exclusively for the State of New Jersey Division of Pensions and Benefits for a specific and limited purpose. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. It is a complex, technical analysis that assumes a high level of knowledge concerning the State of New Jersey Division of Pensions and Benefits' operations, and uses the State of New Jersey Division of Pensions and Benefits' data, which Milliman has not audited. No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

In performing this analysis, we relied, without audit, on census data, plan provisions, asset statements and other information (both written and oral) provided by the State of New Jersey Division of Pensions and Benefits. We have not audited or verified the census data, asset statements or other information. To the extent any of these are inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Future actuarial measurements may differ significantly from the current measurements presented in this analysis due to actual plan experience deviating from the actuarial assumptions, and changes in plan provisions, actuarial assumptions, and applicable law. An assessment of the potential range and cost effect of such differences is beyond the scope of this analysis.

I am a member of the American Academy of Actuaries and meet its Qualification Standard to render this actuarial opinion.

Respectfully submitted,

Scott Porter

Scott F. Porter, FSA, MAAA

# **Summary of Actuarial Assumptions and Methods**

### **A. Actuarial Assumptions**

Interest: 7.90% per annum, compounded annually (as prescribed by the State Treasurer).

Salary Scale: Salary increases vary by years of employment and time period averaging 3.33% for periods prior to June 30, 2016, averaging 3.86% for a five year select period (June 30, 2016 – June 30, 2021) and averaging 4.67% thereafter. Average percentages based on 2012 Experience Study. Schedule of annual rates are shown below.

Years of	Select Period Ending						
Employment	June 30, 2016	June 30, 2021	Ultimate Period				
0-8	3.80%	4.30%	5.40%				
9-12	4.35	5.05	5.95				
13	4.10	4.80	5.80				
14	3.95	4.65	5.45				
15	3.95	4.45	5.05				
16	3.30	3.90	4.50				
17	3.15	3.65	4.15				
18	2.85	3.35	3.95				
19	2.70	3.20	3.70				
20	2.50	3.00	3.60				
21	2.35	2.75	3.25				
22	2.10	2.50	3.10				
23-25	2.00	2.40	2.95				
26-30	1.80	2.20	2.80				
31+	1.75	2.05	2.50				

Increases in Compensation Limits: The IRC Section 401(a)(17) limit is assumed to increase 2.75% per annum, compounded annually. The Social Security Taxable Wage Base is assumed to increase 3.75% per annum, compounded annually.

## A. Actuarial Assumptions (Continued)

Termination: Withdrawal rates vary by age, years of employment and gender. Illustrative rates are shown below:

	Less Th	Less Than 10 Years of Employment					
Years of		Fen	nale				
Employment	Male	<40	40+				
0	9.65%	10.29%	10.29%				
1	8.05	7.42	7.42				
2	7.36	6.91	6.91				
3	4.87	5.74	5.27				
4	3.39	5.07	3.06				
5	2.68	4.84	2.74				
6	2.05	4.58	2.07				
7	1.81	4.28	1.78				
8	1.46	4.01	1.43				
9	1.25	3.41	1.33				

## A. Actuarial Assumptions (Continued)

	Annual Rates for Those With Deferred Annuity Benefits*									
	<b>10-14 Years o</b>	f Employment	<b>15-19 Years</b> o	f Employment	<b>20-24 Years o</b>	20-24 Years of Employment				
Age	Male	Female	Male	Female	Male	Female				
30	0.65%	3.06%	0.47%	2.50%	0.31%	1.66%				
35	0.66	2.27	0.48	1.86	0.32	1.24				
40	0.69	1.34	0.50	0.93	0.33	0.62				
45	0.57	0.61	0.41	0.42	0.27	0.28				
50	0.65	0.62	0.47	0.43	0.31	0.29				
55	1.18	1.29	0.85	0.89	0.57	0.59				

<sup>\*</sup>Members must have attained 10 years of service or 60 years of age (62 years of age for Class E and F members, 65 years of age for Class G members) in order to receive an annuity benefit.

	Annual Rates for Those Receiving Return of Contributions									
	<b>10-14 Years o</b>	f Employment	<b>15-19 Years</b> o	f Employment	20-24 Years o	20-24 Years of Employment				
Age	Male	Female	Male	Female	Male	Female				
30	0.44%	0.76%	0.31%	0.62%	0.21%	0.42%				
35	0.43	0.57	0.30	0.47	0.20	0.31				
40	0.36	0.33	0.26	0.23	0.17	0.16				
45	0.23	0.15	0.17	0.11	0.11	0.07				
50	0.21	0.15	0.15	0.11	0.10	0.07				
55	0.28	0.14	0.20	0.10	0.13	0.07				

## A. Actuarial Assumptions (Continued)

**Retirement:** Rates of retirement vary by age, gender and eligibility for an unreduced pension and post-retirement medical benefits.

The rates listed below are for members hired prior to July 1, 2007 (Class A and B employees). Illustrative rates are shown below.

	Loce Than	Age 55 or	Attainment of Age 55 and 25 Years of Service					
		Years of Service First Eligibility			After First	Eligibility		
Age	Male	Female	Male	Female	Male	Female		
<47	1.2%	1.2%	N/A	N/A	N/A	N/A		
48	1.5	1.5	N/A	N/A	N/A	N/A		
49	1.7	1.7	N/A	N/A	N/A	N/A		
50	2.0	2.0	N/A	N/A	N/A	N/A		
51	2.4	2.4	N/A	N/A	N/A	N/A		
52	2.8	2.8	N/A	N/A	N/A	N/A		
53	3.8	3.8	N/A	N/A	N/A	N/A		
54	4.8	4.8	N/A	N/A	N/A	N/A		
55	N/A	N/A	15.0%	16.0%	N/A	N/A		
56	N/A	N/A	22.0	18.0	12.0%	13.0%		
57	N/A	N/A	22.0	18.0	13.0	14.0		
58	N/A	N/A	26.0	26.0	14.0	15.0		
59	N/A	N/A	26.0	26.0	16.0	17.0		
60	8.0	5.5	32.0	32.0	21.0	21.0		
61	8.0	5.5	35.0	35.0	24.0	23.0		
62	8.5	7.5	45.0	50.0	36.0	32.0		
63	9.5	8.0	45.0	48.0	30.0	29.0		
64	9.5	8.0	45.0	48.0	30.0	29.0		
65	14.5	12.0	50.0	50.0	35.0	35.0		
66-70	18.0	14.0	50.0	50.0	30.0	30.0		
71+	18.0	16.0	50.0	50.0	30.0	30.0		

## A. Actuarial Assumptions (Continued)

The rates listed below are for members hired on or after July 1, 2007, and before November 2, 2008 (Class D employees). Illustrative rates are shown below.

	Loce Than	Less Than Age 60 or		Attainment of Age 60 and 25 Years of Service					
	Less Than 25 Ye		First El	igibility	After First	Eligibility			
Age	Male	Female	Male	Female	Male	Female			
<47	0.6%	0.6%	N/A	N/A	N/A	N/A			
48	0.8	0.8	N/A	N/A	N/A	N/A			
49	0.9	0.9	N/A	N/A	N/A	N/A			
50	1.0	1.0	N/A	N/A	N/A	N/A			
51	1.2	1.2	N/A	N/A	N/A	N/A			
52	1.4	1.4	N/A	N/A	N/A	N/A			
53	1.9	1.9	N/A	N/A	N/A	N/A			
54	2.4	2.4	N/A	N/A	N/A	N/A			
55	11.5	11.5	N/A	N/A	N/A	N/A			
56	12.0	12.0	N/A	N/A	N/A	N/A			
57	12.5	12.5	N/A	N/A	N/A	N/A			
58	13.5	13.5	N/A	N/A	N/A	N/A			
59	14.0	14.0	N/A	N/A	N/A	N/A			
60	8.0	5.5	34.0%	32.0%	N/A	N/A			
61	8.0	5.5	35.0	35.0	24.0%	23.0%			
62	8.5	7.5	45.0	50.0	36.0	32.0			
63	9.5	8.0	45.0	48.0	30.0	29.0			
64	9.5	8.0	45.0	48.0	30.0	29.0			
65	14.5	12.0	50.0	50.0	35.0	35.0			
66-70	18.0	14.0	50.0	50.0	30.0	30.0			
71+	18.0	16.0	50.0	50.0	30.0	30.0			

## A. Actuarial Assumptions (Continued)

The rates listed below are for members hired after November 1, 2008, and before June 28, 2011 (Class E and Class F employees). Illustrative rates are shown below.

	Less Than <i>I</i>	Ngo 62 or	Attainı	ment of Age 62	and 25 Years of	Service
		ss Than 25 Years of Service		First Eligibility		t Eligibility
Age	Male	Female	Male	Female	Male	Female
<47	0.6%	0.6%	N/A	N/A	N/A	N/A
48	0.7	0.7	N/A	N/A	N/A	N/A
49	0.8	0.8	N/A	N/A	N/A	N/A
50	0.9	0.9	N/A	N/A	N/A	N/A
51	1.1	1.1	N/A	N/A	N/A	N/A
52	1.3	1.3	N/A	N/A	N/A	N/A
53	1.7	1.7	N/A	N/A	N/A	N/A
54	2.2	2.2	N/A	N/A	N/A	N/A
55	10.5	10.5	N/A	N/A	N/A	N/A
56	10.8	10.8	N/A	N/A	N/A	N/A
57	11.0	11.0	N/A	N/A	N/A	N/A
58	12.0	12.0	N/A	N/A	N/A	N/A
59	12.5	12.5	N/A	N/A	N/A	N/A
60	20.0	20.0	N/A	N/A	N/A	N/A
61	22.0	22.0	N/A	N/A	N/A	N/A
62	23.0	18.0	50.0%	50.0%	N/A	N/A
63	9.5	8.0	45.0	48.0	30.0%	29.0%
64	9.5	8.0	45.0	48.0	30.0	29.0
65	14.5	12.0	50.0	50.0	35.0	35.0
66-70	18.0	14.0	50.0	50.0	30.0	30.0
71+	18.0	16.0	50.0	50.0	30.0	30.0

## A. Actuarial Assumptions (Continued)

The rates listed below are for members hired on or after June 28, 2011 (Class G employees). Illustrative rates are shown below.

	Less Than A	de 65 or	Attainment of Age 65 and 30 Years of Service				
	Less Than 30 Yea		First El	igibility	After Firs	t Eligibility	
Age	Male	Female	Male	Female	Male	Female	
<47	0.3%	0.3%	N/A	N/A	N/A	N/A	
48	0.4	0.4	N/A	N/A	N/A	N/A	
49	0.4	0.4	N/A	N/A	N/A	N/A	
50	0.5	0.5	N/A	N/A	N/A	N/A	
51	0.6	0.6	N/A	N/A	N/A	N/A	
52	0.7	0.7	N/A	N/A	N/A	N/A	
53	0.9	0.9	N/A	N/A	N/A	N/A	
54	1.1	1.1	N/A	N/A	N/A	N/A	
55	5.0	5.0	N/A	N/A	N/A	N/A	
56	6.0	6.0	N/A	N/A	N/A	N/A	
57	7.0	7.0	N/A	N/A	N/A	N/A	
58	8.0	8.0	N/A	N/A	N/A	N/A	
59	9.0	9.0	N/A	N/A	N/A	N/A	
60	15.0	15.0	N/A	N/A	N/A	N/A	
61	16.0	16.0	N/A	N/A	N/A	N/A	
62	36.0	32.0	N/A	N/A	N/A	N/A	
63	28.0	28.0	N/A	N/A	N/A	N/A	
64	28.0	28.0	N/A	N/A	N/A	N/A	
65	34.0	32.0	50.0%	50.0%	N/A	N/A	
66-70	18.0	14.0	50.0	50.0	30.%	30.0	
71+	18.0	16.0	50.0	50.0	30.0	30.0	

### A. Actuarial Assumptions (Continued)

Disability: Incidence of ordinary disabilities among active members apply upon the attainment of 10 years of service until the attainment of first eligibility for retirement. For members eligible for early retirement, the greater of the early retirement and disability benefit is valued. The rates vary by age, gender and type of disability. Illustrative rates are shown below:

	Ordi	nary	Accidental		
Age	Male	Female	Male	Female	
25	0.0301%	0.0379%	0.0060%	0.0060%	
30	0.0473	0.0550	0.0060	0.0060	
35	0.0609	0.0674	0.0060	0.0060	
40	0.0701	0.0893	0.0060	0.0060	
45	0.1023	0.1317	0.0060	0.0060	
50	0.1421	0.1759	0.0060	0.0060	
55	0.4686	0.3506	0.0060	0.0060	

For Class F and G members assumed to receive a disability benefit under Chapter 3, P.L. 2010, it is assumed that Class F members will begin receiving their retirement benefit at the earlier of age 70 or 36 years of service and Class G members will begin receiving their retirement benefit at age 70. The valuation excludes benefits paid from any disability income policy prior to retirement since these benefits are not paid from TPAF.

Pre-retirement Mortality: Illustrative rates of mortality of active members which vary by age and gender are shown below. Mortality improvements are projected using Scale AA from the base year of 2000 until the valuation date plus 15 years to account for future mortality improvement. Illustrative rates for the base year are shown below. No accidental deaths are assumed.

	Ordinary					
Age	Male	Female				
25	0.0345%	0.0170%				
30	0.0376	0.0191				
35	0.0353	0.0207				
40	0.0591	0.0284				
45	0.0890	0.0466				
50	0.1342	0.0645				
55	0.1978	0.1016				
60	0.2747	0.1589				
65	0.4263	0.2374				
70	0.6725	0.3754				

## A. Actuarial Assumptions (Continued)

Post-retirement Mortality: Rates of mortality vary by age, gender and type of retirement. For non-disabled annuitants, mortality improvements are projected using Scale AA from the base year of 2000 for males and 2003 for females until the valuation date plus seven years to account for future mortality improvement. Illustrative rates for the base year and Scale AA are shown below:

		Service Retirements and Beneficiaries Scale AA Disability Retiren		Scale AA		Retirement
Age	Male	Female	Male	Female	Male	Female
45	0.3573%	0.1375%	1.3%	1.6%	1.6928%	0.6705%
50	0.5265	0.2151	1.8	1.7	2.1731	1.0382
55	0.4781	0.3066	1.9	0.8	2.6581	1.4890
60	0.5813	0.4937	1.6	0.5	3.1531	1.9655
65	1.0238	0.6602	1.4	0.5	3.7630	2.5223
70	1.6962	1.0497	1.5	0.5	4.6937	3.3871
75	2.9598	1.7342	1.4	0.8	6.1550	4.7007
80	5.2282	3.0118	1.0	0.7	8.2029	6.5081
85	9.2106	6.4019	0.7	0.6	10.6202	9.0183

### **Actuarial Assumptions (Continued)**

Noncontributory Active Members: 25% are assumed to return to contributory status.

Beneficiaries: 100% of active members are assumed to have a beneficiary for receipt of the lump sum death benefit or employee contribution refund upon death.

Form of Payment: Modified Cash Refund Annuity.

Member Annuity: Valuation mortality and interest are assumed to be the basis for determining the member annuity in future years.

### **Special Data Adjustments:**

- Determination of employee type is based on Class Code and was used as provided by the Division.
- For noncontributory members where no salary was provided, no date of birth was provided, or ASF was negative a liability equal to the ASF was held.
- For terminated noncontributory members, the liability is based on an estimated benefit using last known salary.
- For beneficiaries where no gender code or date of birth was provided, reasonable assumptions were made based on records provided in prior years or the deceased retiree's records. For retirees with a joint annuitant option code that was missing a spouse's date of birth, husbands are assumed to be 3 years older than wives. All such records were included in the valuation.
- Retiree members where no benefit and monthly allowance was provided, or no cause, class, or option was provided were excluded from the valuation.

#### **Actuarial Valuation Method**

The Projected Unit Credit Method was used as required by Chapter 62, P.L. 1994, as modified by Chapters 115, P.L. 1997, and 133, P.L. 2001. The minimum actuarial accrued liability was equal to the greater of formula benefit under the Projected Unit Credit Cost method, value of the estimated member annuity as of the valuation date and the contributions with interest as of the valuation date provided by the Division. The normal cost was determined using the same methodology but reflecting an additional year of service and contributions less the final amount determined for the actuarial accrued liability.

Noncontributory life insurance benefits are funded on a term cost basis.

#### **Asset Valuation Method**

The actuarial value is equal's the prior year' actuarial value increased with interest and cash flows plus 20% of the difference between it and the market value of assets. Cash flows are based on an accrual accounting approach. This method is prescribed by statute.

#### **Changes in Actuarial Assumptions**

There are no changes in assumptions since the last valuation. Procedures regarding the treatment of noncontributory records that were terminated by the Division since the prior valuation have been modified to appropriately value these records.

# **Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls**

	Added	to Rolls	Removed	from Rolls	Rolls a	t End of Year	% Increase in	
Valuation Date	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance	Average Annual Allowance	Average Annual Allowance
6/30/09	4,684	N/A	1,883	N/A	78,214	\$2,842,667,672	4.32%	\$36,345
6/30/10	4,147	N/A	2,124	N/A	80,237	2,957,518,144	1.42	36,860
6/30/11	7,744	N/A	2,069	N/A	85,912	3,285,419,699	3.75	38,242
6/30/12	5,496	N/A	2,100	N/A	89,308	3,462,975,740	1.40	38,776
6/30/13	4,614	N/A	2,193	N/A	91,729	3,591,007,462	0.96	39,148
6/30/14	5,284	N/A	2,191	N/A	94,822	3,750,680,254	1.04	39,555

# **Schedule of Active Member Valuation Data**

Valuation Date	Number of Active Members (a)	Annual Compensation (b)	Average Compensation (b/a)	% Increase in Average Compensation
6/30/09	157,109	\$10,353,262,361	\$65,899	2.44%
6/30/10	157,023	10,659,241,596	67,883	3.01
6/30/11	151,115	10,416,454,800	68,931	1.54
6/30/12	150,200	10,488,890,840	69,833	1.31
6/30/13	151,318	10,710,424,746	70,781	1.36
6/30/14	141,874¹	10,325,972,743	72,783	2.83

<sup>&</sup>lt;sup>1</sup> Excludes noncontributory members no longer provided on active data.

# **Solvency Test**

	Ac		% of Accrued Liabilities Covered by Net Assets				
Valuation Date	Active Member Retirees &		(3) Active Members (Employer Financed)	Net Assets* Available for Benefits	(1)	(2)	(3)
6/30/09	\$8,450,026,966	\$30,276,614,675	\$14,691,686,935	\$34,708,001,341	100.00%	87.00%	0.00%
6/30/10	9,077,370,573	27,435,656,099	11,904,905,673	33,136,475,630	100.00	88.00	0.00
6/30/11	8,987,300,905	30,765,265,431	10,470,122,414	32,156,229,300	100.00	75.00	0.00
6/30/12	9,432,073,781	32,411,855,950	9,350,180,856	31,079,212,983	100.00	67.00	0.00
6/30/13	10,079,938,128	33,312,970,535	8,973,746,392	30,469,857,304	100.00	61.00	0.00
6/30/14	10,624,778,098	34,587,834,921	8,537,363,622	29,044,777,902	100.00	53.00	0.00

<sup>\*</sup> The above table is based on Valuation Assets. As of June 30, 2014, the solvency percentages would be 1) 100%, 2) 49% and 3) 0%, respectively, if based on the market value of assets of \$27,643.1 million.

# **Analysis of Financial Experience Gains and Losses** in Unfunded Accrued Liabilities Resulting from **Differences between Assumed Experience and Actual Experience**

	For Valuation Period Ending (Amounts in Millions)						
Type of Activity	June 30, 2014	June 30, 2013	June 30, 2012				
Economic Factors:							
Investment Return	\$(350.4)	\$(902.6)	\$(1,260.3)				
Salary Increases	33.8	76.1	119.5				
Expenses	(12.5)	(12.8)	(11.8)				
Demographic Factors:			•				
Active Members*	(41.9)	(3.2)	(100.8)				
New Entrants	(44.1)	(46.6)	(35.5)				
Non-Contributing Members	(8.2)	(11.7)	(15.6)				
Retirees and Beneficiaries*	(54.5)	(36.7)	(40.1)				
Total:	(477.8)	(937.5)	(1,344.6)				

<sup>\*</sup> Includes additional year of mortality improvement

# Summary of Principal Plan Provisions as of June 30, 2014

This summary of plan provisions is intended only to describe the essential features of the plan. All eligibility requirements and benefit amounts shall be determined in strict accordance with the plan document itself.

### 1. Type of Plan

The Plan is a contributory, defined benefit plan. Effective October 1, 2011, contributions by Members are 6.5% and increase by 1/7 of 1% each July thereafter until an ultimate rate of 7.5% is attained on July 1, 2018. As of July 1, 2014, the contribution rate is 6.92%. For members hired on or after July 1, 2007, compensation for contributions is capped at the Social Security Taxable Wage Base (\$117,000 for 2014). For compensation in excess of the Social Security Taxable Wage Base, contributions on the excess compensation are made to the Defined Contribution Retirement Program.

#### 2. Effective Date

The Plan was established in 1919. It was reorganized and integrated with Social Security in 1955. Social Security integration was eliminated in 1966, i.e., reductions in retirement benefits based on Social Security benefits were eliminated.

### 3. Eligibility for Membership

Employees, appointed to positions requiring certification 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.

### 4. Definitions

- a. Fiscal Year: A Fiscal Year is a 12-month period beginning on July 1 and ending on June 30.
- b. Credited Service: A year of Credited Service for each year an employee is a Member of the Retirement System plus service, if any, covered by a prior service liability. Class F members must be scheduled to work at least 32 hours per week, Class E members must have an annual salary of \$7,500 (indexed for inflation) and other members must have an annual salary of \$500.
- c. Final Compensation: This is the average annual compensation upon which contributions by a member are based on the period consecutive years of Creditable Service immediately preceding retirement or the period of highest fiscal years of Membership Service. The period equals three for members hired prior to May 22, 2010, and five for Class F and later members.
- d. Final Year Compensation: This is the compensation upon which contributions by a Member to the Annuity Savings Fund are based in the last year of Membership Service.

- e. Aggregate Member Contributions: This is the sum of all amounts deducted from the compensation of a Member or contributed by him or on his behalf without interest.
- f. Class A Member: Any member who contributes towards retirement allowance based on 1/64th benefit rate per year of creditable service.
- g. Class B Member: Any member hired prior to July 1, 2007, who contributes towards a retirement allowance based on 1/55th benefit rate per year of creditable service.
- h. Class D Member: Any member hired on or after July 1, 2007, and before November 2, 2008, who contributes up to the Social Security Taxable Wage Base towards a retirement allowance based on 1/55th benefit rate per year of creditable service payable at age 60.
- i. Class E Member: Any member hired after November 1, 2008, and before May 22, 2010, who contributes up to the Social Security Taxable Wage Base towards a retirement allowance based on 1/55th benefit rate per year of creditable service payable at age 62.
- j. Class F Member: Any member hired after May 21, 2010, and before June 28, 2011, who contributes up to the Social Security Taxable Wage Base towards a retirement allowance based on 1/60th benefit rate per year of creditable service payable at age 62.
- k. Class G Member: Any member hired on or after June 28, 2011, who contributes up to the Social Security Taxable Wage Base towards a retirement allowance based on 1/60th benefit rate per year of creditable service payable at age 65.

### 5. Cost-of-Living Adjustment

The Pension Adjustment Program provides a cost-of-living adjustment (COLA) to retirees and their survivors who receive a monthly retirement allowance from the TPAF. The first adjustment is received in the 25th month after the member's retirement. Subsequent cost-of-living adjustments are computed annually and are first reflected in February. The rate of increase is equal to 60 percent of the percentage change between the average CPI for the 12 month period ending December 31 in the year of retirement and the August 31 preceding the February adjustment. Pension adjustments to be paid on or after July 1, 2011, have been eliminated for all members unless the Target Funded Ratio is met as of the valuation date and for each of the next 30 years on a projected basis.

#### 6. Retirement Benefits

#### a. Service Retirement

Service Retirement Eligibility: Eligibility means age 60 (Class A, B, and D), age 62 (Class E and F) or age 65 (Class G) with no minimum service requirement.

# **Summary of Principal Plan Provisions as of June 30, 2014, Continued**

Service Retirement Benefit: An employee's annual service retirement allowance is equal to a member annuity plus an employer pension which together equals 1/64th of Final Compensation for each year of service for Class A members, 1/55th of Final Compensation for each year of service for Class B, D, and E members and 1/60th of Final Compensation for each year of service for Class F and G members. The member annuity is based on the member contributions credited at the valuation interest rate.

Note: See Section 12 for special benefits for veteran members.

### **b.** Early Retirement

Early Retirement Eligibility: Class A, B, D, E, and F members may retire after completion of 25 years of Creditable Service and Class G members may retire after completion of 30 years of Creditable Service.

**Early Retirement Benefit:** The benefit may be either:

- the lump-sum withdrawal benefit described in 7.a. below;
- (ii) the Service Retirement Benefit reduced by 1/4 of one percent for each month the retirement date precedes age 55 for Class B members: or
- (iii) the Service Retirement Benefit reduced by 1/12 of one percent for each month the retirement date precedes age 60 but over age 55 and by 1/4 of one percent for each month the retirement date precedes age 55, for Class D members.
- (iv) the Service Retirement Benefit reduced by 1/12 of one percent for each month the retirement date precedes age 62 but over age 55 and by 1/4 of one percent for each month the retirement date precedes age 55, for Class E and F members.
- (v) the Service Retirement Benefit reduced by \( \frac{1}{4} \) of one percent for each month the retirement date precedes age 65, for Class G members.

#### **Deferred Retirement**

**Eligibility:** A member is eligible upon termination of service prior to age 60 (Class A, B, D), age 62 (Class E and Class F), or age 65 (Class G) and after 10 years of Creditable Service.

**Deferred Retirement Benefit:** The benefit may be either:

- the lump-sum withdrawal benefit described in 7.a. above;
- (ii) a deferred retirement benefit, commencing at age 60 (Class A, B, D), age 62 (Class E and Class F), or age 65 (Class G), equal to a member annuity plus an employer pension which together provide a retirement allowance equal to the service retirement benefit based on Final Compen-

sation and Creditable Service at date of termination. Member annuity based on member contributions credited at the valuation interest rate.

#### 7. Termination Benefits

**Lump Sum Withdrawal** 

**Eligibility:** A member is eligible upon termination of service.

**Lump Sum Withdrawal Benefit:** The benefit equals a refund of Aggregate Member Contributions plus, if the member has completed three years of service, interest accumulated at 2.0% per annum allowed thereon.

#### 8. Death Benefits

**Ordinary Death (Insured) Benefit - Lump Sum** (NonContributory)

**Pre-retirement Death Benefit Eligibility:** Any current active member is eligible.

Pre-retirement Death Benefit: The benefit is a lumpsum benefit equal to the Aggregate Contributions with interest allowed thereon plus an amount equal to 1-1/2 times Compensation at date of death.

Post-retirement Death Benefit Prior to Age 60 (Class A, B, D), Age 62 (Class E and Class F), or Age 65 (Class G) Eligibility: Eligible if disabled or retired early. Post-retirement Death Benefit Prior to Age 60

- (Class A, B, D), Age 62 (Class E and Class F), or Age **65 (Class G) Benefit:** The benefit is as follows:
- For death while a Disabled Retiree the benefit is equal to 1-1/2 times Compensation.
- (ii) For death while an Early Retiree, the benefit is equal to 3/16 times Compensation.
- (iii) For death while vested terminated, the benefit is equal to his Aggregate Contributions with interest allowed thereon.

**Post-retirement Death Benefit After Age 60 (Class** A, B, D), Age 62 (Class E and F), or Age 65 (Class G) Eligibility: Eligible after attainment of service retirement, deferred and disabled retirements (if not disabled, 10 years of Creditable Service required for members enrolling on or after July 1, 1971).

Post-retirement Death Benefit After Age 60 (Class A, B, D), Age 62 (Class E and F) or Age 65 (Class G) Benefit: The benefit payable is equal to 3/16 times Compensation.

Contributory Death Benefit: An additional, employeepaid, death benefit is also available through group insurance purchased by the Board of Trustees. Contributions for this

# Summary of Principal Plan Provisions as of June 30, 2014, Continued

benefit are required by Members during the first year of enrollment. Participation may be terminated after the first year. The benefit prior to retirement is 2 times compensation. The benefit after retirement is 1/4 times final year compensation (coverage at retirement, and 10 years of participation for Members enrolling on or after July 1, 1970, is required).

#### c. Pre-retirement Accidental Death Benefit:

**Eligibility:** A death resulting from injuries received from an accident during performance of duty and not a result of willful negligence is eligible.

**Pre-retirement Lump-Sum Benefit:** The benefit is a lump sum equal to 1-1/2 times Compensation.

**Pre-retirement Accidental Death Benefit:** The benefit payable is as follows:

- The annuity benefit to a widow or widower is equal to 50% of Compensation, payable for life or until remarriage.
- (ii) The annuity benefit, when there is no spouse, or the spouse is remarried, is equal to 20% of Compensation for one child, 35% for two children, 50% for three or more children. The benefit is payable while the children are under age 18 and it is payable for life if they are disabled.
- (iii) The annuity benefit, when there is no spouse or children, is equal to 25% of Compensation for one dependent parent and 40% for two dependent parents.
- (iv) The benefit, when there is no relation as stated above, is equal to the Aggregate Contributions with interest allowed thereon and is payable to a beneficiary or to the Member's estate. This is also the minimum benefit payable under (i), (ii) and (iii) above.

### 9. Disability Benefits

## a. Ordinary Disability Retirement

**Eligibility:** A member is eligible for Ordinary Disability Retirement if he (she) has 10 years of Creditable Service and is totally and permanently incapacitated from the performance of usual or available duties.

Ordinary Disability Retirement Benefit for Class A, B, D, and E members: The total retirement allowance is equal to the greater of:

- 1.64% of Final Compensation times the number of years of Creditable Service; or
- (ii) 43.6% of Final Compensation.

Note: See Section 12 for special benefits for veteran members.

Ordinary and Accidental Disability Retirement Benefit for Class F and G members: A disability benefit equal to 60% of salary reduced by the initial Social Security benefit is paid until the earlier of age 70 or commencement of a retirement benefit from a disability income policy outside of TPAF. The policy also makes employee contributions during the period of disability.

### Accidental Disability Retirement for Class A, B, D, and E members

**Eligibility:** A member is eligible upon 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.

**Accident Disability Retirement Benefit:** The benefit payable is equal to a Member annuity plus an employer pension which together equals 72.7% of the Compensation at date of injury.

- 10. Additional Old-Plan Benefit: An additional pension is payable to any retiree who was a member of the old Teachers' Retirement Fund. This pension is the actuarial equivalent of his contributions to the old Teachers' Retirement Fund without interest.
- 11. Special Minimum Benefit: A member who retired prior to 1955 with 20 or more years of service may receive a minimum pension of \$500 a month inclusive of any amounts payable under any pension adjustments.

### **12. Special Benefits for Veterans:**

- a. Service Retirement: Eligible if member attains age 60 and completes 20 years of service or attains age 55 and completes 25 years of service. Benefit equals 54.5% of highest 12-month contributory compensation.
- **b. Chapter 97 Benefit:** Eligible if age 55 and completes 35 years of service. Benefit equals 1/55th of final year compensation for each year of service.

### 13. Benefit and Compensation Limits

The provisions of IRC Section 415 and IRC Section 401(a)(17), which limit benefits paid and limit compensation used in determining benefits, has been reflected in this report. The IRC Section 415 limit is \$210,000 and the 401(a)(17) compensation cap is \$260,000 for 2014 and is applied on a calendar year basis.

### 14. Forms of Payment

- Maximum Option Single life annuity.
- Option 1 Single life annuity with return of reserve option.
- Option 2 100% joint and survivor annuity.

## **Summary of Principal Plan Provisions as of June 30, 2014, Continued**

- 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.
- **Option D** 25% pop-up joint and survivor annuity.

#### 15. Contributions

- **Member Contributions:** Each member becoming a member on or after January 1, 1956, and prior to July 1, 2007, contributes at the rate of contribution applicable to Class B members. Any members hired after June 30, 2007, and prior to November 2, 2008, are Class D members. Members hired after November 1, 2008, and prior to May 22, 2010, are Class E members. Members hired after May 21, 2010, and prior to June 29, 2011, are Class F members. Members hired after June 28, 2011, are Class G members.
  - Class D, E, F, or G Membership: Class D, E, F, or G members contribute at their applicable contribution rate up to the Social Security Taxable Wage Base.
  - (ii) Class B Membership: Any member on December 31, 1955, may elect to be classified as a Class B member and contribute at the rate of contribution applicable to Class B members at his age at membership. Any such member may elect to increase his accumulated deductions by the amount required by the Board to receive credit as a Class B member for all or part of his service prior to such election.
  - (iii) Class A Membership: Any member who is not a veteran and does not elect to be classified as a Class B member continues to contribute at the rate of contribution applicable to his age at membership which was payable prior to the establishment of the integrated system, except that if he became a member subsequent to June 30, 1946, he will pay after January 1, 1955, at the rate of contribution in effect on June 30, 1946, applicable to his age at member-

Prior to July 1, 1979, different contribution rates were established for men and women. Effective on that date members contribute at rates intermediate between the rates previously applicable to male and female members, computed to provide the same present value of future employee contributions at each entry age on the basis of the membership as constituted on the effective date.

### **Local Employer Contributions**

- Early Retirement Incentive Contributions: The State and Local employers which elected to participate in the early retirement incentive programs authorized by Chapters 137, 229 and 231, P.L. 1991, Chapters 48, 138 and 163, P.L. 1993, Chapter 23, P.L. 2001, and Chapters 128 and 129, P.L. 2003, pay contributions to cover the additional liability for these programs over amortization periods chosen by the employer (15 years for Chapters 128 and 129) or the amortization period for the Unfunded Accrued Liability of the system (Chapter 23, P.L. 2002, and Chapter 21, P.L. 2008). The remaining present values are re-amortized upon changes to the interest rate assumption. Effective with the revised June 30, 2011 actuarial valuation, for any local employer with an increasing payment amortization schedule, the increase factor is 3.25%
- Chapter 113 Contributions: Certain School Districts have elected to exempt a select group of employees from the compensation limit under IRC Section 401(a)(17) incorporated under Chapter 113. These school districts will pay the full cost of this exemption at a member's date of retirement.

# **16. Changes in Plan Provisions Since Prior Valuation**

None.

## ACTUARIAL INFORMATION

STATE OF NEW JERSEY **DIVISION OF PENSIONS AND BENEFITS** POLICE AND FIREMEN'S RETIREMENT SYSTEM



June 29, 2016

The Board of Trustees Police and Firemen's Retirement System of New Jersey

**Re: Actuary's Certification Letter** 

**Aaron Shapiro** 

Principal, Consulting Actuary

Xerox HR Services Buck Consultants, LLC 500 Plaza Drive Secaucus, N.J. 07096-1533

aaron.shapiro@xerox.com tel 201.902.2706 fax 201.553.6402

#### Members of the Board:

An actuarial valuation of the Police and Firemen's Retirement System is performed annually to measure the ongoing costs of the System (with required contributions determined separately for the State and Local employers) and the progress towards the funding goals of the System over time. In general, the financial goal of the Police and Firemen's Retirement System is a pattern of contributions, which is sufficient to cover the normal cost of the System plus the contribution towards the unfunded accrued liability.

In accordance with the New Jersey statutes, employers are required to make two contributions to the System, a normal contribution and an accrued liability contribution. The normal contribution for basic allowances and cost of living adjustments (COLA's) is defined under the Projected Unit Credit funding method as the present value of the benefits accruing during the current year. Prior to the July 1, 2010 valuation, the unfunded accrued liability contribution for basic allowances and COLA's was determined as a level percentage of pay required to amortize the unfunded accrued liability over 30 years in annual payments increasing by 4% per year. The funding reform provisions of Chapter 78, P.L. 2011, changed the methodology used to amortize the unfunded accrued liability. 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, 2018 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 will decrease by one year.) Beginning with the July 1, 2028 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 that valuation year using a 20 year amortization period.

Chapter 78, P.L. 2011, also increased member contributions from 8.50% to 10.00% of salary. Effective with the July 1, 2012 actuarial valuation, the determination of the State and Local employers' normal cost contributions has been revised to reflect the use of all member contributions as an offset to the gross normal cost. This was the methodology used to determine the State's normal cost contribution prior to the enactment of Chapter 78, P.L. 2011, and is consistent with the methodology typically used by contributory public-sector retirement systems to calculate the employer's normal cost contribution.

The valuation reflects the reduction in the fiscal year 2014 recommended State Pension contribution from \$389,689,529 to \$115,623,000. In addition, the valuation also reflects a reduction in the fiscal year 2015 State Pension contribution from \$414,316,953 to \$108,411,934. This amount reflects the State's planned fiscal year 2015 contribution of \$116,976,477, the recommended employer normal cost, discounted to the valuation date. This amount may be subject to change per the requirements of the State's fiscal year 2015 spending plan.

A State contribution of \$461,081,051 is recommended for the fiscal year beginning July 1, 2015. This amount is comprised of an unfunded accrued liability payment of \$331,006,350 plus a normal contribution of \$ 130,074,701. This amount excludes the estimated Non-Contributory Group Insurance Premium of \$10,368,000. This amount may be subject to change per the requirements of the State's fiscal year 2016 spending plan.

The valuation reflects Chapter 19, P.L. 2009, which allowed the State Treasurer to reduce Local employers' normal and accrued liability contributions to 50% of the amount certified for the State fiscal year 2009. In addition, certain Local employers who were eligible under Chapter 19, P.L. 2009, to defer 50% of their State fiscal year 2009 pension contribution but did not were permitted to defer 50% of their State fiscal year 2010 recommended pension contribution. This 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 provides that a Local employer may pay 100% of the recommended contributions for State fiscal years 2009 and 2010. Such an employer will be credited with the full payments and any such amounts will not be included in their unfunded liability.

The valuation reflects the unauthorized early retirement incentive programs offered by certain Local employers. The additional liability incurred by the System due to these programs is included as a receivable contribution.

The underlying demographic data is maintained and provided by the New Jersey Division of Pensions and Benefits. The data is analyzed by Buck Consultants for internal completeness and consistency and compared with the prior valuation data to again ensure consistency.

As required under Chapter 255, P.L. 1944, an actuarial investigation of the demographic experience of the members and beneficiaries of the Police and Firemen's Retirement System is made once in every three-year period. The July 1, 2014 valuation was based on the actuarial assumptions that were determined from the July 1, 2010 - June 30, 2013 Experience Study (which was approved by the Board of Trustees at the February 9, 2015 Board meeting).

The valuation reflects the economic assumptions, which include a rate of investment return of 7.90% per annum and assumed future salary increases reduced by 2.00% per annum through fiscal year ending 2021 and 1.00% per annum for fiscal years ending 2022 and thereafter. These assumptions will remain in effect for valuation purposes until such time as the Board or the Treasurer recommends revised economic assumptions.

The valuation cost method used is the projected unit credit method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains and losses are recognized in future accrued liability contributions. The asset valuation method used was a fiveyear average of market values with write-up. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of the potential range of future results is beyond the scope of this valuation.

Use of this report for any other purpose or by anyone other than the Board or staff of the State of New Jersey's Division of Pensions and Benefits may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, or inapplicability of the report for that purpose. You should ask Buck to review any statement you wish to make on the results contained in this report. Buck will accept no liability for any such statement made without prior review by Buck.

In my opinion, the attached schedules of valuation results fairly represent the status of the Police and Firemen's Retirement System and present an accurate view of historical data. The underlying assumptions and methods used are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the System.

The following supporting schedules in the Actuarial Section were prepared by Buck Consultants:

- Summary of Actuarial Assumptions and Methods
- . Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls
- Schedule of Active Member Valuation Data
- Solvency Test
- Analysis of Past Financial Experience Reconciliation of Employer Contribution Rates
- Brief Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes

# **ACTUARIAL INFORMATION**

STATE OF NEW JERSEY **DIVISION OF PENSIONS AND BENEFITS** POLICE AND FIREMEN'S RETIREMENT SYSTEM

In addition, Buck Consultants prepared the "Schedule of Funding Progress" and the "Schedule of Employer Contributions" in the Financial Section. The Schedule of Funding Progress and the Schedule of Employer Contributions are provided for informational purposes only since the reporting requirements of Statements No. 67 and No. 68 are effective as of the June 30, 2014 and June 30, 2015 reporting dates, respectively. This report was prepared under my supervision. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the academy's qualification Standards to issue this Statement of Actuarial Opinion. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and I am available to answer questions concerning it.

Respectfully submitted,

Aaron Shapiro, FSA, EA, MAAA

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Principal, Consulting Actuary

# **Summary of Actuarial Assumptions and Methods**

Section 13, Subsection (13) of Chapter 255, P.L. 1944, as amended by Chapter 157, P.L. 1972, of the New Jersey Statutes provides that once in every three-year period the actuary shall examine in detail the demographic experience of the members and beneficiaries of the Police and Firemen's Retirement System to assure that the tables used for determining expected liabilities are consistent with recent experience.

The July 1, 2014 actuarial valuation of the Police and Firemen's Retirement System reflects the recognition of the actuarial assumptions determined from the July 1, 2010 - June 30, 2013 Experience Study which was approved by the Board of Trustees at the February 9, 2015 Board meeting and the revised economic assumptions established in the July 1, 2012 valuation.

An outline of the actuarial assumptions and methods used for the July 1, 2014 valuation is as follows:

Valuation Interest Rate: 7.90% per annum, compounded annually.

**COLA:** No future COLA is assumed.

Compensation Limit Increase: 401(a)(17) Limit - 3.00% per annum, Social Security Wage Base - 4.00% per annum

Separations from Service and Salary Increases: Representative values of the assumed annual rates of separation and annual rates of salary increases are as follows:

	Annual Rate of									
		Ultimate Withdrawal								
Age	Up to the 1st Year	2nd Year	3rd Year	4th Year	5 to 9 Years	After 9 Years				
25	6.90%	2.03%	1.18%	0.60%	0.35%	0.00%				
30	9.30	2.75	1.76	1.31	0.60	0.24				
35	9.80	3.17	1.76	1.57	0.77	0.24				
40	13.70	2.25	1.85	1.74	0.67	0.27				
45	3.50	2.25	1.85	2.32	1.35	0.28				
50	0.00	2.25	1.85	2.00	1.60	0.30				
55	0.00	0.00	0.00	0.00	0.00	0.00				

	Annual Rates of								
		Death		Dica	Disability				
	Orc	linary		- Disa					
Age	Male <sup>1</sup>	Female <sup>1</sup>	Accidental	Ordinary	Accidental				
25	0.036%	0.020%	0.006%	0.045%	0.029%				
30	0.043	0.025	0.006	0.147	0.278				
35	0.074	0.046	0.008	0.265	0.393				
40	0.103	0.068	0.008	0.362	0.423				
45	0.145	0.108	0.009	0.394	0.396				
50	0.205	0.161	0.009	0.449	0.179				
55	0.290	0.235	0.014	0.554	0.161				
60	0.442	0.342	0.013	1.024	0.161				
64	0.602	0.458	0.008	1.680	0.161				
65 and over	0.000	0.000	0.000	0.000	0.000				

<sup>&</sup>lt;sup>1</sup> RP2000 Employee Pre-Retirement mortality tables projected fourteen-years using Projection Scale BB. These base tables are effective 2014 and are projected on a generational basis using Projection Scale BB.

		Service Re		Salary Ir	ıcreases				
	Length of Service								
Age	Less Than 21 Years¹	<b>21 to 24 Years</b>	25 Years	26 or More Years	FY2012 to FY2021	FY2022 and thereafter			
25	-	_	-	_	9.48%	10.48%			
30	-	-	-	-	6.47	7.47			
35	-	-	-	-	4.67	5.67			
40	4.00%	0.60%	45.57%	15.40%	3.83	4.83			
45	4.00	0.60	54.83	15.40	3.40	4.40			
50	4.30	0.60	57.62	18.48	3.25	4.25			
55	6.00	0.00	64.94	24.47	3.10	4.10			
60	3.20	0.00	77.49	27.34	2.85	3.85			
64	37.50	0.00	85.24	51.03	2.60	3.60			
65 and over	100.00	100.00	100.00	100.00	_	_			

<sup>&</sup>lt;sup>1</sup>Retirement assumption prior to age 55 is for any member as of January 18, 2000, upon completion of 20 years of service.

#### **Deaths After Retirement**

RP-2000 Combined Healthy Mortality Tables projected one year using Projection Scale AA and one year using Projection Scale BB is the base table as of the 2014 measurement date for male service retirements and will be further projected on a generational basis using Projection Scale BB. RP-2000 Combined Healthy Mortality Tables projected fourteen years using projection Scale BB is the base table as of the 2014 measurement date for female service retirements and beneficiaries and will be further projected on a generational basis using Projection Scale BB. Special mortality tables are used for the period after disability retirement. The following representative values of the assumed annual rates of mortality are effective 2014:

	Service Retirements		Service Retirements Beneficiaries			Disability
Age	Men	Women	Men	Women	Age	Retirements
55	0.354%	0.253%	0.348%	0.253%	35	0.598%
60	0.659	0.439	0.612	0.439	40	0.634
65	1.241	0.820	1.076	0.820	45	0.803
70	2.155	1.414	1.797	1.414	50	1.058
75	3.674	2.374	3.062	2.374	55	1.210
80	6.277	3.875	5.209	3.875	60	1.426
85	10.833	6.540	8.964	6.540	65	1.949

## **Marriage**

Husbands are assumed to be 3 years older than wives. Among the active population, 90% of participants are assumed married. No children are assumed. Neither the percentage married nor the number of children assumption is individually explicit, but they are considered reasonable as a single combined assumption.

#### **Valuation Method**

Projected Unit Credit Method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains and losses are recognized in future accrued liability contributions. 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, 2018 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 valuation, the amortization period shall decrease by one year.) Beginning with the July 1, 2028 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.

### **Receivable Contributions**

State contributions expected to be paid the June 30th following the valuation date are discounted by the valuation interest rate of 7.90% to the valuation date.

Local contributions expected to be paid the April 1st, following the valuation are discounted by the valuation interest rate of 7.90% to the valuation date

#### **Asset Valuation Method**

A five year average of market values with write-up was used. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five-year period.

## **ACTUARIAL INFORMATION**

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
POLICE AND FIREMEN'S RETIREMENT SYSTEM

# **Summary of Actuarial Assumptions and Methods, continued**

### **Changes in Actuarial Assumptions and Methods**

The following are changes to the actuarial assumptions and methods from those used in the prior valuation:

- 1. 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. The compensation limit for the 2014 valuation is \$260,000. Effective with the July 1, 2014 valuation, the compensation limit is assumed to increase annually at a rate of 3% per annum.
- 2. Chapter 1, P.L. 2010, provided 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. The maximum contribution base for the 2014 valuation is \$117,000. Effective with the July 1, 2014 valuation, the maximum contribution base is assumed to increase annually at a rate of 4% per annum.
- 3. The employer receivable contribution included in the Market Value (MVA) of Assets and the Actuarial Value of Assets (AVA) has been discounted at the valuation rate of 7.90% from the expected payable date of June 30, 2015, to the valuation date for the State's MVA and AVA and from the expected payable date of April 1, 2015, to the valuation date for the Local's MVA and AVA.
- 4. As required under Chapter 255, P.L. 1944, experience studies are performed once in every three year period. The valuation was prepared using the demographic assumptions recommended on the basis of the July 1, 2010 June 30, 2013 Experience Study and approved by the Board of Trustees at the February 9, 2015 Board meeting.

# **Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls**

### **State**

	Added to Rolls		Remove	ed from Rolls	Rolls at	End of Year	% Increase in	Average
Valuation Date	Number	Annual Allowance	Number	Annual Allowance	Number <sup>1</sup>	Annual Allowance <sup>2</sup>	Annual Allowance	Annual Allowance
7/1/14	411	\$18,319,747	125	\$3,624,098	6,127	\$259,008,914	6.03%	\$42,273
7/1/13	562	25,376,310	144	3,961,938	5,841	244,287,186	9.51	41,823
7/1/12	483	21,936,867	83	2,596,132	5,423	223,064,017	9.57	41,133
7/1/11	578	26,839,762	117	3,116,709	5,023	203,579,687	14.28	40,530
7/1/10	466	20,752,289	85	2,577,204	4,562	178,146,637	11.69	39,050
7/1/09	448	19,077,696	82	2,165,118	4,181	159,495,927	14.73	38,148

## **Local Employers**

	Adde	Added to Rolls		ed from Rolls	Rolls at End of Year		% Increase in	Average
Valuation Date	Number	Annual Allowance	Number	Annual Allowance	Number <sup>1</sup>	Annual Allowance <sup>2</sup>	Annual Allowance	Annual Allowance
7/1/14	2,157	\$125,562,304	1,061	\$37,217,915	36,449	\$1,824,960,208	5.17%	\$50,069
7/1/13	2,126	123,863,237	1,062	34,299,782	35,353	1,735,172,993	5.50	49,081
7/1/12	2,131	119,315,514	855	29,526,388	34,289	1,644,739,476	5.88	47,967
7/1/11	2,613	157,395,175	954	29,687,515	33,013	1,553,435,879	9.94	47,055
7/1/10	2,088	117,656,689	856	26,753,568	31,354	1,413,047,858	6.85	45,068
7/1/09	1,703	90,251,963	859	25,570,826	30,122	1,322,470,071	8.20	43,904

## **Total System**

	Adde	d to Rolls	Remove	ed from Rolls	Rolls at End of Year		% Increase in	Average
Valuation Date	Number	Annual Allowance	Number	Annual Allowance	Number <sup>1</sup>	Annual Allowance <sup>2</sup>	Annual Allowance	Annual Allowance
7/1/14	2,568	\$143,882,051	1,186	\$40,842,013	42,576	\$2,083,969,122	5.28%	\$48,947
7/1/13	2,688	149,239,547	1,206	38,261,720	41,194	1,979,460,179	5.98	48,052
7/1/12	2,614	141,252,381	938	32,122,520	39,712	1,867,803,493	6.31	47,034
7/1/11	3,191	184,234,937	1,071	32,804,224	38,036	1,757,015,566	10.42	46,193
7/1/10	2,554	138,408,978	941	29,330,772	35,916	1,591,194,495	7.37	44,303
7/1/09	2,151	109,329,659	941	27,735,944	34,303	1,481,965,998	8.86	43,202

<sup>&</sup>lt;sup>1</sup> These values include Domestic Relations beneficiaries in receipt but exclude deferred vested terminations.

<sup>&</sup>lt;sup>2</sup> The benefit amounts shown are the annualized benefits as of the valuation date and are not the actual benefits paid during the fiscal year.

# **Schedule of Active Members Valuation Data**<sup>1</sup>

### **State**

Valuation Date	Number of Active Members	Annual Limited Compensation	Average Compensation	% Increase in Average Compensation
7/1/14	7,025	\$529,501,284	\$75,374	0.54%
7/1/13	7,098	532,147,062	74,971	(0.65)
7/1/12	7,187	542,344,707	75,462	(0.31)
7/1/11	7,237	547,809,629	75,696	4.07
7/1/10	7,572	550,731,084	72,733	5.81
7/1/09	7,915	544,071,811	68,739	0.18

### **Local Employers**

Valuation Date	Number of Active Members	Annual Limited Compensation	Average Compensation	% Increase in Average Compensation
7/1/14	33,081	\$3,246,344,549	\$98,133	0.99%
7/1/13	33,274	3,233,135,473	97,167	1.52
7/1/12	33,632	3,218,932,891	95,710	3.85
7/1/11	34,762	3,203,676,618	92,160	3.96
7/1/10	36,632	3,247,452,128	88,651	3.04
7/1/09	37,235	3,203,508,603	86,035	2.43

## **Total System**

Valuation Date	Number of Active Members	Annual Limited Compensation	Average Compensation	% Increase in Average Compensation
7/1/14	40,106	\$3,775,845,833	\$94,147	0.95%
7/1/13	40,372	3,765,282,535	93,265	1.22
7/1/12	40,819	3,761,277,598	92,145	3.16
7/1/11	41,999	3,751,486,247	89,323	3.96
7/1/10	44,204	3,798,183,212	85,924	3.52
7/1/09	45,150	3,747,580,414	83,003	2.08

 $<sup>^{\</sup>rm 1}$  Includes all contributing and noncontributing active members.

# **Solvency Test**

### **State**

	Accrued Liabilities For				_	e of Accrued y Net Assets	
Valuation Date	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members	Net Assets Available for Benefits <sup>1</sup>	(1)	(2)	(3)
7/1/14	\$461,707,703	\$2,836,126,945	\$1,067,775,016	\$2,062,185,965	100.00%	56.43%	0.00%
7/1/13	446,509,394	2,645,278,934	1,096,734,709	2,127,491,585	100.00	63.55	0.00
7/1/12	444,953,351	2,418,803,841	1,163,197,690	2,137,727,566	100.00	69.98	0.00
7/1/11	434,353,581	2,240,031,414	1,252,140,684	2,173,255,647	100.00	77.63	0.00
7/1/10	439,239,135	1,914,386,462	1,318,735,661	2,190,654,958	100.00	91.49	0.00
7/1/09	427,713,716	1,998,329,812	1,567,215,952	2,268,272,056	100.00	92.10	0.00

## **Local Employer**

	Accrued Liabilities For				_	e of Accrued y Net Assets	
Valuation Date	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members	Net Assets Available for Benefits <sup>1</sup>	(1)	(2)	(3)
7/1/14	\$2,953,537,557	\$18,953,799,304	\$8,331,950,046	\$23,066,498,788	100.00%	100.00%	13.91%
7/1/13	2,842,256,925	17,710,792,805	8,258,648,542	22,170,221,173	100.00	100.00	19.58
7/1/12	2,726,801,462	16,780,025,399	8,198,341,576	21,549,327,079	100.00	100.00	24.91
7/1/11	2,611,348,759	16,074,784,440	8,292,498,989	21,051,681,692	100.00	100.00	28.53
7/1/10	2,610,141,488	14,279,203,074	8,712,653,564	20,367,865,987	100.00	100.00	39.92
7/1/09	2,527,185,808	15,411,236,571	10,510,419,386	20,669,565,701	100.00	100.00	25.99

## **Total System**

	Accrued Liabilities For					e of Accrued y Net Assets	
Valuation Date	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members	Net Assets Available for Benefits <sup>1</sup>	(1)	(2)	(3)
7/1/14	\$3,415,245,260	\$21,789,926,249	\$9,399,725,062	\$25,128,684,753	100.00%	99.65%	0.00%
7/1/13	3,288,766,319	20,356,071,739	9,355,383,251	24,297,712,758	100.00	100.00	6.98
7/1/12	3,171,754,813	19,198,829,240	9,361,539,266	23,687,054,645	100.00	100.00	14.06
7/1/11	3,045,702,340	18,314,815,854	9,544,639,673	23,224,937,339	100.00	100.00	19.53
7/1/10	3,049,380,623	16,193,589,536	10,031,389,225	22,558,520,945	100.00	100.00	33.05
7/1/09	2,954,899,524	17,409,566,383	12,077,635,338	22,937,837,757	100.00	100.00	21.31

<sup>&</sup>lt;sup>1</sup> Actuarial Value including receivable amounts.

# **Analysis of Past Financial Experience -Reconciliation of Employer Contribution Rates**

### **State**

Valuation Year	July 1, 2014	July 1, 2013	July 1, 2012	July 1, 2011	July 1, 2010	July 1, 2009
Prior Year Contribution Rate	81.12%6	76.94% <sup>6</sup>	74.83% <sup>6</sup>	70.70% <sup>6</sup>	71.02% <sup>6</sup>	64.36% <sup>6</sup>
Adjustment for Full Member Contributions to Offset Normal Cost	N/A	(1.61)	N/A	N/A	N/A	N/A
Revised Prior Year Contribution Rate	81.12	75.33	74.83	70.70	71.02	64.36
Net Change Due to:						
Current New Entrants	0.27	0.27	0.31	0.22	0.15	0.17
Excess Salary Increases	(0.12)	0.07	(0.36)	(0.43)	(0.39)	(0.64)
Assumption/Method Changes	0.50	0.00	(1.51) <sup>5</sup>	(2.44)4	(4.41)7	0.00
COLA Increases	0.00	0.02	0.04	(0.25)	(0.41)	0.31
Active and Other Experience	(0.49)	(0.71)	(1.43)	(0.01)	0.41	0.01
Retiree Experience	0.08	0.03	0.06	0.01	0.03	0.02
Investment Loss/(Gain)	0.48	1.00	1.32	0.99	1.30	1.64
Net Effect of Chapter 8 <sup>1</sup>	2.98	1.27	(1.13)	0.48	0.68	1.03
Appropriation Act <sup>2</sup>	6.12	3.84	4.81	5.56	3.99	4.12
Chapter 78, P.L. 2011	N/A	N/A	N/A	N/A	(1.67)	N/A
Recommended Contribution Rate:						
<ul> <li>Prior to reflecting Chapter 1, P.L. 2010</li> </ul>	90.94%6	81.12% <sup>6</sup>	76.94% <sup>6</sup>	74.83% <sup>6</sup>	70.70%6	71.02%6
After reflecting Chapter 1, P.L. 2010	N/A	46.35% <sup>6</sup>	32.98% <sup>6</sup>	21.38%	10.10% <sup>6</sup>	N/A

# **Analysis of Past Financial Experience — Reconciliation of Employer Contribution Rates**

### **Local Employers**

Valuation Year	July 1, 2014	July 1, 2013	July 1, 2012	July 1, 2011	July 1, 2010	July 1, 2009
Prior Year Contribution Rate	23.14%6	23.90%6	24.01%6	23.08%6	30.20%6	27.85%6
Adjustment for Full Member Contributions to Offset Normal Cost	N/A	(1.60)	N/A	N/A	N/A	N/A
Revised Prior Year Contribution Rate	23.14	22.30	24.01	23.08	30.20	27.85
Net Change Due to:						
Current New Entrants	0.16	0.14	0.08	0.07	0.21	0.15
Excess Salary Increases	(0.15)	0.08	(0.40)	(0.47)	(0.42)	(0.70)
Assumption/Method Changes	1.18	0.00	(0.90)5	$(0.05)^4$	(0.66)7	0.00
COLA Increases	0.00	0.02	0.04	(0.30)	(0.50)	(0.40)
Active and Other Experience	2.48	1.50	1.18	2.47	1.83	1.97
Retiree Experience	0.09	0.04	0.07	0.01	0.04	0.03
Investment Loss/(Gain)	(0.05)	1.00	1.59	1.20	1.68	2.29
Net Effect of Chapter 8 <sup>1</sup>	(2.39)	(1.94)	(1.77)	(2.00)	(1.89)	(1.79)
Chapter 78, P.L. 2011	N/A	N/A	N/A	N/A	(8.73)	N/A
Recommended Contribution Rate <sup>3</sup>	24.46%6	23.14%6	23.90%6	24.01%6	23.08%6	30.20%6

- 1 Net effect of the change in the calculation of the July 1, 1998 actuarial value of System assets and elimination of the Local Employers' accrued liability contribution for the period ending June 30, 1997.
- <sup>2</sup> Net change due to Appropriation Act for July 1, 2014, includes 0.96% change due to the Fiscal Year 2014 Appropriation Act and 5.16% change due to the Fiscal Year 2015 Appropriation Act. Net change for July 1, 2011, July 1, 2012, and July 1, 2013, are due to the provisions of Chapter 1, P.L. 2010. Net change due to Appropriation Act for July 1, 2010, includes 0.17% change due to the Fiscal Year 2010 Appropriation Act, 0.15% change due to the Fiscal Year 2011 Appropriation Act and 3.67% for the Fiscal Year 2012 Appropriation Act. Net change due to Appropriation Act for July 1, 2009, includes 0.26% change due to the Fiscal Year 2009 Appropriation Act, 0.08% change due to the Fiscal Year 2010 Appropriation Act and 3.78% for the Fiscal Year 2011 Appropriation Act.
- 3 Includes rates attributable to Chapter 204 requirement which are billed to specific locations.
- Net effect of the Board approved revised demographic assumptions based on the June 30, 2011 experience investigations and the Treasurer approved revised economic assumptions.
- Net effect of the Board approved revised demographic assumptions based on the Treasurer approved revised economic assumptions.
- Excludes contribution rates payable to the Noncontributory Group Insurance Premium Fund. For State, the contribution rates are 2.05% for 2014, 1.51% for 2013, 1.41% for 2012, 1.64% for 2011, 1.53% for 2010, and 1.46% for 2009. For Local, the contribution rates are 1.14% for 2014, 1.09% for 2013, .86% for 2012, 1.00% for 2011, .85% for 2010, and 1.20% for 2009.
- Due to the State's decision to reduce the lag period between the valuation year and the contribution from three years to two years.

# **Brief Summary of the Benefit and Contribution Provisions** as Interpreted for Valuation Purposes

### **Eligibility for Membership**

Enrollment is restricted to eligible policemen and firemen who are permanent and full-time and who pass the physical and mental fitness requirements. The maximum enrollment age is 35.

### 1. Definitions

#### **Plan Year**

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

#### **Credited Service**

A year of service is credited for each year an employee is a Member of the Retirement System plus service, if any, covered by a prior service liability.

### **Average Final Compensation (AFC)**

"Average final compensation" shall mean final compensation (see below).

#### **Compensation**

Base salary upon which contributions by a Member to the Annuity Savings Fund were based in the last year of Service. For Accidental Death, benefits are computed at the annual rate of salary. In accordance with Chapter 1, P.L. 2010, for members hired on or after May 22, 2010, Compensation cannot exceed the annual maximum wage contribution base for Social Security pursuant to the Federal Insurance Contribution Act.

### **Final Compensation (FC)**

Annual compensation received by the member in the last 12 months of Credited Service preceding his retirement. In accordance with Chapter 1, P.L. 2010, for members hired on or after May 22, 2010, FC means the average annual compensation for the three fiscal years of membership providing the largest benefit.

### **Accumulated Deductions**

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

### 2. Benefits<sup>1</sup>

### **Service Retirement**

Eligibility means age 55 or 20 years of credited service for an employee who was a member of the Retirement System as of January 18, 2000, and age 55 for an employee who became a member of the Retirement System after January 18, 2000; mandatory at age 65 (except that a member hired prior to January 1, 1987, may remain a member of the Retirement System until the member attains the earlier of age 68 or 25 years of creditable service). Benefit is an annual retirement allowance equal to a member annuity plus an employer pension which together equals the greater of:

- (i) 1/60th of FC for each year of Credited Service; or
- (ii) 2% of FC multiplied by years of Credited Service up to 30 plus 1% of FC multiplied by years of Service over 30. (Prior to January 18, 2000, this benefit was based on AFC rather than FC. However, Policy Memorandum 4-2000, which interpreted the provisions of Chapter 428, P.L. 1999, authorized the change in the salary basis).
- (iii) 50% of FC if the member has 20 or more years of Credited Serv-

Chapter 428 also requires that, in addition to the 50% of FC benefit, any member as of January 18, 2000, who will have 20 or more years of Credited Service and is required to retire upon attaining age 65 (except that a member hired prior to January 1, 1987, may remain a member of the System until the member attains the earlier of age 68 or 25 years of creditable service), shall receive an additional benefit equal to 3% of FC for each year of Credited Service over 20 years but not over 25 years.

### **Special Retirement**

After completion of 25 years of Credited Service. The annual retirement benefit is equal to a member annuity plus an employer pension which together equal 65% of FC plus 1% of FC for each year of Credited Service over 25. Effective for members hired after June 28, 2011, the annual retirement benefit is equal to a member annuity plus an employer pension which together equal 60% of FC plus 1% of FC for each year of Credited Service over 25. There is a maximum benefit of 70% of FC (65% of FC for members hired after June 28, 2011) except for those members with 30 or more years of Credited Service on June 30, 1979,

#### **Vested Termination**

- (A) Eligible upon termination of service prior to age 55 and prior to 10 years of Credited Service. The benefit equals a refund of Accumulated Deductions less any outstanding loans.
- (B) Eligible upon termination of service prior to age 55 and after 10 years of Credited Service (but less than 20 years if a member on or prior to January 18, 2000, or less than 25 years of service if a member after January 18, 2000). The benefit is a deferred retirement benefit, commencing at age 55, equal to a member annuity plus an employer pension which together provide a retirement allowance equal to 2% of FC multiplied by years of Credited Service up to 30 plus 1% of FC multiplied by years of Credited Service over 30.

# **Brief Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes (continued)**

#### **Death Benefits**

### **Ordinary Death Benefit - Lump Sum**

(1) If a member dies prior to retirement, the benefit payable is as fol-

A lump sum amount equal to 3-1/2 times FC payable to the member's beneficiary.

- (2) After retirement but prior to age 55, the benefit is as follows:
  - (i) For death while a Disabled Retiree the benefit is equal to 3-1/2 times Compensation.
  - (ii) For death while a Deferred Retiree the benefit is equal to his **Accumulated Deductions.**
  - (iii) For death while a Retiree who has completed 20 years of Credited Service, the benefit is equal to 1/2 times FC.
- (3) After retirement and after age 55, the benefit payable is equal to 1/2 times Compensation. (Note: If a Member is not disabled, 10 years of Credited Service is required for Members enrolling after July 1, 1971.)

### **Ordinary Death Benefit - Survivor Annuity**

- (1) If a member dies prior to retirement, the benefit payable to a widow (widower) is equal to 50% of FC (20% of FC payable to one child, 35% of FC payable to two children or 50% of FC payable to three or more children if there is no surviving widow or widower or if the widow or widower dies or remarries or 25% of FC payable to one parent or 40% of FC payable to two parents if no surviving widow, widower or child. If no widow, widower, child or parent, the benefit payable to a beneficiary is the aggregate Accumulated Contributions at the time of death).
- (2) For any member who retired after December 18, 1967, the benefit payable to a widow (widower) is equal to 50% of FC plus 15% of FC for one child and 25% of FC for two or more children.
  - If no spouse, or spouse remarries, the benefit is equal to 20% of FC for one child, 35% for two children, and 50% for three or more children.
  - There is also a minimum benefit payable to widows (widowers) of \$4,500 a year.
- (3) For any member who retired with an Accidental Disability Benefit, the benefit payable is equal to \$4,500 a year to the widow (widower). If there is no widow (widower) the benefit payable is \$600 a year for 1 child, \$960 a year for 2 children, and \$1,500 a year for 3 or more children. The benefit for children is payable until age 18.

### **Accidental Death Benefit**

A death while active resulting from injuries received from an accident during performance of duty is eligible for a lump sum equal to the Accumulated Deductions plus 3-1/2 times Compensation plus an annuity benefit payable is as follows:

- (i) The benefit to a widow or widower is equal to 70% of Compensa-
- (ii) The benefit, when there is no spouse, or spouse is remarried, is equal to 20% of Compensation for one child, 35% for two children, 50% for three or more children. The benefit is payable while the children are under age 18, or until age 24 if they are full-time students, or it is payable for life if they are disabled.
- (iii) The benefit, when there is no spouse or children, is equal to 25% of Compensation for one parent and 40% for two parents.
- (iv) The benefit, when there is no relation as stated above, is equal to the Accumulated Deductions and is payable to a beneficiary or to the Member's estate. This is also the minimum benefit payable under (i), (ii) and (iii).

### **Disability Benefits**

### **Ordinary Disability Retirement**

A Member is eligible for Ordinary Disability Retirement if he (she) has four years of Service and is totally and permanently incapacitated from the performance of usual or available duties. The benefit is equal to the greater of:

- (i) 1-1/2% of FC times the number of years of Credited Service; or
- (ii) 40% of FC.

In addition, a member who has at least 20 years but less than 25 years of Credited Service and who is required to retire upon application by the employer on and after January 18, 2000, shall receive a benefit equal to a member annuity plus an employer pension which together provide a total retirement allowance equal to 50% of FC plus 3% of FC multiplied by the number of years of Credited Service over 20 but not over 25.

### **Accidental Disability Retirement**

A Member is eligible upon total and permanent incapacitation from the performance of usual or available duties as a result of injury during the performance of regular duties. The benefit payable is equal to a Member annuity plus an employer pension which together equals 2/3 of the Compensation at date of injury.

#### **Special Disability Retirement**

A member is eligible for Special Disability Retirement if he (she) has five years of Credited Service, is under age 55, and has received a heart transplant. The benefit payable is equal to a Member annuity plus an employer pension which together equals 50% of FC.

### 3. Member Contributions

Each member contributes 10.0% of Compensation.

## ACTUARIAL INFORMATION

STATE OF NEW JERSEY **DIVISION OF PENSIONS AND BENEFITS** STATE POLICE RETIREMENT SYSTEM



June 29, 2016

The Board of Trustees State Police Retirement System of New Jersey

**Re: Actuary's Certification Letter** 

**Aaron Shapiro** 

Principal, Consulting Actuary

Xerox HR Services Buck Consultants, LLC 500 Plaza Drive Secaucus, N.J. 07096-1533

aaron.shapiro@xerox.com tel 201.902.2706 fax 201.553.6402

#### Members of the Board:

An actuarial valuation of the State Police Retirement System is performed annually to measure the ongoing costs of the System and the progress towards the funding goals of the System over time. In general, the financial goals of the State Police Retirement System are a pattern of contributions, which is sufficient to cover the normal cost of the System plus the contribution towards the unfunded accrued liability.

In accordance with the New Jersey statutes, employers are required to make two contributions to the System, a normal contribution and an accrued liability contribution. The normal contribution is defined under the Projected Unit Credit funding method as the present value of the benefits accruing during the current year. Prior to the July 1, 2010 valuation, the unfunded accrued liability contribution for basic allowances and cost of living adjustments was determined as a level percentage of pay required to amortize the unfunded accrued liability over 30 years in annual payments increasing by 4.0% per year. The funding reform provisions of Chapter 78, P.L. 2011, changed the methodology used to amortize the unfunded accrued liability. 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.

Chapter 78, P.L. 2011, also increased member contributions from 7.5% to 9.00% of salary, beginning October 2011. Effective with the July 1, 2012 actuarial valuation, the determination of the State's normal cost contributions has been revised to reflect the use of all member contributions as an offset to the gross normal cost. This was the methodology used to determine the State's normal cost contribution prior to the enactment of Chapter 78, P.L. 2011, and is consistent with the methodology typically used by contributory public-sector retirement systems to calculate the employer's normal cost contribution.

The valuation reflects actual fiscal year 2014 State contributions of \$35.231.000, which have been reduced from the recommended pension contribution of \$103,193,378. In addition, the fiscal year 2015 recommended pension contribution of \$108,904,703 has been reduced to \$29,185,421. This amount reflects the State's planned fiscal year 2015 contribution of \$31,491,069, the recommended employer normal cost, discounted to the valuation date. This amount may be subject to change per the requirements of the State's fiscal year 2015 spending plan.

A contribution of \$118,600,705 is recommended for the fiscal year beginning July 1, 2015. This amount is comprised of an unfunded accrued liability payment of \$86,389,763 plus a normal contribution of \$32,210,942. This amount may be subject to change per the requirements of the State's fiscal year 2016 spending plan.

The State of New Jersey's Division of Pensions and Benefits reported the individual data for members of the State Police Retirement System of New Jersey as of the valuation date for use in the preparation of this report. While we did not verify the data at their source, we did perform tests for internal consistency and reasonableness. The amount of assets in the trust fund taken into account in the valuation was based on statements prepared for us by the Division of Pensions and Benefits. The accuracy of the results presented in this report is dependent on the accuracy of the data.

As required under Section 32 of Chapter 89, P.L. 1965, experience studies are performed once in every three year period. The valuation was prepared using demographic assumptions recommended on the basis of the July 1, 2008 - June 30, 2011 Experience Study and approved by the Board of Trustees at the September 25, 2012 Board meeting. These assumptions will remain in effect for valuation purposes until such time as the Board adopts revised demographic assumptions.

## **ACTUARIAL INFORMATION**

The valuation reflects economic assumptions, which include a rate of investment return of 7.90% per annum and the assumed future salary increases of 3.45% per annum through fiscal year ending 2021 and 4.45% per annum for fiscal years ending 2022 and thereafter. These assumptions will remain in effect for valuation purposes until such time the Board or the Treasurer recommends revised assumptions.

The valuation cost method used is the projected unit credit method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains and losses are recognized in future accrued liability contributions. The asset valuation method used was a five-year average of market values with write-up. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five-year period.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of the potential range of future results is beyond the scope of this valuation.

Use of this report for any other purpose or by anyone other than the Board or staff of the State of New Jersey's Division of Pensions and Benefits may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, or inapplicability of the report for that purpose. You should ask Buck to review any statement you wish to make on the results contained in this report. Buck will accept no liability for any such statement made without prior review by Buck.

The actuarial assumptions and methods used by the State Police Retirement System for financial reporting meet the requirements set forth in Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68. Information necessary to comply with the reporting requirements of GASB Statement Nos. 67 and No. 68 were provided in separate Actuarial Reports, which are available on the Division of Pensions and Benefits web site. Please refer to the separate Actuarial Reports for supplementary information documentation and support for the actuarial analysis and information presented herein.

In my opinion, the attached schedules of valuation results fairly represent the status of the State Police Retirement System and present an accurate view of historical data. The underlying assumptions and methods used are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the System.

The following supporting schedules in the Actuarial Section were prepared by Buck Consultants:

- Summary of Actuarial Assumptions and Methods
- Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls
- Schedule of Active Member Valuation Data

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- Solvency Test
- Analysis of Past Financial Experience Reconciliation of Employer Contribution Rates
- . Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes

In addition, Buck Consultants prepared the "Schedule of Assets and Liabilities" and the "Schedule of Employer Contributions" in the Financial Section. The Schedule of Assets and Liabilities and the Schedule of Employer Contributions are provided for informational purposes only since the reporting requirements of Statements No. 67 and No. 68 became effective as of the June 30, 2014 and June 30, 2015 reporting dates, respectively.

This report was prepared under my supervision. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the academy's qualification Standards to issue this Statement of Actuarial Opinion. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and I am available to answer questions concerning it.

Respectfully submitted,

Aaron Shapiro, FSA, EA, MAAA Principal, Consulting Actuary

# **Summary of Actuarial Assumptions and Methods**

Section 32 of Chapter 89, P.L. 1965, of the New Jersey Statutes provides that once in every three-year period the actuary shall examine in detail the demographic experience of the members and beneficiaries of the State Police Retirement System to assure that the tables used for determining expected liabilities are consistent with recent experience.

The demographic assumptions used for the July 1, 2014 actuarial valuation of the State Police Retirement System were based on the results of the experience study, which covered the period from July 1, 2008, to June 30, 2011, which were approved by the Board of Trustees, and the revised economic assumptions established in the July 1, 2012 valuation.

An outline of the actuarial assumptions and methods used for the July 1, 2014 valuation is as follows:

Valuation Interest Rate: 7.90% per annum, compounded annually.

**COLA:** No future COLA is assumed.

Salary Increases: Salaries are assumed to increase by 3.45% per year through fiscal year ending 2021 and 4.45% per year for fiscal years ending 2022 and thereafter.

401(a)(17) Pay Limit: \$260,000 for 2014 increasing 3.00% per annum, compounded annually.

Social Security Wage Base: \$117,000 for 2014 increasing 4.00% per annum, compounded annually.

**Termination:** Withdrawal rates vary by length of service. Illustrative rates are shown below:

	Lives per Thousand				
Age	Less Than 5 Years of Service	Five to Nineteen Years of Service			
25	5.0%	0.0%			
30	5.0	4.0			
35	8.3	1.0			
40	0.0	1.5			
45	0.0	2.0			
50	0.0	0.0			

#### **Separations From Service**

Representative mortality, disability and retirement rates are as follows:

	Annual Rates of¹						
	Ordinaı	y Death²	Accidental	Ordinary	Accidental		
Age	Male <sup>1</sup>	Female <sup>1</sup>	Death	Disability	Disability		
25	0.4%	0.2%	0.4%	0.6%	0.3%		
30	0.4	0.3	0.5	0.9	0.5		
35	0.6	0.5	0.5	2.4	1.9		
40	0.9	0.7	0.5	2.5	2.1		
45	1.2	1.1	0.6	3.1	2.1		
50	1.7	1.7	0.9	5.4	2.2		

<sup>1</sup> Per one thousand lives.

### **Marriage**

Husbands are assumed to be three years older than wives. Among the active population, 83.3% of participants are assumed married. No children are assumed. Neither the percentage married nor number of children assumption is individually explicit but they are considered as a single combined assumption.

#### **Valuation Method**

Projected Unit Credit Method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains and losses are recognized in future accrued liability contributions. 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 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.

#### **Receivable Contributions**

State contributions expected to be paid the June 30th following the valuation date are discounted by the valuation interest rate of 7.90% to the valuation date.

#### **Asset Valuation Method**

A five-year average of market values with write-up. (This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five-year period.)

RP-2000 Combined Healthy Male (set back 3 years) and RP-2000 Combined Healthy Female Mortality Tables projected on a generational basis from the base year of 2012 using Projection Scale AA. Rates shown above are unadjusted for Projection Scale AA.

#### **Deaths After Retirement**

For healthy inactive members and beneficiaries of deceased members the RP-2000 Combined Healthy Male (set back three years) and RP-2000 Combined Healthy Female Mortality tables projected on a generational basis from the base year of 2012 using Projection Scale AA. For disabled members the RP-2000 Combined Healthy Male (set forward five years) and RP-2000 Combined Healthy Female Mortality (set forward five years) tables are used. Illustrative rates of mortality unadjusted for Projection Scale AA are shown below:

	Lives per Thousand				
		and Beneficiaries of I Members	Disabled	l Members	
Age	Males	Females	Males	Females	
55	2.7%	2.7%	6.8%	5.1%	
60	4.7	5.1	12.7	9.7	
65	8.8	9.7	22.2	16.7	
70	16.1	16.7	37.8	28.1	
75	27.3	28.1	64.4	45.9	
80	46.9	45.9	110.8	77.5	
85	80.5	77.5	183.4	131.7	
90	136.0	131.7	267.5	194.5	

### **Rates of Retirement**

Rates of retirement vary by length of service and age (if more than 24 years of service) with 100% of those remaining at age 55 retiring at age 55. The rates are shown below:

Service	Lives per 100		
20%	2.0%		
21	0.5		
22	0.0		
23	0.0		
24	0.0		
25	45.5		
Greater than 25:			
(a) through age 42	5.0		
(b) ages 43-47	25.0		
(c) ages 48-53	30.0		
(d) age 54	55.0		

### **Summary of Actuarial Assumptions and Methods, continued**

### **Changes in Actuarial Assumptions and Methods**

The following are changes to the actuarial assumptions and methods from those used in the prior valuation:

- 1. 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. The compensation limit for the 2014 valuation is \$260,000. Effective with the July 1, 2014 valuation, the compensation limit is assumed to increase annually at a rate of 3% per annum.
- 2. Chapter 1, P.L. 2010, provided 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. The maximum contribution base for the 2014 valuation is \$117,000. Effective with the July 1, 2014 valuation, the maximum contribution base is assumed to increase annually at a rate of 4% per annum.
- 3. The employer receivable contribution included in the Market Value of Assets and the Actuarial Value of Assets has been discounted at the valuation rate of 7.90% from the expected payable date of June 30, 2015, to the valuation date.

# **Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls**

	Adde	d to Rolls	Remove	ed from Rolls	Rolls at	End of Year	% Increase in	Average
Valuation Date	Number	Annual Allowance	Number	Annual Allowance	Number <sup>1</sup>	Annual Allowance <sup>2</sup>	Annual Allowance	Annual Allowance
7/1/14	201	\$14,131,655	45	\$1,563,031	3,409	\$200,508,546	6.69%	\$58,817
7/1/13	291	20,641,305	68	2,192,736	3,253	187,939,922	10.88	57,774
7/1/12	256	17,483,694	44	1,557,365	3,030	169,491,353	10.81	55,938
7/1/11	232	14,848,311	66	2,030,490	2,818	152,950,538	10.14	54,276
7/1/10	107	6,656,153	40	1,345,937	2,652	138,873,702	3.97	52,366
7/1/09	119	7,458,400	54	1,593,106	2,585	133,573,198	7.53	51,672

<sup>&</sup>lt;sup>1</sup> These values include beneficiaries in receipt but exclude deferred vested terminations.

### **Schedule of Active Members Valuation Data**

Valuation Date	Number of Active Members	Annual Limited Compensation	Average Compensation	% Increase (Decrease) in Average Compensation
7/1/14	2,522	\$262,496,289	\$104,083	(1.46)%
7/1/13	2,481	262,063,829	105,628	1.48
7/1/12	2,721	283,219,927	104,086	7.56
7/1/11	2,844	275,219,752	96,772	1.12
7/1/10	3,030	289,980,657	95,703	0.48
7/1/09	3,016	287,267,502	95,248	(0.14)

### **Solvency Test**

	Accrued Liabilities For				Percentage of Accrued Liabilities Covered by Net Assets Available			
Valuation Date	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members	Net Assets Available for Benefits <sup>3</sup>	(1)	(2)	(3)	
7/1/14	\$173,529,948	\$2,173,442,158	\$616,210,014	\$1,981,376,495	100.00%	83.18%	0.00%	
7/1/13	171,462,709	2,034,551,263	664,576,728	1,990,797,312	100.00	89.42	0.00	
7/1/12	180,407,372	1,822,707,659	764,653,782	1,995,388,133	100.00	99.58	0.00	
7/1/11	182,626,003	1,634,856,377	764,468,466	2,015,624,130	100.00	100.00	25.92	
7/1/10	185,587,970	1,466,806,024	844,700,143	2,019,350,048	100.00	100.00	43.44	
7/1/09	175,349,297	1,647,110,535	1,002,995,736	2,067,242,877	100.00	100.00	24.41	

Actuarial value including receivable amounts.

<sup>&</sup>lt;sup>2</sup> The benefit amounts shown prior to the 7/1/2013 valuation date are the annualized benefits as of the valuation date and are not the actual benefits paid during the fiscal year.

### **Analysis of Past Financial Experience — Reconciliation of Employer Contribution Rates**

Valuation Year	July 1, 2014	July 1, 2013	July 1, 2012	July 1, 2011	July 1, 2010	July 1, 2009
Prior Year Contribution Rate <sup>2</sup>	41.56%	37.78%	32.53%	30.92%	36.11%	29.34%
Adjustment for Full Member Contributions to Offset Normal Cost	N/A	(1.34)	N/A	N/A	N/A	N/A
Revised Prior Year Contribution Rate <sup>2</sup>	41.56	36.44	32.53	30.92	36.11	29.34
Net Change Due to:						
Current New Entrants	0.36	0.00	0.11	0.00	0.43	0.60
Excess Salary Increases	(0.78)	(0.35)	1.58	(0.64)	(1.60)	(0.87)
Assumption/Method Changes	0.79	0.00	0.20	(1.75)	N/A	2.41
COLA Increases	0.00	0.00	0.00	(0.39)	(0.56)	0.43
Retiree Mortality	0.16	0.88	0.37	0.05	0.10	0.06
Active and Other Experience	0.38	1.28	(0.88)	0.19	0.59	(0.20)
Investment Loss/(Gain)	0.12	1.33	1.87	1.61	1.90	2.66
Appropriation Act <sup>1</sup>	2.59	1.98	2.00	2.54	2.17	1.68
Chapter 78, P.L. 2011	N/A	N/A	N/A	N/A	(8.22)	N/A
Recommended Contribution Rate:						
<ul> <li>Prior to reflecting Chapter 1, P.L. 2010<sup>2</sup></li> </ul>	45.18%	41.56%	37.78%	32.53%	30.92%	36.11%
After reflecting Chapter 1, P.L. 2010 <sup>2</sup>	N/A	23.75%	16.18%	9.30%	4.42%	N/A

<sup>&</sup>lt;sup>1</sup> Changes in 2011, 2012, and 2013 are due to the provisions of Chapter 1, P.L. 2010.

<sup>&</sup>lt;sup>2</sup> Excludes contribution rates of 0.84% for 2014, 0.76% for 2013, 0.67% for 2012, 0.73% for 2011, 0.62% for 2010, and 0.56% for 2009 for premiums payable to the Noncontributory Group Insurance Premium Fund.

# Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes

### **Eligibility for Membership**

All members of the former State Police and Benevolent Fund: full-time commissioned officers, non-commissioned officers, or troopers of the Division of State Police. Membership is a condition of employment.

### 1. Definitions

### **Plan Year**

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

### Service

Service rendered while a member as described above.

### **Credited Service**

A year is credited for each year of service as an officer or trooper in the State Police. Service with other State Retirement Systems is included in the calculation of the retirement benefit at the rate of 1% of final compensation for each year of service credit.

### **Compensation**

Based on contractual salary, including maintenance allowance, received by the member in the last 12 months of credited service preceding retirement, termination or death. Compensation does not include individual salary adjustments granted primarily in anticipation of the retirement or for temporary or extracurricular duties beyond the ordinary work day. (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 System 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.)

### **Final Compensation**

Average compensation received by member in 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 salary 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. Such term shall include the value of the member's maintenance allowance.)

### **Aggregate Contributions**

The sum of all amounts deducted from the compensation of a member or contributed by him or on his behalf. For contribution purposes, compensation does not include overtime, bonuses, maintenance, or any adjustments before retirement.

### **Adjusted Final Compensation**

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.

### 2. Benefits

### **Service Retirement**

Mandatory retirement at age 55. Voluntary retirement prior to age 55 with 20 years of credited service. 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 or more years 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.
- (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 as defined in (a) above plus 3% for each year of service in excess of 20 years.

### **Vested Termination**

Termination of service prior to age 55. Benefit for 10 to 20 years of service - Refund of aggregate contributions, or a deferred life annuity beginning at age 55 equal to 2% of final compensation for each year of service up to 20 years.

### **Ordinary Death**

### **Before Retirement**

Death of an active member of the plan. Benefit is equal to:

- (a) Lump sum payment equal to 3-1/2 times final compensation, 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%, or 50% of final compensation payable to one, two, or three dependent children. If there is no surviving spouse (or dependent children), an amount equal to 25% or 40% of final compensation to one or two dependent parents.

### **Summary of the Benefit and Contribution Provisions** as Interpreted for Valuation Purposes, continued

### Minimum ordinary death benefit

Aggregate contributions

### After Retirement

Death of a retired member of the plan. The benefit is equal to:

- (a) Lump sum of 50% of final compensation, 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%, or 50% of final compensation payable to one, two or three dependent children, respectively.

### **Accidental Death**

Death of an active member of the plan resulting during performance of duties. Benefit is equal to:

- (a) Lump sum payment equal to 3-1/2 times final compensation,
- (b) Spousal life annuity of 70% of adjusted final compensation payable until spouse's death. If there is no surviving spouse, or upon death of the surviving spouse, a total of 20%, 35%, or 50% of adjusted final compensation payable to one, two or three dependent children. If there is no surviving spouse or dependent children, 25% or 40% of adjusted final compensation to one or two dependent parents.

### **Ordinary Disability Retirement**

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.

- (a) The benefit for members with less than four years of service is a refund of the member's aggregate contributions.
- (b) For members with at least four years of service, the benefit is an immediate life annuity equal to 40% of final compensation plus 1-1/2% of final compensation for years of creditable service in excess of 26-2/3.

(c) For members who are forced to retire with 20 but less than 25 years of service, the benefit is 50% of the member's final compensation plus 3% of final compensation for each year of service in excess of 20 years, to a maximum of 65% of final compensa-

For death following disability retirement, a lump sum equal to 3-1/2 times final compensation if death occurs prior to age 55 or 1/2 of final compensation after age 55.

### **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. Benefit is an immediate life annuity equal to 2/3 of final compensation. Upon death after disability retirement, lump sum benefit of 3-1/2 times final compensation if death occurs before age 55 and 1/2 times final compensation if death occurs after age 55.

### **Loan Provision**

Eligible if an active member of the State Police Retirement System with at least three years of contributory service. If eligible, a member may borrow an amount, which is greater than \$50, but not more than 50% of aggregate contributions. The loan accrues at a rate set by the State Treasurer, which is based on a commercially reasonable rate as required by the Internal Revenue Service. An administrative fee may be charged by for the loan.

### **Member Contributions**

Each member contributes 9.0% of Compensation.

### ACTUARIAL INFORMATION

STATE OF NEW JERSEY **DIVISION OF PENSIONS AND BENEFITS** JUDICIAL RETIREMENT SYSTEM



June 29, 2016

**State House Commission Judicial Retirement System** of New Jersey

**Re: Actuary's Certification Letter** 

**Aaron Shapiro** 

Principal, Consulting Actuary

Xerox HR Services Buck Consultants, LLC 500 Plaza Drive Secaucus, N.J. 07096-1533

aaron.shapiro@xerox.com tel 201.902.2706 fax 201.553.6402

### Members of the Commission:

An actuarial valuation of the Judicial Retirement System is performed annually to measure the ongoing costs of the System and the progress towards the funding goals of the System over time. In general, the financial goals of the Judicial Retirement System are a pattern of contributions, which is sufficient to cover the normal cost of the System plus the contribution towards the unfunded accrued liability.

In accordance with the New Jersey statutes, employers are required to make two contributions to the System, a normal contribution and an accrued liability contribution. The normal contribution is defined under the Projected Unit Credit funding method as the present value of the benefits accruing during the current year. Prior to the July 1, 2010 valuation, the unfunded accrued liability contribution for basic allowances and cost of living adjustments was determined as a level percentage of pay required to amortize the unfunded accrued liability over 30 years in annual payments increasing by 4.0% per year. The funding reform provisions of Chapter 78, P.L. 2011, changed the methodology used to amortize the unfunded accrued liability. 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.

Chapter 78, P.L. 2011, also increased member contributions by 9% of salary phased-in over a period of seven years, beginning October 2011. The increase in member contributions will be fully phased-in by July 2017. Effective with the July 1, 2012 actuarial valuation, the determination of the State's normal cost contributions has been revised to reflect the use of all member contributions as an offset to the gross normal cost. This was the methodology used to determine the State's normal cost contribution prior to the enactment of Chapter 78, P.L. 2011 and is consistent with the methodology typically used by contributory public-sector retirement systems to calculate the employer's normal cost contribution.

The valuation reflects actual fiscal year 2014 State contributions of \$15.334,000, which have been reduced from the recommended pension contribution of \$43,050,167. In addition, the fiscal year 2015 recommended pension contribution of \$44,334,504 has been reduced to \$13,083,987. This amount reflects the State's planned fiscal year 2015 contribution of \$14,117,622, the recommended employer normal cost, discounted to the valuation date. This amount may be subject to change per the requirements of the State's fiscal year 2015 spending plan.

A contribution of \$46,502,819 is recommended for the fiscal year beginning July 1, 2015. This amount is comprised of an unfunded accrued liability payment of \$32,959,419 plus a normal contribution of \$13,543,400. This amount may be subject to change per the requirements of the State's fiscal year 2016 spending plan.

The State of New Jersey's Division of Pensions and Benefits reported the individual data for members of the Judicial Retirement System of New Jersey as of the valuation date for use in the preparation of this report. While we did not verify the data at their source, we did perform tests for internal consistency and reasonableness. The amount of assets in the trust fund taken into account in the valuation was based on statements prepared for us by the Division of Pensions and Benefits. The accuracy of the results presented in this report is dependent on the accuracy of the data.

As required under Chapter 140, P.L. 1973, experience studies are performed once in every three year period. The valuation was prepared on the basis of the demographic assumptions that were determined from the July 1, 2008 - June 30, 2011 Experience Study and approved by the State House Commission. These assumptions will remain in effect for valuation purposes until such time as the State House Commission adopts revised demographic assumptions.

### STATE OF NEW JERSEY **DIVISION OF PENSIONS AND BENEFITS** JUDICIAL RETIREMENT SYSTEM

### **ACTUARIAL INFORMATION**

The valuation reflects economic assumptions, which include a rate of investment return of 7.90% per annum and the assumed future salary increases of 2.50% per annum through fiscal year ending 2021 and 3.50% per annum for fiscal years ending 2022 and thereafter. These assumptions will remain in effect for valuation purposes until such time the State House Commission or the Treasurer recommends revised assumptions.

The valuation cost method used is the projected unit credit method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains and losses are recognized in future accrued liability contributions. The asset valuation method used was a five-year average of market values with write-up. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of the potential range of future results is beyond the scope of this valuation.

Use of this report for any other purpose or by anyone other than the State House Commission or staff of the State of New Jersey's Division of Pensions and Benefits may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, or inapplicability of the report for that purpose. You should ask Buck to review any statement you wish to make on the results contained in this report. Buck will accept no liability for any such statement made without prior review by Buck.

The actuarial assumptions and methods used by the Judicial Retirement System for financial reporting meet the requirements set forth in Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68. Information necessary to comply with the reporting requirements of GASB Statement Nos. 67 and No. 68 were provided in separate Actuarial Reports, which are available on the Division of Pensions and Benefits web site. Please refer to the separate Actuarial Reports for supplementary information documentation and support for the actuarial analysis and information presented herein.

In my opinion, the attached schedules of valuation results fairly represent the status of the Judicial Retirement System and present an accurate view of historical data. The underlying assumptions and methods used are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the System.

The following supporting schedules in the Actuarial Section were prepared by Buck Consultants:

- Summary of Actuarial Assumptions and Methods
- Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls
- Schedule of Active Member Valuation Data

Warron Shapviro

- Solvency Test
- Analysis of Past Financial Experience Reconciliation of Employer Contribution Rates
- . Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes

In addition, Buck Consultants prepared the "Schedule of Assets and Liabilities" and the "Schedule of Employer Contributions" in the Financial Section. The Schedule of Assets and Liabilities and the Schedule of Employer Contributions are provided for informational purposes only since the reporting requirements of Statements No. 67 and No. 68 became effective as of the June 30, 2014, and June 30, 2015, reporting dates, respectively.

This report was prepared under my supervision. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Academy's qualification Standards to issue this Statement of Actuarial Opinion. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and I am available to answer questions concerning it.

Respectfully submitted,

Aaron Shapiro, FSA, EA, MAAA Principal, Consulting Actuary

### **Summary of Actuarial Assumptions and Methods**

Section 31 of Chapter 140, P.L. 1973, of the New Jersey Statutes provides that once in every three-year period the actuary shall examine in detail the demographic experience of the members and beneficiaries of the Judicial Retirement System to assure that the tables used for determining expected liabilities are consistent with recent experience.

The demographic assumptions used for the July 1, 2014 actuarial valuation of the Judicial Retirement System were based on the results of the experience study, which covered the period from July 1, 2008, to June 30, 2011, which were approved by the State House Commission, and the revised economic assumptions established in the July 1, 2012 valuation.

An outline of the actuarial assumptions and methods used for the July 1, 2014 valuation is as follows:

Valuation Interest Rate: 7.90% per annum, compounded annually.

**COLA:** No future COLA is assumed.

Salary Increases: Salaries are assumed to increase by 2.50% per year through fiscal year ending 2021 and 3.50% per year for fiscal years ending 2022 and thereafter.

401(a)(17) Pay Limit: \$260,000 for 2014 increasing 3.00% per annum, compounded annually.

**Separations from Service:** Representative mortality and disability rates are as follows:

	Lives per Thousand						
	Death¹						
Age	Male	Female	Disability				
30	0.38%	0.22%	0.22%				
35	0.44	0.35	0.26				
40	0.77	0.55	0.33				
45	1.08	0.85	0.64				
50	1.51	1.33	1.14				
55	2.14	2.02	1.97				
60	3.62	3.48	3.26				
65	6.75	6.66	4.73				

<sup>1</sup> RP-2000 Combined Healthy Male and RP-2000 Combined Healthy Female Mortality Tables (set back 5 years for males and 3 years for females) projected on a generational basis from the base year of 2012 using Projection Scale AA. The above rates are unadjusted for Projection Scale AA.

### Summary of Actuarial Assumptions and Methods, continued

### **Deaths after Retirement**

RP-2000 Combined Healthy Mortality Tables (set back five years for males and three years for females) for service retirement and beneficiaries of former members projected on a generational basis from the base year of 2012 using Projection Scale AA. The RP-2000 Disability Mortality Tables (set forward two years for males and females) are used to value disabled retirees. Representative values of the annual rates of mortality unadjusted for Projection Scale AA are as follows:

	Lives per Thousand					
	Retired Members and Beneficiaries of Deceased Members		Disabled Members			
Age	Males	Females	Males	Females		
55	2.14%	2.02%	38.03%	18.65%		
60	3.62	3.48	44.98	24.08		
65	6.75	6.66	54.45	31.32		
70	12.74	12.16	69.41	42.85		
75	22.21	20.66	92.15	59.54		
80	37.83	34.11	121.88	82.30		
85	64.37	56.29	155.23	114.51		
90	110.76	96.34	216.61	159.92		

### Retirement

It was assumed that the probability of retirement at age 65 for those judges who have 12 or more years of judicial service at age 65 is at 25% per year. In addition, retirement for members who have attained age 60 with 20 years of judicial service or attained age 65 with 15 years judicial service is at 30% at age 60, 25% at age 65, and 20% for all other ages between ages 60 and 70. At age 70, all remaining active members are assumed to retire.

### **Marriage**

Husbands are assumed to be three years older than wives. Among the active population, 90% of participants are assumed married. No children are assumed. Neither the percentage married nor the number of children assumption is individually explicit but are considered reasonable as a single combined assumption.

### **Valuation Method**

Projected Unit Credit Method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains and losses are recognized in future accrued liability contributions. 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.

Chapter 78, P.L. 2011, increased the member contributions by 9% of salary, phased-in over a seven year period.

### **ACTUARIAL INFORMATION**

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
JUDICIAL RETIREMENT SYSTEM

### Summary of Actuarial Assumptions and Methods, continued

### **Receivable Contributions**

State contributions expected to be paid the June 30th following the valuation date are discounted by the valuation interest rate of 7.90% to the valuation date.

### **Asset Valuation Method**

A five year average of market values with write-up was used. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five-year period.

### **Changes in Actuarial Assumptions and Methods**

The following are changes to the actuarial assumptions and methods from those used in the prior valuation:

- 1. 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. The compensation limit for the 2014 valuation is \$260,000. Effective with the July 1, 2014 valuation, the compensation limit is assumed to increase annually at a rate of 3% per annum.
- 2. The employer receivable contribution included in the Market Value of Assets and the Actuarial Value of Assets has been discounted at the valuation rate of 7.90% from the expected payable date of June 30, 2015, to the valuation date.

### **Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls**

	Adde	d to Rolls	Remove	ed from Rolls	Rolls at	t End of Year	% Increase in	Average
Valuation Date	Number	Annual Allowance	Number	Annual Allowance	Number <sup>1</sup>	Annual Allowance <sup>2</sup>	Annual Allowance	Annual Allowance
7/1/14	34	\$3,165,378	22	\$1,456,153	561	\$49,946,393	3.54%	\$89,031
7/1/13	48	4,091,470	34	2,021,915	549	48,237,168	4.48	87,864
7/1/12	34	3,723,186	21	1,423,636	535	46,167,613	5.24	86,295
7/1/11	41	3,699,618	24	1,442,965	522	43,868,063	6.35	84,038
7/1/10	47	4,424,782	24	1,659,228	505	41,250,479	7.22	81,684
7/1/09	38	3,502,225	21	1,605,240	482	38,472,184	7.91	79,818

<sup>&</sup>lt;sup>1</sup> These values include beneficiaries in receipt but exclude deferred vested terminations.

### **Schedule of Active Members Valuation Data**

Valuation Date	Number of Active Members	Annual Limited Compensation	Average Compensation	% Increase (Decrease) in Average Compensation
7/1/14	397	\$66,028,491	\$166,319	0.32%
7/1/13	409	67,810,110	165,795	(0.03)
7/1/12	407	67,497,660	165,842	(0.16)
7/1/11	406	67,437,125	166,101	0.01
7/1/10	432	71,746,413	166,080	(0.07)
7/1/09	422	70,133,372	166,193	5.17

### **Solvency Test**

	Accrued Liabilities For				Percentage of Accrued Liabilities Covered by Net Assets Available			
Valuation Date	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members	Net Assets Available for Benefits <sup>3</sup>	(1)	(2)	(3)	
7/1/14	\$23,058,086	\$444,577,573	\$165,044,278	\$258,101,497	100.00%	52.87%	0.00%	
7/1/13	20,588,967	435,970,958	163,816,367	276,966,331	100.00	58.81	0.00	
7/1/12	19,799,227	417,423,315	167,958,092	290,191,842	100.00	64.78	0.00	
7/1/11	18,353,365	394,760,527	172,586,895	310,724,782	100.00	74.06	0.00	
7/1/10	17,967,938	354,390,110	182,182,355	329,030,387	100.00	87.77	0.00	
7/1/09	17,288,107	364,446,307	212,308,961	355,522,646	100.00	92.81	0.00	

<sup>&</sup>lt;sup>3</sup> Actuarial value including receivable amounts.

<sup>&</sup>lt;sup>2</sup> The benefit amounts shown are the annualized benefits as of the valuation date and are not the actual benefits paid during the fiscal year.

### **Analysis of Past Financial Experience — Reconciliation of Employer Contribution Rates**

Valuation Year	July 1, 2014	July 1, 2013	July 1, 2012	July 1, 2011	July 1, 2010	July 1, 2009
Prior Year Contribution Rate <sup>2</sup>	65.38%	66.20%	60.43%	53.45%	49.41%	42.97%
Adjustment for Full Member Contributions to Offset Normal Cost	N/A	(2.42)	N/A	N/A	N/A	N/A
Revised Prior Year Contribution Rate <sup>2</sup>	65.38	63.78	60.43	53.45	49.41	42.97
Net Change Due to:						
Current New Entrants	0.68	1.93	1.73	0.20	2.61	1.52
Excess Salary Increases	(0.34)	(0.91)	(0.97)	(1.37)	(1.38)	(0.15)
Assumption/Method Changes	1.03	0.00	0.61	(3.87)	0.00	0.32
COLA Increases	N/A	N/A	N/A	(0.19)	(0.46)	0.29
Retiree Mortality	0.36	0.19	0.12	0.04	(0.04)	0.01
Active and Other Experience	(1.16)	(3.86)	(1.05)	6.37	(1.46)	0.02
Investment Loss/(Gain)	0.45	1.06	1.52	1.37	1.43	2.03
Appropriation Act <sup>1</sup>	4.03	3.19	3.81	4.43	2.94	2.40
Chapter 78, P.L. 2011	N/A	N/A	N/A	N/A	0.40	N/A
Recommended Contribution Rate:						
<ul> <li>Prior to reflecting Chapter 1, P.L. 2010<sup>2</sup></li> </ul>	70.43%	65.38%	66.20%	60.43%	53.45%	49.41%
After reflecting Chapter 1, P.L. 2010 <sup>2</sup>	N/A	37.36%	28.37%	17.27%	7.63%	N/A

<sup>&</sup>lt;sup>1</sup> Changes in 2011, 2012, and 2013 are due to the provisions of Chapter 1, P.L. 2010.

<sup>&</sup>lt;sup>2</sup> Excludes contribution rates of 1.22% for 2014, 1.18% for 2013, 1.29% for 2012, 1.34% for 2011, 1.34% for 2010, and 1.23% for 2009 for premiums payable to the Noncontributory Group Insurance Premium Fund.

### **Summary of the Benefit and Contribution Provisions** as Interpreted for Valuation Purposes

### **Eligibility for Membership**

Chief Justice and associate justices of the Supreme Court, judges of the Superior Court and tax courts of the State of New Jersey.

### 1. Definitions

### **Plan Year**

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

### Service

A year is credited for each year of service as a public employee in the State of New Jersey. Any service, for which member did not receive annual salary of at least \$500, shall be excluded.

### **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.)

### **Accumulated Deductions**

The sum of all amounts deducted from the compensation of a member or contributed by him or on his behalf.

### **Retirement Allowance**

Pension derived from contributions of the State plus the annuity derived from employee contributions.

### 2. Benefits

### **Service Retirement**

- (A) Mandatory retirement at age 70. Voluntary retirement prior to age 70 as follows:
  - (a) Age 70 and 10 years of judicial service;
  - (b) Age 65 and 15 years of judicial service; or
  - (c) Age 60 and 20 years of judicial service. Benefit is an annual retirement allowance equal to 75% of fina
- (B) Age 65 while serving as a judge, five consecutive years of judicial

service and 15 years in the aggregate of public service; or

- Age 60 while serving as a judge, five 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.
- (C) Age 60 while serving as a judge, five 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 in excess of 25 years.
- (D) 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 in excess of 25 years.

### **Early Retirement**

Prior to age 60 while serving as a judge, five 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.

### **Vested Termination**

Termination of service prior to age 60, with five 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% for service in excess of 25 years.

### **Death Benefits**

### **Before Retirement**

Death of an active member of the plan. Benefit is equal to:

- (a) Lump sum payment equal to 1-1/2 times final salary, 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 (children). 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 (children). If there is no surviving spouse (or dependent children), 20% or 30% of final salary to one or two dependent parents.

### After Retirement

Death of a retired member of the plan. Benefit is equal to:

- (a) Lump sum of 25% of final salary for a member retired under normal or early retirement. If a member were receiving a disability benefit, a lump sum 1-1/2 times final salary if death occurred before the member attained age 60 and 1/4 times final salary if death occurred after age 60, 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 (children). 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 (children).

### **Summary of the Benefit and Contribution Provisions** as Interpreted for Valuation Purposes, continued

### **Disability Retirement**

Physically or otherwise incapacitated for a full and efficient service to State in his judicial capacity and such incapacity is likely to be permanent. Benefit is an annual retirement allowance of 75% of final salary.

### **Member Contributions**

Any member enrolled prior to January 1, 1996, contributes 3% of the difference between current salary and salary for that position on January 18, 1982. Members enrolled on and 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 will be fully phased-in by July 2017.)

- (a) For members enrolled prior to January 1, 1996:
  - i. Member Contributions of 9% (phased-in over a period of seven years beginning October 2011) of the salary for that position on January 18, 1982.
  - ii. Member Contributions increase from 3% to 12% (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 Contributions increase from 3% to 12% of full salary phased-in over a period of seven years beginning October 2011.

### STATE OF NEW JERSEY **DIVISION OF PENSIONS AND BENEFITS** CONSOLIDATED POLICE AND FIREMEN'S PENSION FUND

### **ACTUARIAL INFORMATION**



June 29, 2016

The Board of Trustees Consolidated Police and Firemen's Pension Fund of New Jersey

**Re: Actuary's Certification Letter** 

### **Aaron Shapiro**

Principal, Consulting Actuary

Xerox HR Services Buck Consultants, LLC 500 Plaza Drive Secaucus, N.J. 07096-1533

aaron.shapiro@xerox.com tel 201.902.2706 fax 201.553.6402

### Members of the Board:

An actuarial valuation of the Consolidated Police and Firemen's Pension Fund is performed annually to measure the ongoing costs of the Fund and the progress towards the funding goals of the Fund over time. Since the Pension Fund is closed to new entrants and there are no active participants, the financial goals of the Consolidated Police and Firemen's Pension Fund are to ensure that the combination of future State appropriations and current Trust assets, both projected forward with expected investment earnings, are sufficient to provide for all future benefit payments.

The unfunded accrued liability for basic allowances was initially determined as of June 30, 1990, and was to be amortized over a nine-year period. However, the provisions of Chapter 115, P.L. 1997, of the Pension Security Legislation permitted the State to pay off the unfunded accrued liabilities from the proceeds of pension obligation bonds.

The recommended contribution for the fiscal year beginning July 1, 2015, was based on the method described above using an interest rate of 2.00% per annum and the mortality assumption for service retirements and beneficiaries reflects the RP-2000 Combined Healthy Mortality Tables projected on a generational basis using Projection Scale AA from the base year of 2012. The asset valuation method used was a five-year average of market values with write-up. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income.

The State of New Jersey's Division of Pensions and Benefits reported the individual data for members of the Consolidated Police and Firemen's Pension Fund of New Jersey as of the valuation date to the actuaries. While we did not verify the data at their source, we did perform tests for internal consistency and reasonableness. The amount of assets in the trust fund taken into account in the valuation was based on statements prepared for us by the Division of Pensions and Benefits. The accuracy of the results presented in this report is dependent on the accuracy of the data.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of the potential range of future results is beyond the scope of this valuation.

Use of this report for any other purpose or by anyone other than the Commission or staff of the State of New Jersey's Division of Pensions and Benefits may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, or inapplicability of the report for that purpose. You should ask Buck to review any statement you wish to make on the results contained in this report. Buck will accept no liability for any such statement made without prior review by Buck.

The actuarial assumptions and methods used by the Consolidated Police and Firemen's Pension Fund for financial reporting meet the requirements set forth in Governmental Accounting Standards Board (GASB) Statement No. 67. Information necessary to comply with the reporting requirements of GASB Statement No. 67 was provided in a separate Actuarial Report, which is available on the Division of Pensions and Benefits web site. Please refer to that separate Actuarial Report for supplementary information documentation and support for the actuarial analysis and information presented herein.

In my opinion, the attached schedules of valuation results fairly represent the status of the Consolidated Police and Firemen's Pension Fund and present an accurate view of historical data. The underlying assumptions and methods used are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the Fund.

The following supporting schedules in the Actuarial Section were prepared by Buck Consultants:

- Summary of Actuarial Assumptions and Methods
- . Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls
- Schedule of Active Member Valuation Data

### **ACTUARIAL INFORMATION**

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
CONSOLIDATED POLICE AND FIREMEN'S PENSION FUND

- · Solvency Test
- · Analysis of Past Financial Experience Reconciliation of Unfunded Accrued Liability/(Surplus)
- · Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes

In addition, Buck Consultants prepared the "Schedule of Assets and Liabilities" and the "Schedule of Employer Contributions" in the Financial Section. The Schedule of Assets and Liabilities and the Schedule of Employer Contributions are provided for informational purposes only since the reporting requirements of Statement No. 67 became effective as of the June 30, 2014, reporting date.

This report was prepared under my supervision. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Academy's qualification Standards to issue this Statement of Actuarial Opinion. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and I am available to answer questions concerning it.

Respectfully submitted,

Aaron Shapiro, F.S.A., E.A., M.A.A.A.

Laron Shapvio

Principal, Consulting Actuary

### **Summary of Actuarial Assumptions and Methods**

An outline of the actuarial assumptions and methods used for the July 1, 2014 valuation is as follows:

Valuation Interest Rate: 2.00% per annum, compounded annually for development of costs.

Deaths after Retirement: RP-2000 Combined Healthy Mortality Tables for service retirements and beneficiaries projected on a generational basis from the base year of 2012 using Projection Scale AA. Special mortality tables are used for the period after disability retirement with no provisions made for mortality improvement after the valuation date. Representative values of the assumed annual rates of mortality unadjusted for Projection Scale AA for current retirees are as follows:

	Service Pensioner	Disability		
Age	Men	Women	Pensioners	
60	0.675%	1.506%	2.45%	
65	1.274	0.971	3.57	
70	2.221	1.674	5.32	
75	3.783	2.811	8.02	
80	6.437	4.588	12.11	
85	11.076	7.745	18.20	
90	18.341	13.168	26.88	

### **Marriage**

Males are assumed to be four years older than females, no assumption was made as to children.

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 benefit 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.).

### **Actuarial Method**

The unfunded accrued liability was measured as of June 30, 1990, and the accrued liability contribution rate was then determined such that the unfunded accrued liability was to be amortized over a period of nine years with contributions expected to remain constant.

In determining the unfunded accrued liability and the contribution rate, the actuarial value of assets as of June 30, 1990, was based upon 100% of the market value of fund assets. For subsequent actuarial valuations, the actuarial value of assets is adjusted to reflect actual contributions and benefit payments, an assumed rate of return on the previous year's assets and current year's cash flow at an annual rate of 2.00% with an adjustment to reflect 20% of the difference between the resulting value and the actual market value of Fund assets.

In developing the unfunded accrued liability contribution rate as of June 30, 1991, and subsequent years, the contribution rate is adjusted to amortize any gains or losses over the remainder of the nine-year period. (Without additional guidance, we have assumed that the unfunded accrued liability determined as of June 30, 2012, will be amortized over one year.)

# Schedule of Retirement Members and Beneficiaries Added to and Removed from Rolls

	Adde	d to Rolls	Remove	d from Rolls	Rolls at	End of Year	% Increase	
Valuation Date	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance <sup>2</sup>	(Decrease) in Annual Allowance	Average Annual Allowance
7/1/14	0	\$0	36	\$268,424	149	\$1,033,825	(20.61)%	\$6,938
7/1/13	0	0	56	414,903	185	1,302,249	(24.16)	7,039
7/1/12	3	46,595	72	478,997	241	1,717,152	(20.12)	7,125
7/1/11	1	6,861	87	572,894	310	2,149,554	(20.84)	6,934
7/1/10	0	0	50	356,230	396	2,715,587	(11.60)	6,858
7/1/09	8	60,806	94	653,683	446	3,071,817	(16.18)	6,887

<sup>&</sup>lt;sup>1</sup> The benefit amounts shown are the annualized benefit as of the valuation date and are not the actual benefits paid during the fiscal year.

### **Schedule of Active Member Valuation Data**

There have been no active participants in the Fund since July 1, 1992.

### **Solvency Test**

	Ac	crued Liabilities F	or		_	e of Accrued y Net Assets	
Valuation Date	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members	Net Assets Available for Benefits <sup>3</sup>	(1)	(2)	(3)
7/1/14	\$0	\$4,848,499	\$0	\$4,366,457	N/A	90.06%	N/A
7/1/13	0	6,102,292	0	6,445,847	N/A	100.00	N/A
7/1/12	0	8,026,421	0	7,179,322	N/A	89.45	N/A
7/1/11	0	9,179,981	0	8,300,684	N/A	90.42	N/A
7/1/10	0	11,824,904	0	10,632,228	N/A	89.91	N/A
7/1/09	0	14,024,132	0	13,879,949	N/A	98.97	N/A

<sup>&</sup>lt;sup>1</sup> Actuarial value including receivable amount.

### **Analysis of Past Financial Experience — Reconciliation of Unfunded Accrued Liability/(Surplus)**

Valuation Year	July 1, 2014	July 1, 2013	July 1, 2012	July 1, 2011	July 1, 2010	July 1, 2009
Prior Year Unfunded/(Surplus)	\$(343,555)	\$847,099	\$879,297	\$1,192,676	\$144,183	\$357,106
Net Change Due to:						
Interest on Prior Year Unfunded/(Surplus)	(6,871)	16,942	17,586	23,854	2,884	7,142
Investment Loss/(Gain)	265,707	306,998	(355,895)	408,804	467,873	532,716
Retiree Experience	(314,561)	(650,553)	(515,459)	(572,247)	206,204	(388,781)
State Appropriations	0	(864,041)	(896,883)	(173,790)	0	(364,000)
Appropriation Act	881,322	N/A	N/A	N/A	371,532	N/A
Assumption, Benefit or Method Changes	N/A	N/A	1,006,663	N/A	N/A	N/A
Actual Unfunded/(Surplus)	\$482,042	\$(343,555)	\$847,099	\$879,297	\$1,192,676	\$144,183

### **Summary of the Benefit and Contribution Provisions** as Interpreted for Valuation Purposes

### **Eligibility for Membership**

Member of a municipal police department, municipal paid or part-paid fire department or 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.

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.

Employee Member: Any member who is not subject to active service or duty.

### 1. Definitions

### **Plan Year**

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

Service rendered while a member as described above.

### **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 work day. (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.)

### **Final Compensation**

Compensation Compensation received during the last 12 months of service preceding retirement or termination of service.

### **Average Salary**

Salary averaged over the last three years prior to retirement or other termination of service.

### 2. Benefits

### **Service Retirement**

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 service 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.

### **Death Benefit 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 and 35% (50%) of final compensation will be payable, to two (three) surviving children. If there is no surviving spouse or child, 25% (40%) of final compensation will be payable to one (two) surviving dependent parent(s). The minimum spousal annuity is \$4,500 per annum.

### **Death Benefit while not on duty after retirement**

Life annuity equal to 50% of the member's average salary payable to the spouse, plus 15% (25%) to one (two or more) surviving child (children). If there is no surviving spouse or if the surviving spouse dies or remarries, 20% (35%, 50%) of the member's average salary to one (two, three or more) surviving child (children). In the event that there is no surviving spouse or child, 25% (40%) of the member's average salary will be payable to one (two) dependent parent(s). The minimum spousal annuity is \$4,500 per annum.

### **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 duty. Benefit is an immediate life annuity equal to 1/2 of average salary.

### **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.

# STATE OF NEW JERSEY DIVISION OF PENSIONS AND BENEFITS PRISON OFFICERS' PENSION FUND

### ACTUARIAL INFORMATION



June 29, 2016

The Board of Trustees
Prison Officers' Pension Fund
of New Jersey

**Aaron Shapiro** 

Principal, Consulting Actuary

Xerox HR Services Buck Consultants, LLC 500 Plaza Drive Secaucus, N.J. 07096-1533

aaron.shapiro@xerox.com tel 201.902.2706 fax 201.553.6402

**Re: Actuary's Certification Letter** 

### Members of the Board:

An actuarial valuation of the Prison Officers' Pension Fund is performed annually to measure the ongoing costs of the Fund and the progress towards the funding goals of the Fund over time. Since the pension fund is closed to new entrants and there are no active participants, the financial goals of the Prison Officers' Pension Fund are to ensure that the combination of future State appropriations and current Trust assets, both projected forward with expected investment earnings, are sufficient to provide for all future benefit payments.

The unfunded accrued liability for basic allowances was initially determined as of July 1, 1989, and was to be amortized over the 14-year period beginning July 1, 1989, and ending on July 1, 2002. However, the provisions of Chapter 115, P.L. 1997, of the Pension Security Legislation permitted the State to pay off the unfunded accrued liability from the proceeds of pension obligation bonds. The net effect of this legislation and plan experience was that no contributions were required for the fiscal year beginning July 1, 2015. (There were no required unfunded accrued liability payments due to the fact that a net surplus existed as of July 1, 2014.)

The underlying demographic data is maintained and provided by the New Jersey Division of Pensions and Benefits. The data is analyzed by Buck Consultants for internal completeness and consistency and compared with the prior valuation data to again ensure consistency.

The recommended contribution for the fiscal year beginning July 1, 2015, was based on the method described above using an interest rate of 5.00%. In accordance with actuarial standards of practice, the mortality assumption for service retirements and beneficiaries reflects the RP-2000 Combined Healthy Mortality Tables projected on a generational basis using Projection Scale AA from the base year of 2012. Assets are valued at book value, which is equivalent to market value.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of the potential range of future results is beyond the scope of this valuation.

Use of this report for any other purpose or by anyone other than the staff of the State of New Jersey's Division of Pensions and Benefits may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, or inapplicability of the report for that purpose. You should ask Buck to review any statement you wish to make on the results contained in this report. Buck will accept no liability for any such statement made without prior review by Buck.

The actuarial assumptions and methods used by the Prison Officers' Pension Fund for financial reporting meet the requirements set forth in Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68. Information necessary to comply with the reporting requirements of GASB Statement Nos. 67 and No. 68 were provided in separate Actuarial Reports, which are available on the Division of Pensions and Benefits web site. Please refer to the separate Actuarial Reports for supplementary information documentation and support for the actuarial analysis and information presented herein.

In my opinion, the attached schedules of valuation results fairly represent the status of the Prison Officers' Pension Fund and present an accurate view of historical data. The underlying assumptions and methods used are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the Fund.

The following supporting schedules in the Actuarial Section were prepared by Buck Consultants:

- . Summary of Actuarial Assumptions and Methods
- . Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls
- Schedule of Active Member Valuation Data
- Solvency Test

### ACTUARIAL INFORMATION

STATE OF NEW JERSEY **DIVISION OF PENSIONS AND BENEFITS** PRISON OFFICERS' PENSION FUND

- Analysis of Past Financial Experience Reconciliation of Unfunded Accrued Liability/(Surplus)
- Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes

In addition, Buck Consultants prepared the "Schedule of Assets and Liabilities" and the "Schedule of Employer Contributions" in the Financial Section. The Schedule of Assets and Liabilities and the Schedule of Employer Contributions are provided for informational purposes only since the reporting requirements of Statements No. 67 and No. 68 became effective as of the June 30, 2014, and June 30, 2015, reporting dates, respectively.

This report was prepared under my supervision. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Academy's qualification Standards to issue this Statement of Actuarial Opinion. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and I am available to answer questions concerning it.

Respectfully submitted,

Aaron Shapiro, F.S.A., E.A., M.A.A.A.

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Principal, Consulting Actuary

### **Summary of Actuarial Assumptions and Methods**

An outline of the actuarial assumptions and methods used for the July 1, 2014 valuation is as follows:

Valuation Interest Rate: 5.00% per annum, compounded annually.

Deaths After Retirement: RP-2000 Combined Healthy Mortality Tables for service retirements and beneficiaries projected on a generational basis from the base year of 2012 using Projection Scale AA. Special mortality tables are used for the period after disability retirement with no provisions made for mortality improvement after the valuation date for disability retirements. Representative values of the assumed annual rates of mortality unadjusted for Projection Scale AA for current retirees are as follows:

	Service Pensioner	s and Beneficiaries	Disability
Age	Men	Women	Pensioners
60	0.675%	0.506%	2.722%
65	1.274	0.971	3.969
70	2.221	1.674	5.909
75	3.783	2.811	8.906
80	6.437	4.588	13.458
85	11.076	7.745	20.220
90	18.341	13.168	29.873

**Marriage:** Husbands are assumed to be three years older than wives.

Valuation Method: The unfunded accrued liability (the difference between the present value of benefits and the valuation assets) was determined as of July 1, 1988. This liability was amortized over the 14-year period beginning July 1, 1989, and ending on July 1, 2002. Each year the amortization payments were adjusted to reflect any experience gains or losses that occurred during the previous plan year. All gains and losses were amortized over the remaining original amortization period. (Without any guidance, we have assumed that any unfunded accrued liability that develops after the July 1, 2001 valuation will be amortized over 1 year.)

Asset Valuation Method: Assets are valued at book value, which is equivalent to market value.

### **Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls**

	Adde	d to Rolls	Remove	ed from Rolls	Rolls at	t End of Year	% Increase	A
Valuation Date	Number	Annual Allowance	Number	Annual Allowance	Number	Annual Allowance <sup>1</sup>	(Decrease) in Annual Allowance	Average Annual Allowance
7/1/14	1	\$7,671	12	\$71,652	110	\$793,067	(7.47)%	\$7,210
7/1/13	1	2,856	15	82,854	121	857,048	(8.54)	7,083
7/1/12	3	20,252	10	76,496	135	937,046	(5.66)	6,941
7/1/11	2	11,391	9	66,709	142	993,290	(5.28)	6,995
7/1/10	3	10,962	9	52,842	149	1,048,608	(3.84)	7,038
7/1/09	4	19,345	16	90,358	155	1,090,488	(6.11)	7,035

<sup>&</sup>lt;sup>1</sup> The benefit amounts shown are the annualized benefit as of the valuation date and are not the actual benefits paid during the fiscal year.

### **Schedule of Active Member Valuation Data**

There have been no active participants in the Fund since July 1, 1994.

### **Solvency Test**

	Ac	crued Liabilities F	or		_	e of Accrued y Net Assets	
Valuation Date	(1) Aggregate Member Contributions	(2) Current Retirees & Beneficiaries	(3) Active & Inactive Members	Net Assets Available for Benefits <sup>1</sup>	(1)	(2)	(3)
7/1/14	\$0	\$4,301,307	\$0	\$7,383,201	N/A	100.00%	N/A
7/1/13	0	4,748,938	0	8,171,920	N/A	100.00	N/A
7/1/12	0	5,395,505	0	9,044,236	N/A	100.00	N/A
7/1/11	0	5,096,792	0	9,997,650	N/A	100.00	N/A
7/1/10	0	5,635,024	0	11,018,367	N/A	100.00	N/A
7/1/09	0	6,136,441	0	11,986,919	N/A	100.00	N/A

<sup>&</sup>lt;sup>1</sup> Market value including receivable amount.

### **Analysis of Past Financial Experience — Reconciliation of Unfunded Accrued Liability/(Surplus)**

Valuation Year	July 1, 2014	July 1, 2013	July 1, 2012	July 1, 2011	July 1, 2010	July 1, 2009
Prior Year Unfunded/(Surplus)	\$(3,422,982)	\$(3,648,731)	\$(4,900,858)	\$(5,383,343)	\$(5,850,478)	\$(6,101,424)
Net Change Due to:						
Interest on Prior Year Unfunded/(Surplus)	(171,149)	(182,437)	(245,043)	(269,167)	(292,524)	(305,071)
Investment Loss/(Gain)	381,569	421,375	473,239	492,481	520,553	419,571
Retiree Experience	130,668	(13,189)	210,511	259,171	239,106	136,446
Assumption/Method Changes	N/A	N/A	813,420	N/A	N/A	N/A
Actual Unfunded/(Surplus)	\$(3,081,894)	\$(3,422,982)	\$(3,648,731)	\$(4,900,858)	\$(5,383,343)	\$(5,850,478)

### **Summary of the Benefit and Contribution Provision** as Interpreted for Valuation Purposes

### **Eligibility for Membership**

Employees of State penal institutions, employed prior to January 1, 1960, who did not transfer to the Police and Firemen's Retirement System in accordance with Chapter 205, of P.L. 1989. The System no longer accepts new members.

### 1. Definitions

### **Plan Year**

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

### **Service**

A year is credited for each year an employee is a member of the retirement system.

### **Average Final Compensation (AFC)**

Average annual compensation (or base salary) for three years of Service 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.)

### **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.

### 2. Benefits

### **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 (A), (B), and (C) below:

- (A) 2% of AFC up to 30 years of service plus 1% for each year in excess of 30 and prior to age 65;
- (B) 50% of final pay; and
- (C) For member with 25 years of service, 2% of AFC up to 30 years of service plus 1% for each year in excess of 30.

### **Vested Retirements**

Eligible upon termination of employment. Benefits are summarized as follows:

Termination with 10 or more years of service: Benefit is a deferred life annuity equal to 2% of AFC for service up to 30 years plus 1% for service over 30 years.

Termination with less than 10 years of service: Refund of accumulated deductions.

### **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.

### **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 equal to 2/3 of AFC.

### **Death Benefits**

Death of member of system. Spouse must be married to member prior to retirement, or at least five years before member's death. Benefit is an annuity equal to 25% of member's AFC plus an additional 15% (25%) for one (two or more) surviving dependent child (children). If there is no spouse or if the spouse dies or remarries, 20% (35%, 50%) of AFC to one (two, three or more) surviving child (children). If there is no surviving spouse or children, 25% (40%) of AFC to one (two) dependent parent(s). The provision for a survivor annuity payable to dependent parents does not apply in the death of a retired member of the system.

Minimum benefits: Minimum spousal annuity is \$1,600 per annum. If no other benefit is payable prior to retirement, the member's beneficiary shall receive the accumulated deductibles.

# STATISTICAL SECTION

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**Schedule of Retired Members by Type of Benefit** 

(Based on the most recent actuarial valuation prepared as of 6/30/14)

Number         4,275         86.017         2,801         5,731         402         402         4         25.02         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25         250.25 <t< th=""><th>Group</th><th>PERS (State)</th><th>PERS (Local)</th><th>TPAF</th><th>PFRS</th><th>SPRS</th><th>JRS</th><th>CPFPF</th><th>POPF</th><th>Total</th></t<>	Group	PERS (State)	PERS (Local)	TPAF	PFRS	SPRS	JRS	CPFPF	POPF	Total
4,772         90,520         86,017         27,3801         27,31         402         4         25         86,017         27,3801         27,31         402         4,27,292         58,986,12         86,077         58,075         58,075         58,075         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076         58,076	Service Retirements									
\$1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	Number	42,725	90,520	86,017	27,801	2,731	402	4	25	250,225
\$ 56,688         \$ 16,871         \$ 40,911         \$ 589,904         \$ 603,594         \$ 102,731         \$ 19,223         \$ 15,544           4,501         7,860         2,939         2,890         2,890         132         7         —         2,15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,366         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,368         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,367         \$ 15,36	Annual Allowance	\$1,148,809,731	\$1,527,150,039	\$3,519,020,046	\$1,665,389,313	\$173,674,468	\$41,297,731	\$77,292	\$388,612	\$8,075,807,232
4,501         7,860         2,939         2,890         132         7         —         2,536         37,976           \$19,177         \$16,366         \$2,636         \$2,890         132         \$16,386         \$15,356         \$15,356         \$15,356         \$15,366           \$19,177         \$16,366         \$26,785         \$27,916         \$35,036         \$116,398         —         \$15,356         \$17,678           \$14,064,804         \$20,341,708         \$10,637,062         \$128,060,913         \$7,972,073         —         —         \$19,649         \$181           \$28,414         \$20,341,708         \$10,637,062         \$128,060,913         \$7,972,073         —         —         \$19,649         \$181           \$28,614         \$226,978         \$48,125         \$54,603         —         —         \$19,649         \$181           \$348,918         \$1,146,310         \$42,784         \$22,557,087         \$534,305         \$109,339         \$39,323         \$26           \$16,157         \$19,105         \$22,688         \$43,340         \$24,376         \$43,370         \$34,370         \$33,334         \$44,970         \$39,525           \$24,6615         \$115,285,925         \$126,089         \$11,680,135	Average Annual Allowance	\$26,888	\$16,871	\$40,911	\$59,904	\$63,594	\$102,731	\$19,323	\$15,544	\$32,274
4,501         7,860         2,939         2,890         132         7         —         2,536         871,326         871,320,466         \$80,678,208         \$4,624,783         \$818,564         —         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356         \$15,356	Ordinary Disability Retirements									
\$86,314,230         \$128,639,671         \$78,720,466         \$80,678,208         \$4,624,783         \$818,564         —         \$15,356         \$379           \$19,177         \$16,366         \$22,786         \$27,916         \$35,036         \$116,938         —         \$7,678         \$7,678           \$19,177         \$16,366         \$26,786         \$27,916         \$26,737         —         —         \$7,678         \$18,678           \$14,064,804         \$20,344,708         \$10,637,062         \$128,060,913         \$7,972,073         —         —         \$7,678         \$18,649         \$18,146           \$28,414         \$226,978         \$44,176         \$22,860         \$48,125         \$54,603         —         —         \$7,678         \$18,649         \$18,146           \$28,48,126         \$1,146,310         \$41,764,310         \$22,183,104         \$22,557,087         \$534,305         \$19,649         \$41,979         \$39,323         \$22,575           \$16,161         \$19,176         \$22,183,104         \$22,557,087         \$43,340         \$43,970         \$33,0127         \$32,575           \$16,161         \$11,762,206,896         \$11,680,136         \$11,280,136         \$11,280,136         \$11,280,136         \$11,280,136         \$11,280,136	Number	4,501	7,860	2,939	2,890	132	7	ı	2	18,331
\$19,177         \$16,366         \$20,785         \$27,916         \$35,036         \$116,938         -         \$7,678           \$495         754         251         2,661         146         -         -         -         \$7,678           \$14,064,804         \$20,341,708         \$10,637,062         \$128,060,913         \$7,972,073         -         -         -         \$19,649         \$181.           \$28,414         \$20,341,708         \$10,637,062         \$128,060,913         \$7,972,073         -         -         \$19,649         \$181.           \$38,49,14         \$20,341,708         \$14,631         \$44,784         \$22,183,104         \$2,557,087         \$534,305         \$109,339         \$39,325         \$20           \$34,916         \$11,16,310         \$41,784         \$22,183,104         \$2,557,087         \$534,305         \$103,339         \$39,335         \$20           \$4,076         \$11,16,310         \$142,260,896         \$187,657,884         \$11,680,135         \$54,376         \$39,335         \$20           \$4,116,305         \$11,754         \$25,345         \$14,316         \$21,806         \$14,316         \$14,316         \$14,316         \$14,316         \$14,316         \$14,317         \$14,317         \$14,317	Annual Allowance	\$86,314,230	\$128,639,671	\$78,720,466	\$80,678,208	\$4,624,783	\$818,564	ı	\$15,356	\$379,811,278
\$495         754         251         2,661         146         —         —         2         2         2         2         2         2         2         2         2         2         2         2         31,00,64,804         \$10,637,062         \$128,060,913         \$7,972,073         —         —         —         \$10,649         \$181,064         \$10,64,804         \$20,341,708         \$128,613         —         —         —         \$10,649         \$181,064         \$10,641         \$20,341         —         —         —         \$10,649         \$181,064         \$10,641         \$20,344         \$20,344         —         —         —         \$10,649         \$181,064         \$11,064,013         \$20,344,013         \$20,344         \$20,344,013         \$20,344,013         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         \$20,344,014         <	Average Annual Allowance	\$19,177	\$16,366	\$26,785	\$27,916	\$35,036	\$116,938	I	\$7,678	\$20,720
495         754         251         2,661         146         -         -         2         2         2         2         2         2         495         31,054,09         \$10,637,062         \$128,060,913         \$7,972,073         -         -         -         \$19,649         \$181,064         \$10,648,04         \$10,648,04         \$10,648,04         \$10,648,04         \$10,649,04         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,649         \$10,64	Accidental Disability Retiremen	হ								
\$14,064,804         \$20,341,708         \$10,637,062         \$128,060,913         \$7,972,073         —         \$19,649         \$181,615         \$10,637,062         \$128,060,913         \$7,972,073         —         —         \$10,625         \$10,637         \$11,612         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613         \$11,613<	Number	495	754	251	2,661	146	ı	ı	2	4,309
\$28,414         \$26,978         \$42,379         \$48,125         \$54,603         —         —         9,825         3,925           \$348,918         \$1,146,310         \$41,784         \$22,183,104         \$2,557,087         \$534,305         \$109,339         \$39,323         \$20,825           \$16,615         \$1,146,310         \$41,784         \$22,183,104         \$2,557,087         \$533,394         \$4,970         \$33,575         \$20,835           \$4,601         \$1,22,85,925         \$142,260,896         \$187,657,584         \$11,680,135         \$7,295,793         \$847,194         \$30,127         \$529,18           \$4,176,305         \$11,754         \$25,345         \$11,680,135         \$7,295,793         \$847,194         \$30,127         \$529,18           \$4,176,306         \$11,754         \$25,345         \$11,680,135         \$11,680,135         \$11,754         \$330,127         \$529,18           \$16,15         \$11,754         \$25,345         \$11,754         \$25,346         \$6,888         \$4,716         \$13,25           \$2,635,860         \$5,264,544         \$3,951,528         \$1,088,196         \$1,088,196         \$1,088,196         \$1,088,196         \$1,088,196         \$1,088,196         \$1,088,196         \$1,089,196         \$1,089,196         \$1,089	Annual Allowance	\$14,064,804	\$20,341,708	\$10,637,062	\$128,060,913	\$7,972,073	I	I	\$19,649	\$181,096,209
21         60         2         618         59         16         22         11           \$348,918         \$1,146,310         \$41,784         \$22,183,104         \$2,557,087         \$534,305         \$109,339         \$39,323         \$26,6           \$16,615         \$19,105         \$20,892         \$35,895         \$43,340         \$33,394         \$4,970         \$33,575         \$26,375           \$44,176,305         \$115,285,925         \$142,260,896         \$187,657,584         \$11,680,135         \$7,295,793         \$847,194         \$330,127         \$529,1           \$64,176,305         \$11,754         \$25,345         \$21,805         \$34,253         \$53,646         \$6,888         \$47,116         \$330,127         \$529,1           \$6,55,646         \$13,61,57         \$10,88,196         \$10,88,196         \$10,88,196         \$10,88,196         \$10,88,196         \$10,88,196         \$10,947         \$10,785         \$10,947         \$10,785         \$10,947         \$10,785         \$10,947         \$10,785         \$10,947         \$10,785         \$10,947         \$10,785         \$10,947         \$10,785         \$10,947         \$10,785         \$10,947         \$10,785         \$10,947         \$10,785         \$10,947         \$10,785         \$10,947         \$10,94	Average Annual Allowance	\$28,414	\$26,978	\$42,379	\$48,125	\$54,603	I	I	\$9,825	\$42,027
21         60         2         11         22         11           \$348,918         \$1,146,310         \$41,784         \$22,183,104         \$2,557,087         \$534,305         \$109,339         \$39,233         \$26,61           \$16,615         \$10,403         \$20,808         \$35,805         \$35,805         \$43,340         \$44,970         \$35,575         \$26,755           \$4,176,305         \$115,285,925         \$142,260,896         \$187,657,584         \$11,680,135         \$7,295,793         \$847,194         \$330,127         \$529,535           \$16,157         \$11,754         \$25,345         \$21,805         \$34,253         \$34,253         \$53,646         \$6,888         \$4,716         \$330,127         \$529,535           \$2,635,860         \$5,264,544         \$3,951,528         \$1,088,196         \$6         \$4         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6         \$6	Active Members' Death Benefits	40								
\$348,918         \$1,146,310         \$41,784         \$22,183,104         \$2,557,087         \$534,305         \$109,339         \$39,323         \$26,613         \$41,784         \$22,183,104         \$2,557,087         \$43,340         \$49,70         \$35,75         \$26,825         \$43,340         \$49,70         \$35,75         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825         \$26,825	Number	21	09	2	618	29	16	22	11	808
\$16,615         \$19,105         \$20,892         \$35,895         \$43,340         \$33,394         \$4,970         \$3,575         \$           3,972         9,808         5,613         8,606         341         136         123         70           \$64,176,305         \$115,285,925         \$142,260,896         \$187,657,584         \$11,680,135         \$7,295,793         \$847,194         \$330,127         \$559,5           \$16,157         \$11,754         \$25,345         \$1,088,196         \$34,253         \$53,646         \$6,888         \$4,716         \$15,285,95           \$2,635,860         \$5,264,544         \$3,951,528         \$1,088,196         -         \$183,500         -         -         \$13,785           \$12,795         \$10,047         \$14,317         \$19,785         -         -         -         -         -         813,785	Annual Allowance	\$348,918	\$1,146,310	\$41,784	\$22,183,104	\$2,557,087	\$534,305	\$109,339	\$39,323	\$26,960,170
3,972       9,808       5,613       8,606       341       136       123       70         \$64,176,305       \$115,285,925       \$142,260,896       \$187,657,584       \$11,680,135       \$7,295,793       \$847,194       \$330,127       \$559,8         \$16,157       \$11,754       \$25,345       \$21,805       \$34,253       \$53,646       \$6,888       \$4,716       3         206       524       276       55       -       4       -       4       -       -       \$13,75         \$2,635,860       \$5,264,544       \$3,951,528       \$1,088,196       -       \$1,088,196       -       \$19,785       -       -       \$13,75         \$12,795       \$10,047       \$14,317       \$19,785       -       -       -       -       \$13,75	Average Annual Allowance	\$16,615	\$19,105	\$20,892	\$35,895	\$43,340	\$33,394	\$4,970	\$3,575	\$33,325
3,972         9,808         5,613         8,606         341         136         123         70           \$64,176,305         \$115,285,925         \$142,260,896         \$187,657,584         \$11,680,135         \$7,295,793         \$847,194         \$330,127         \$529,88           \$64,176,305         \$11,754         \$25,345         \$21,805         \$34,253         \$53,646         \$6,888         \$4,716         \$529,88           \$2,635,860         \$5,264,544         \$3,951,528         \$1,088,196         -         4         -         4         -         -         \$13,73           \$2,835,860         \$5,264,544         \$14,317         \$19,785         -         \$183,500         -         -         \$13,75	Retired Members' Death Benefi	ts								
\$64,176,305         \$115,285,925         \$142,260,896         \$187,657,584         \$11,680,135         \$7,295,793         \$847,194         \$330,127         \$529,53           e         \$16,157         \$11,754         \$25,345         \$21,805         \$34,253         \$6,888         \$4,716         \$1           206         524         276         55         -         4         -         -         -         -         \$13,12           82,635,860         \$5,264,544         \$3,951,528         \$1,088,196         -         \$183,500         -         -         -         \$13,12           e         \$12,795         \$10,047         \$14,317         \$19,785         -         -         -         -         -         \$1	Number	3,972	808'6	5,613	8,606	341	136	123	70	28,669
e         \$16,157         \$11,754         \$25,345         \$21,805         \$34,253         \$53,646         \$6,888         \$4,716         \$1           206         524         276         55         -         4         -         -         -         -         -         \$13,12         -         \$13,12         -         \$13,12         -         \$13,12         -         \$13,12         -         \$13,12         -         \$13,12         -         -         \$13,12         -         -         \$13,12         -         \$13,12         -         -         \$13,12         -         \$13,12         -         \$13,12         -         -         \$13,12         -         \$13,12         -         -         \$13,12         -         \$13,12         -         -         \$13,12         -         -         \$13,12         -         -         \$13,12         -         -         -         \$13,12         -         -         -         -         -         \$13,12         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         <	Annual Allowance	\$64,176,305	\$115,285,925	\$142,260,896	\$187,657,584	\$11,680,135	\$7,295,793	\$847,194	\$330,127	\$529,533,959
206 524 276 55 – 4 – – – 4 – – – 813,12 81,088,196 – \$183,500 – \$113,12 e \$12,795 \$10,047 \$14,317 \$19,785 – – + 13	Average Annual Allowance	\$16,157	\$11,754	\$25,345	\$21,805	\$34,253	\$53,646	\$6,888	\$4,716	\$18,471
206         524         276         55         -         4         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -<	Deferred Terminated Vested									
\$2,635,860 \$5,264,544 \$3,951,528 \$1,088,196 - \$183,500 \$12,795 \$10,047 \$14,317 \$19,785	Number	206	524	276	55	I	4	ı	I	1,065
\$12,795 \$10,047 \$14,317 \$19,785	Annual Allowance	\$2,635,860	\$5,264,544	\$3,951,528	\$1,088,196	I	\$183,500	I	ı	\$13,123,628
	Average Annual Allowance	\$12,795	\$10,047	\$14,317	\$19,785	I	I	I	I	\$12,323

Note: See "Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls" in the Actuarial Section for Average Annual Allowance for the last five fiscal years.

	Fiscal Year	Member Contributions	Employer (1)Contributions (2)	Pension Adjustment Contributions <sup>(3)</sup>	Other (4)	Percentage of Annual Covered Compensation (5)	Investment Income <sup>(6)</sup>	Total
PUBLIC	2006	630,322,617	322,487,907*	_	_	3.09	2,338,531,507	3,291,342,031
EMPLOYEES'	2007	654,493,521	674,629,437	_	_	6.14	3,810,965,382	5,140,088,340
RETIREMENT	2008	705,903,439	812,356,103	_	_	7.11	(391,708,689)	1,126,550,853
SYSTEM	2009	741,911,166	774,672,945	_	_	6.56	(3,787,350,299)	(2,270,766,188)
	2010	743,486,792	919,999,429	_	_	7.67	2,696,305,650	4,359,791,871
	2011	728,602,461	925,626,097	_	_	7.73	3,813,641,343	5,467,869,901
	2012	793,993,077	997,437,885	_	_	8.59	628,573,598	2,420,004,560
	2013	790,456,229	1,141,876,707	_	\$55,543,296	9.99	2,687,826,583	4,675,702,815
	2014	797,818,225	917,689,000	_	55,641,713	8.02	4,103,472,982	5,874,621,920
	2015	805,232,235	1,085,237,214	-	10,496,496	9.49	1,117,827,113	3,018,793,058
TEACHERS'	2006	507,106,612	101,327,375*	_	-	1.20	2,980,823,472	3,589,257,459
PENSION	2007	523,997,776	693,759,318	_	_	7.93	4,874,924,850	6,092,681,944
AND	2008	585,800,133	701,584,600	_	_	7.73	(766,377,094)	521,007,639
ANNUITY	2009	616,222,799	102,472,305	_	_	1.09	(5,071,848,719)	(4,353,153,615)
FUND	2010	615,862,621	42,850,384	_	_	0.44	3,277,424,465	3,936,137,470
	2011	593,587,972	36,117,717	_	_	0.36	4,364,388,191	4,994,093,880
	2012	685,608,357	323,100,685	_	_	3.34	640,982,289	1,649,691,331
	2013	686,872,383	653,704,602	_	39,651,455	6.68	2,865,390,916	4,245,619,356
	2014	716,183,306	427,700,146	_	40,469,573	4.26	4,100,453,466	5,284,806,491
	2015	740,296,265	540,603,535	_	4,476,040	5.32	1,066,062,926	2,351,438,766
POLICE	2006	290,681,716	714,210,999	_	_	23.03	1,675,380,936	2,680,273,651
AND	2007	307,335,360	825,687,477	_	_	25.18	2,777,158,696	3,910,181,533
FIREMEN'S	2008	310,259,367	886,871,720	_	_	25.63	(339,212,149)	857,918,938
RETIREMENT	2009	326,491,066	913,302,011	_	_	23.40	(2,735,834,439)	(1,496,041,362)
SYSTEM	2010	330,951,798	1,001,223,223	_	_	27.25	2,008,239,281	3,340,414,302
	2011	327,357,244	(216,914,092)	_	_	(5.83)	3,071,480,855	3,181,924,007
	2012	374,688,168	842,084,854	_	_	23.07	371,496,172	1,588,269,194
	2013	387,775,184	898,531,390	_	_	24.58	2,191,780,555	3,478,087,129
	2014	385,660,096	858,047,628	_	_	23.32	3,381,553,869	4,625,261,593
	2015	386,991,641	959,814,917	_	26,963,211	26.06	922,598,676	2,296,368,445
STATE	2006	16,917,317	13,015,093	_	_	5.38	173,767,121	203,699,531
POLICE	2007	17,861,043	29,285,276	_	_	11.13	291,531,439	338,677,758
RETIREMENT	2008	18,306,246	36,506,782	_	_	13.26	(34,109,753)	20,703,275
SYSTEM	2009	18,652,049	5,644,059	_	_	2.01	(298,475,097)	(274,178,989)
	2010	18,825,131	1,235,580	_	_	0.43	214,479,134	234,539,845
	2011	18,164,837	2,208,340	_	_	0.76	280,447,557	300,820,734
	2012	23,233,207	13,578,328	_	_	4.93	48,915,745	85,727,280
	2013	21,875,233	27,781,894	_	_	9.81	191,873,254	241,530,381
	2014	24,034,496	36,436,923	_	_	13.90	287,098,217	347,569,636
	2015	22,315,431	38,527,297	_	222,557	14.68	75,532,779	136,598,064

	Fiscal Year	Member Contributions (1	Employer Contributions (2)	Pension Adjustment Contributions <sup>(3)</sup>	Other (4)	Percentage of Annual Covered Compensation (5)	Investment Income <sup>(6)</sup>	Total
JUDICIAL	2006	1,583,469	7,972,000	_	_	13.18	32,475,105	42,030,574
RETIREMENT	2007	2,201,527	12,741,898	_	_	20.39	52,215,397	67,158,822
SYSTEM	2008	1,825,726	12,913,986	_	_	20.45	(1,268,945)	13,470,767
	2009	3,032,945	1,696,891	_	_	2.53	(56,230,261)	(51,500,425)
	2010	3,054,881	2,308,854	_	_	3.29	37,131,556	42,495,291
	2011	2,575,318	1,693,412	_	_	2.36	42,358,462	46,627,192
	2012	2,476,205	6,061,953	_	_	8.99	4,954,214	13,492,372
	2013	3,402,807	12,308,419	_	_	18.24	25,932,027	41,643,253
	2014	5,096,577	15,874,857	_	_	23.41	34,448,036	55,419,470
	2015	6,310,124	17,031,026	-	2,081,523	25.79	8,475,641	33,898,314
CONSOLIDATE	D 2006	-	6,450,118	8,231,766	_	_	405,597	15,087,481
POLICE AND	2007	_	1,809,773	7,362,588	_	_	611,939	9,784,300
FIREMEN'S	2008	_	550,881	6,515,308	_	_	438,349	7,504,538
PENSION	2009	_	1,276,151	5,641,890	_	_	142,184	7,060,225
FUND	2010	_	13,236	4,830,461	_	_	35,223	4,878,920
	2011	_	8,199	4,033,257	_	_	17,256	4,058,712
	2012	_	193,183	3,234,585	_	_	210	3,427,978
	2013	_	911,150	2,477,987	_	_	217	3,389,354
	2014	_	11,740	1,889,091	_	_	585	1,901,416
	2015	_	_	1,568,185	9,566	-	198	1,577,949
PRISON	2006		_	1,149,159	_	-	532,946	1,682,105
OFFICERS'	2007		_	1,138,138	_	-	712,185	1,850,323
PENSION	2008	_	_	1,104,335	_	_	546,188	1,650,523
FUND	2009		_	1,088,687	_	_	197,755	1,286,442
	2010		_	1,046,590	_	_	53,572	1,100,162
	2011		_	1,064,245	_	_	32,429	1,096,674
	2012		_	994,367	_	_	9,945	1,004,312
	2013	_	_	889,542	_	_	9,070	898,612
	2014	_	_	793,175	_	_	7,368	800,543
	2015	_		698,360	_		6,355	704,715
CENTRAL	2006		424,786	25,713	_	-	4,739	455,238
PENSION	2007		426,071	28,234	_	_	6,264	460,569
FUND	2008		403,163	24,690	_	_	8,973	436,826
	2009		376,688	21,861	_	_	3,642	402,191
	2010		179,863	22,018	_	-	484	202,365
	2011		199,451	21,677	_	-	211	221,339
	2012		168,000	22,155	_	-	119	190,274
	2013		168,000	22,214	_	-	98	190,312
	2014		204,750	22,214	_	-	89	227,053
	2015	_	231,150	22,214	_	-	97	253,461

	Fiscal Year	Member Contributions (1)	Employer Contributions (2)	Pension Adjustment Contributions (3)	Other <sup>(4)</sup>	Covered Compensation (5)	Percentage Of Annual Investment Income <sup>(6)</sup>	Total
SUPPLEMENT	AL 2006	7,601,807	_	_	_	_	16,072,155	23,673,962
ANNUITY	2007	7,764,788	_	_	_	_	32,563,751	40,328,539
COLLECTIVE	2008	8,271,028	_	_	_	_	(17,688,152)	(9,417,124)
TRUST	2009	7,866,241	_	_	_	_	(33,470,754)	(25,604,513)
	2010	7,119,188	_	_	_	_	16,061,568	23,180,756
	2011	5,882,012	_	_	_	_	34,723,580	40,605,592
	2012	6,346,823	_	_	_	_	5,941,424	12,288,247
	2013	6,635,320	_	_	_	_	30,989,256	37,624,576
	2014	5,907,412	_	_	_	_	42,222,601	48,130,013
	2015	6,003,908	_	_	_	_	16,456,041	22,459,949
DEFERRED	2006	166,371,405	_	_	_	_	106,982,480	273,353,885
COMPENSATION	ON 2007	173,352,442	_	_	_	_	248,778,286	422,130,728
PLAN	2008	185,234,570	_	_	_	_	(170,242,308)	14,992,262
	2009	172,895,622	_	_	_	_	(334,762,381)	(161,866,759)
	2010	171,382,135	_	_	_	_	169,072,944	340,455,079
	2011	185,334,980	_	_	_	_	383,783,797	569,118,777
	2012	178,243,724	_	_	_	_	19,834,685	198,078,409
	2013	177,296,365	_	_	_	_	302,069,484	479,365,849
	2014	181,051,805	_	_	_	_	424,147,776	605,199,581
	2015	186,999,797	-	-	-	-	133,142,031	320,141,828
DEFINED	2006	_	_	_	_	_	_	_
CONTRIBUTIO		_	_	_	_	_	_	_
RETIREMENT	2008	_	_	_	_	_	_	_
PROGRAM	2009	_	_	_	_	_	_	_
THOUTAM	2010	_	_	_	_	_	_	_
	2010	_	\$289,483	_		_	\$110	\$289,593
	2011	_	487,559	_		_	765	488,324
	2012	_	1,482,976	_	_	_	1,761	1,484,737
	2013		1,409,544	_	_	_	2,250	1,411,794
	2014	_	2,046,770		_	_ _	3,497	2,050,267
ALTERNATE	2006	_	1,000,000			_	155,312	1,155,312
BENEFIT	2007	_	2,613,675	_	_	_	146,526	2,760,201
LONG-TERM	2008	_	2,000,000	_	_	_	128,401	2,128,401
DISABILITY	2009	_	2,685,591	_	_	_	42,876	2,728,467
FUND	2010	_	2,766,031	_	_	_	12,970	2,779,001
. 3.15	2010	_	2,885,119	_	_	_	8,175	2,893,294
	2011	_	3,323,165	_	_	_	4,132	3,327,297
	2012	_	3,037,116	_ _	<u>-</u>	<u></u>	2,875	3,039,991
	2013		1,382,696	_	_	_ <del>-</del>	1,622	1,384,318
	2014	_	1,550,000	_	_	_	1,622	
	2015	_	1,330,000	_	_	_	1,031	1,551,631

	Fiscal Year	Member Contributions	Employer s <sup>(1)</sup> Contributions <sup>(2)</sup>	Pension Adjustment Contributions <sup>(3)</sup>	Other (4)	Percentage Of Annual Covered Compensation (5)	Investment Income <sup>(6)</sup>	Total
STATE	2006	\$165,607,369	\$3,354,002,431	_	_	_	\$30,206,681	\$3,549,816,481
HEALTH	2007	161,113,500	3,386,507,653	_	_	_	50,207,956	3,597,829,109
BENEFIT	2008	199,319,910	3,479,317,116	_	_	_	43,386,656	3,722,023,682
<b>PROGRAM</b>	2009	198,176,549	3,474,413,647	_	_	_	16,370,148	3,688,960,344
FUNDS (7)	2010	217,154,537	4,144,906,282	_	_	_	4,269,124	4,366,329,943
	2011	233,187,835	4,607,439,545	_	_	_	2,777,355	4,843,404,735
	2012	244,680,394	4,721,637,111	_	_	_	1,361,300	4,967,678,805
	2013	304,860,078	5,162,767,727	_	_	_	1,378,523	5,469,006,328
	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
PENSION	2006	\$1,786,192,312	\$4,520,890,709	\$9,406,638	_	_	\$7,355,338,051	\$13,671,827,710
TRUST	2007	1,848,119,957	5,627,460,578	8,528,960	_	_	12,139,822,671	19,623,932,166
AND	2008	2,014,920,419	5,932,504,351	7,644,333	_	_	(1,676,098,523)	6,278,970,580
STATE	2009	2,085,248,437	5,276,540,288	6,752,438	_	_	(12,301,215,345)	(4,932,674,182)
HEALTH	2010	2,107,837,083	6,115,482,882	5,899,069	_	_	8,423,085,971	16,652,305,005
BENEFIT	2011	2,094,692,659	5,359,553,271	5,119,179	_	_	11,993,659,321	19,453,024,430
<b>PROGRAM</b>	2012	2,309,269,955	6,908,072,723	4,251,107	_	_	1,722,074,598	10,943,668,383
FUNDS	2013	2,379,173,599	7,902,569,981	3,389,743	95,194,751	_	8,297,254,619	18,677,582,693
TOTAL (7)	2014	2,515,059,384	7,738,101,825	2,704,480	96,111,286	_	12,374,632,568	22,726,609,543
	2015	2,651,633,067	8,516,578,669	2,288,759	44,249,393	_	3,341,282,108	14,556,031,996

<sup>\*</sup> Restated due to the implementation of GASB Statement No. 43 (Other Post-Employment Benefits).

<sup>(1)</sup> Indicates contributions from active members.

<sup>(2)</sup> Includes contributions both from State and local employers.

<sup>(3)</sup> Indicates State contribution to POPF, CPFPF, and CPF as pension adjustment.

<sup>(4)</sup> Previously, indicated Contributory Group Insurance (CGI) member contributions; however, now, indicates other employer contribution items, such as Delayed Enrollments/ Approproations, Retro billing, etc. Starting FY 2015, based on GASB No. 67, we are taking out CGI items from our financial statements.

<sup>(5)</sup> Indicates percentage of Employer Contributions over Annual Covered Compensation.

<sup>(6)</sup> Indicates net appreciation/depreciation of fair value, dividends, and interest.

<sup>(7)</sup> GASB No. 43 became implemented in fiscal year 2007. Fiscal years before 2007 other than the restated 2006 were presented otherwise.

# **Schedule of Expenses by Type**

(based on Comprehensive Annual Financial Reports for relevant years)

PUBLIC         306         1,527,004,088         190,902,28         1,486,3273         9,146,338         9,146,338         1,136,5727         2,040,437         1,897,013,986,822           FENTIREMENT         2008         1,486,422,238         2,11,580,432         1,158,432,388         2,141,437,742         2,141,437,742         2,141,437,742         2,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437,742         3,141,437         3,141,437         3,141,437         3,141,437         3,141,437,742         3,141,437         3,141,437         3		Fiscal Year	Retirement Benefits <sup>(1)</sup>	Cost-of-Living Adjustments <sup>(2)</sup>	Death Benefits <sup>(3)</sup>	Withdrawal (4)	Other Refunds <sup>(5)</sup>	Admin and Misc <sup>(6)</sup>	Transfer to Other Retirement Systems (7)	Total
COMDAY         2007         14,649,463,289         217,869,306         10,677,883         —         15,606,770         9,664,453           EMENT         2008         1,684,946,289         217,869,306         76,747,839         —         15,606,770         9,664,453           EMINT         2009         1,356,221,388         20,005,656         20,005,656         20,005,656         1,504,739         1,504,739         —         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739         1,504,739 <td>PUBLIC</td> <td>2006</td> <td>1,527,004,088</td> <td>190,903,284</td> <td>91,469,327</td> <td>49,867,143</td> <td>I</td> <td>17,365,727</td> <td>20,404,379</td> <td>1,897,013,948</td>	PUBLIC	2006	1,527,004,088	190,903,284	91,469,327	49,867,143	I	17,365,727	20,404,379	1,897,013,948
FEMINT         2008         1/782/22288         201/68/271         15.04/1572           EMENT         2009         1/782/22288         201/08/56         0         201/08/57         15.04/57           2009         1/782/22288         201/08/56         1/70/2829         100/487/29         77/4624         0         201/19/79           2011         2.751/67/19/39         283/67/28         110/08/2829         82.666/386         -         51.51/17/29         13.340/37           2012         2.751/67/19/39         281/08/14/3         118/03/3827         100.381/32         -         21.641/32         11.541/79           2014         2.806.4341/4         2.806.4341/4         2.86.300         17.300/3827         100.381/32         -         21.641/32         11.541/39           2014         2.806.8301/16         2.826.300         2.242.800/28         11.1090/34         -         21.641/39         11.541/39           10N         2.201         2.296.6341/4         2.65.051/06         3.922.034         -         2.176.932         3.145/39           10N         2.201         2.296.6341/4         2.242.800/28         2.292.2034         -         2.246.762         11.547/32         11.547/32           10N         2.201	<b>EMPLOYEES</b> '	2007	1,649,495,269	217,980,305	109,559,172	67,679,883	ı	19,506,750	9,665,453	2,073,886,832
EW         2009         1336,621,188         270,085,569         130,40,13         130,40,13         130,40,13           2010         2,0768,292,073         286,356,523         110,078,229         82,566,955         —         17,217,05         15,34,471           2011         2,273,877,650         288,10,288         116,035,188         82,566,955         —         17,217,05         11,541,789           2012         2,576,176,979         288,706,288         116,035,218         97,076,504         —         21,441,723         11,541,789           2013         2,646,551,088         289,302,21         138,033,27         1,02,381,274         —         22,846,654         15,441,789           2014         2,986,839,116         242,240,085         73,430,329         116,431,242         —         22,846,664         15,447,789           10N         2007         2,117,640,086         77,442,420         16,431,242         —         22,846,664         15,447,779           10N         2,296,547,74         3,133,447         33,464,753         —         12,343,928         32,463,928           10N         2,296,547,74         3,1346,475         —         2,284,474         —         2,445,609           10N         2,245,647 <t< td=""><td>RETIREMENT</td><td>2008</td><td>1,782,422,238</td><td>241,149,747</td><td>125,809,087</td><td>78,543,399</td><td>I</td><td>21,669,271</td><td>15,047,572</td><td>2,264,641,314</td></t<>	RETIREMENT	2008	1,782,422,238	241,149,747	125,809,087	78,543,399	I	21,669,271	15,047,572	2,264,641,314
2010         2.088,292.073         286,358,532         110,078,29         82,666,655         -         112,12,705         15,344,71           2011         2.273,677,660         283,610,268         116,038,218         66,453,366         -         115,41,729         115,41,729           2012         2.510,170,979         281,708,164         108,660,771         102,841,227         -         21,841,729         115,41,739           2013         2.566,510,98         226,320,198         127,005,599         111,309,794         -         22,844,664         15,603,908           2014         2.986,343,114         256,307,988         127,100,599         116,431,242         -         22,844,664         15,603,908           2015         2.986,893,16         245,907,789         73,403,259         116,431,242         -         22,465,049         11,509,908           10N         2008         1,943,589,309         21,242,066         56,051,077         29,922,034         -         12,445,604         11,451,739           10N         2008         2,256,94,794         31,308,528         33,464,753         -         12,446,747         14,456,044           2011         2,886,94,744         31,308,444         33,464,753         31,447,474         31,447,824	SYSTEM	2009	1,936,521,198	270,085,565	100,487,729	77,747,624	I	20,195,796	18,340,013	2,423,377,925
2011   2.273-677   560   283-610,268   115,053-218   66,423,866   - 55,475,377   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,961   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,661   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610   1190-6,610		2010	2,058,292,073	286,355,823	110,078,829	82,566,955	ı	17,212,705	15,384,771	2,569,891,156
2012         2,510,170,979         281,706,154         108,60,771         97,076,504         —         2184,123         11,541,759           2013         2,646,551,088         286,262,021         138,633,827         102,381,327         —         22,846,664         15,603,908           2014         2,806,839,116         242,890,285         173,430,329         116,431,242         —         21,766,139         13,778,414           7         2,906,839,116         242,890,285         73,430,329         16,431,242         —         21,766,039         21,455,094           8         2,008         2,295,94,794         311,306,960         70,448,969         36,510,781         —         12,445,924         31,445,969           1TY         2008         2,295,94,794         311,306,960         70,448,969         36,510,781         —         12,445,741         4,057,881           1TY         2009         2,475,071,781         362,66,306         65,051,781         97,092,203         —         12,743,784         4,057,881           1TY         2009         2,475,907         381,473,106         68,044,466         38,031,439         —         11,752,339         2,401,574           2011         2,576,683,991         381,473,106         68,044,466 <td></td> <td>2011</td> <td>2,273,677,650</td> <td>283,610,268</td> <td>115,035,218</td> <td>66,423,856</td> <td>ı</td> <td>55,475,327</td> <td>11,926,661</td> <td>2,806,148,980</td>		2011	2,273,677,650	283,610,268	115,035,218	66,423,856	ı	55,475,327	11,926,661	2,806,148,980
2013         2,646,651,098         269,382,071         138,033,877         102,381,277         2,846,654,698         269,382,017         118,003,798         111,909,794         2,246,651,099         1,560,19         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,475         13,778,474         13,778,475         13,778,474         13,778,474         4,057,851         13,778,474         4,057,851         13,778,474         4,057,851         2,041,774         13,778,474         4,057,851         2,041,774         4,057,851         2,041,774         4,057,851         3,043,778         10,047,781         35,268,308         6,325,481         37,139,492         -11,248,741         4,057,851         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,043,778         3,04		2012	2,510,170,979	281,708,154	108,660,771	97,076,504	I	21,841,723	11,541,759	3,030,999,890
2014         2,866,343,114         256,307,398         127,100,559         111,909,794         —         21,756,019         13,778,475           PERS*         2006         1,948,589,116         242,890,285         73,430,329         116,431,242         —         21,756,019         13,778,475           ION         2007         2,117,640,036         241,242,066         56,051,067         29,922,034         —         10,389,022         3,289,349           ION         2007         2,117,640,036         277,692,327         58,220,617         33,464,733         —         12,343,928         3,044,379           INTY         2009         2,453,017,51         352,668,308         63,825,481         37,139,492         —         12,343,928         3,044,379           INTY         2009         2,453,017,51         352,668,308         63,825,481         37,139,492         —         12,343,328         3,044,379           1NTY         2000         2,453,017,51         36,678,349         37,139,492         —         12,343,228         3,044,379           1NTY         2000         2,453,017,441         64,782,346         39,769,526         —         12,344,280         2,401,579           2011         3,376,677,146         34,41,122 <t< td=""><td></td><td>2013</td><td>2,646,551,098</td><td>269,362,021</td><td>138,033,827</td><td>102,381,327</td><td>ı</td><td>22,814,654</td><td>15,603,908</td><td>3,194,746,835</td></t<>		2013	2,646,551,098	269,362,021	138,033,827	102,381,327	ı	22,814,654	15,603,908	3,194,746,835
2015         2,986,839,116         242,890,286         73,430,329         116,431,242         — 23,761,859         21,455,094         2           HERS         2006         1,943,589,309         241,220,066         56,051,067         33,464,753         — 10,389,022         3,289,349         2           INV         2007         2,117,640,036         277,692,327         56,220,617         33,464,753         — 11,764,751         4,057,861         3,044,379           INTY         2009         2,453,071,751         352,668,308         63,825,481         37,139,492         — 11,744,71         4,057,861         3,044,379           2010         2,573,633,407         378,442,120         76,687,906         39,543,649         — 12,321,344         4,057,861         4,057,861           2011         2,673,659,391         381,128,401         64,782,346         38,763,4369         — 12,321,344         4,205,762         2,401,574           2012         3,099,099,919         381,128,401         64,782,346         38,763,4369         — 12,321,344         4,205,786         2,401,574           2013         3,206,73,226         37,431,300         73,122,967         42,299,299         — 12,321,344         4,205,786         2,401,578           2014         3,397,569,391		2014	2,806,343,114	256,307,998	127,100,559	111,909,794	ı	21,756,019	13,778,475	3,337,195,959
HERS' 2006 1,943,589,309 241,242,066 56,051,067 29,922,034 - 10,389,022 3,289,349 3,044,379 34,44,753 - 12,343,928 3,044,379 311,308,960 70,448,959 36,510,781 - 13,787,441 4,205,762 3,044,379 2009 2,453,071,751 352,668,308 63,825,481 37,139,492 - 12,746,751 4,057,851 2,011 2,897,547,945 311,308,960 70,448,959 39,540,789 - 12,746,751 4,057,851 2,011 2,897,547,945 311,2128,401 64,782,346 38,041,469 - 12,746,751 4,057,851 3,047,789 31,1308,909,919 31,1308,909,919 31,1308,909,919 31,1308,909,919 31,1308,909,919 31,1308,909,919 31,1308,909,919 31,1308,909,919 31,1308,909,919 31,131,328,907 42,299,299 - 12,746,751 4,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89 3,047,89		2015	2,986,839,116	242,890,285	73,430,329	116,431,242	I	23,761,859	21,455,094	3,464,807,925
ON   2007   2,117,640,036   217,692,327   58,220,617   33,464,753   -     1,343,928   3,044,379   1,047,210   2,056   2,265,924,794   31,1308,960   70,448,959   36,510,781   -     1,3787,441   4,205,762   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,057,851   4,0	TEACHERS'	2006	1,943,589,309	241,242,066	56,051,067	29,922,034	ı	10,389,022	3,289,349	2,284,482,847
11TY         2008         2,295,924,794         311,308,960         70,448,959         36,510,781         —         13,787,441         4,205,762           11TY         2009         2,453,071,751         352,668,308         63,825,481         37139,492         —         12,746,751         4,057,851         267,851           101         2,873,053,407         378,442,100         76,687,906         39,769,526         —         12,746,751         4,057,851         3,240,1574           2011         2,887,547,945         381,128,401         64,782,346         39,769,526         —         12,746,751         4,057,851         2,401,748           2012         3,887,559,391         381,473,106         68,044,466         38,031,439         —         12,432,600         4,982,800           2013         3,397,559,391         357,451,129         74,929,067         43,101,723         —         12,482,060         4,982,800           2014         3,397,559,391         357,451,129         74,929,067         43,101,723         —         12,482,060         4,926,204           2015         3,576,67,146         36,283,535         51,161,238         —         12,482,060         4,926,204           2016         3,607,731         36,283,535         51,161	PENSION	2007	2,117,640,036	277,692,327	58,220,617	33,464,753	ı	12,343,928	3,044,379	2,502,406,040
Y         2009         2,453,071,751         352,668,308         63,825,481         37,139,492         —         12,746,751         4,057,851         25           2010         2,573,053,407         378,442,120         76,697,906         39,543,649         —         12,323,809         2,401,574           2011         2,897,547,945         381,128,401         64,782,346         39,769,526         —         12,323,340         2,401,574           2012         3,089,099,919         381,473,106         68,044,466         38,076,329         —         12,323,346         4,982,800           2013         3,230,673,226         370,347,129         74,929,067         42,299,299         —         12,482,060         4,926,004           2014         3,397,559,391         357,451,129         74,929,067         42,299,299         —         12,482,060         4,926,004           2015         3,397,559,391         357,451,129         74,929,067         42,299,299         —         12,482,060         6,947,788           2016         3,576,672,146         34,455,133         51,617,389         51,617,389         51,617,788         51,617,789         51,617,788         51,617,788         51,617,788         51,617,788         51,617,788         51,617,788         51,617	AND	2008	2,295,924,794	311,308,960	70,448,959	36,510,781	ı	13,787,441	4,205,762	2,732,186,697
2010         2,573,053,407         378,442,120         76,697,906         39,543,649         —         12,323,809         2,401,574         S           2011         2,887,547,945         381,128,401         64,782,346         39,769,526         —         12,321,344         4,842,890         2,401,574         38,01,594           2012         3,089,099,919         381,473,106         68,044,466         38,011,439         —         12,321,344         4,842,890         38,01         4,926,004         4,926,004         4,929,007         42,299,299         —         12,482,006         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004         4,926,004	ANNUITY	2009	2,453,071,751	352,668,308	63,825,481	37,139,492	I	12,746,751	4,057,851	2,923,509,634
2011         2,897,547,945         381,128,401         64,782,346         39,769,526         —         12,321,344         4,842,890         280,016           2012         3,089,099,919         381,473,106         68,044,466         38,031,439         —         11,523,396         2,880,016         2,880,016         2,880,016         2,880,016         2,880,016         2,880,016         2,880,016         2,880,016         3,730,673,226         37,733         2,467,788         2,880,016         4,926,204         4,209,067         43,101,723         —         12,482,060         4,926,204         4,926,204         2,880,016         2,880,016         2,880,016         2,880,016         2,880,016         3,337,559,391         3,146,788         3,116,238         —         12,482,060         4,926,204         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         3,467,788         <	FUND	2010	2,573,053,407	378,442,120	76,697,906	39,543,649	I	12,323,809	2,401,574	3,082,462,465
2012         3,089,099,919         381,473,106         68,044,466         38,031,439         -         11,523,396         2,880,016         2,880,016           2013         3,230,673,226         370,347,130         73,132,997         42,299,299         -         12,482,060         4,926,204           2014         3,397,559,391         357,451,129         74,929,067         43,101,723         -         12,170,972         5,467,788           2015         3,576,672,146         36,283,535         51,161,238         -         12,170,972         5,467,788           ANS         2007         1,047,270,662         173,429,553         32,643,052         5,590,973         -         4,930,808         537,733           ANS         2007         1,047,270,662         173,429,553         32,643,052         5,590,973         -         6,281,677         394,592           ANS         2007         1,216,141,979         215,793,951         31,484,481         5,768,703         -         6,281,677         394,592           ANS         2010         1,310,546,315         230,715,014         32,249,526         5,238,615         -         6,080,087         376,544           2012         1,593,941,123         234,401,519         34,058,970 <td< td=""><td></td><td>2011</td><td>2,897,547,945</td><td>381,128,401</td><td>64,782,346</td><td>39,769,526</td><td>ı</td><td>12,321,344</td><td>4,842,890</td><td>3,400,392,452</td></td<>		2011	2,897,547,945	381,128,401	64,782,346	39,769,526	ı	12,321,344	4,842,890	3,400,392,452
2013         3,230,673,226         370,347,130         73,132,997         42,299,299         —         12,482,060         4,926,204         5           2014         3,397,559,391         367,451,129         74,929,067         43,101,723         —         12,170,972         5,467,788         5           2015         3,576,672,146         344,252,116         36,283,535         51,161,238         —         12,170,972         5,467,788         5           AND         2006         969,680,617         152,114,567         31,695,612         6,107,009         —         4,930,080         6,634,552         6           N'S         2007         1,047,270,962         173,429,553         32,643,052         5,590,973         —         6,284,677         394,592           AND         2008         1,129,947,758         192,527,105         30,634,136         6,899,520         —         6,284,677         394,592           AND         2009         1,216,141,979         215,793,951         31,484,481         5,768,703         —         6,284,677         394,592           AND         2010         1,310,546,315         220,715,014         32,249,526         5,238,615         —         4,115,476         376,44           AND		2012	3,089,099,919		68,044,466	38,031,439	I	11,523,396	2,880,016	3,591,052,342
2014         3,397,559,391         357,451,129         74,929,067         43,101,723         —         12,170,972         5,467,788         3           AND         2015         3,576,672,146         36,283,535         51,161,238         —         12,170,972         5,467,788         3           AND         2006         969,680,617         152,114,567         31,695,612         6,107,009         —         4,930,808         537,733           AND         2006         1,047,270,962         173,429,553         32,643,052         5,590,973         —         4,930,808         537,733           ANS         2007         1,129,947,758         192,527,105         30,634,136         6,899,520         —         6,281,677         394,592           ADD         2009         1,216,141,979         215,793,951         31,484,481         5,768,703         —         6,281,677         394,592           ADD         2010         1,310,546,315         220,715,014         32,249,526         5,238,615         —         6,681,677         394,592           ADD         2011         1,454,083,372         232,362,028         35,107,319         7,197,736         —         4,115,476         237,855           ADD         1,706,252,607		2013	3,230,673,226		73,132,997	42,299,299	ı	12,482,060	4,926,204	3,733,860,916
AND         2006         9696,860,617         152,114,567         31,695,612         6,107,009         —         4,930,808         6,634,552         A.           AND         2006         969,680,617         152,114,567         31,695,612         6,107,009         —         4,930,808         537,733           N'S         2007         1,047,270,962         173,429,553         32,643,052         5,590,973         —         4,930,808         537,733           N'S         2007         1,129,947,758         192,527,105         30,634,136         6,899,520         —         4,930,808         537,733           N'S         2009         1,216,141,979         215,793,951         31,484,481         5,768,703         —         6,281,677         394,592           2010         1,310,546,315         230,715,014         32,249,526         5,238,615         —         4,115,476         237,654           2011         1,454,083,372         232,362,028         35,107,319         7,467,889         —         4,115,476         237,855           2012         1,593,941,123         234,084,179         34,084,179         6,735,054         —         4,115,476         3,881,457         148,902           2013         1,706,252,607         229		2014	3,397,559,391	357,451,129	74,929,067	43,101,723	ı	12,170,972	5,467,788	3,890,680,070
AND         2006         969,680,617         152,114,567         31,695,612         6,107,009         —         4,930,808         537,733           N'S         2007         1,047,270,962         173,429,553         32,643,052         5,590,973         —         6,988,367         394,592           AIN         2008         1,129,947,758         192,527,105         30,634,136         6,899,520         —         6,281,677         394,592           2009         1,216,141,979         215,793,951         31,484,481         5,768,703         —         6,281,677         394,592           2010         1,310,546,315         230,715,014         32,249,526         5,238,615         —         6,080,087         376,544           2011         1,454,083,372         232,362,028         35,107,319         7,467,889         —         4,115,476         237,855           2012         1,593,941,123         234,041,519         34,058,970         7,197,736         —         3,919,438         353,727           2013         1,706,252,607         229,131,950         34,084,179         6,735,054         —         3,881,457         420,647           2014         1,831,032,076         223,111,212         35,424,340         7,789,561         —		2015	3,576,672,146	344,252,116	36,283,535	51,161,238	I	13,890,080	6,634,552	4,028,893,667
N'S         2007         1,047,270,962         173,429,553         32,643,052         5,590,973         —         6,958,936         491,009           AFNT         2008         1,129,947,758         192,527,105         30,634,136         6,899,520         —         6,281,677         394,592           2009         1,216,141,979         215,793,951         31,484,481         5,768,703         —         6,526,511         531,253           2010         1,310,546,315         230,715,014         32,249,526         5,238,615         —         6,080,087         376,544           2011         1,454,083,372         232,362,028         35,107,319         7,467,889         —         4,115,476         237,855           2012         1,593,941,123         234,401,519         34,084,179         6,735,054         —         3,919,438         353,727           2013         1,706,252,607         229,131,950         34,084,179         6,735,054         —         3,881,457         148,902           2014         1,831,032,076         229,131,361         35,424,340         7,789,561         —         4,531,012         6,080,087         362,590	POLICE AND	2006	969,680,617	152,114,567	31,695,612	6,107,009	ı	4,930,808	537,733	1,165,066,346
AENT         2008         1,129,947,758         192,527,105         30,634,136         6,899,520         —         6,281,677         394,592           2009         1,216,141,979         215,793,951         31,484,481         5,768,703         —         6,526,511         531,253           2010         1,310,546,315         230,715,014         32,249,526         5,238,615         —         6,080,087         376,544           2011         1,454,083,372         232,362,028         35,107,319         7,467,889         —         4,115,476         237,855           2012         1,593,941,123         234,401,519         34,058,970         7,197,736         —         4,115,476         237,855           2013         1,706,252,607         229,131,950         34,084,179         6,735,054         —         3,919,438         353,727           2014         1,831,032,076         229,131,205         42,612,105         8,652,971         —         4,531,012         602,550           2015         1,945,006,485         216,641,361         35,424,340         7,789,561         —         4,531,012         602,550	FIREMEN'S	2007	1,047,270,962	173,429,553	32,643,052	5,590,973	I	5,958,936	491,009	1,265,384,485
2009         1,216,141,979         215,793,951         31,484,481         5,768,703         -         6,526,511         531,253           2010         1,310,546,315         230,715,014         32,249,526         5,238,615         -         6,080,087         376,544           2011         1,454,083,372         232,362,028         35,107,319         7,467,889         -         4,115,476         237,855           2012         1,593,941,123         234,401,519         34,058,970         7,197,736         -         3,919,438         353,727           2013         1,706,252,607         229,131,950         34,084,179         6,735,054         -         3,881,457         148,902           2014         1,831,032,076         223,111,212         42,612,105         8,652,971         -         4,531,012         602,550           2015         1,945,006,485         216,641,361         35,424,340         7,789,561         -         4,531,012         602,550	RETIREMENT	2008	1,129,947,758	192,527,105	30,634,136	6,899,520	I	6,281,677	394,592	1,366,684,788
1,310,546,315         230,715,014         32,249,526         5,238,615         -         6,080,087         376,544           1,454,083,372         232,362,028         35,107,319         7,467,889         -         4,115,476         237,855           1,593,941,123         234,401,519         34,088,370         7,197,736         -         3,919,438         353,727           1,706,252,607         229,131,950         34,084,179         6,735,054         -         3,881,457         148,902           1,831,032,076         223,111,212         42,612,105         8,652,971         -         3,884,342         420,647         2           1,945,006,485         216,641,361         35,424,340         7,789,561         -         4,531,012         602,550         2	SYSTEM	2009	1,216,141,979	215,793,951	31,484,481	5,768,703	I	6,526,511	531,253	1,476,246,878
1,454,083,372         232,362,028         35,107,319         7,467,889         -         4,115,476         237,855         :           1,593,941,123         234,401,519         34,058,970         7,197,736         -         3,919,438         353,727         :           1,706,252,607         229,131,950         34,084,179         6,735,054         -         3,881,457         148,902         :           1,831,032,076         223,111,212         42,612,105         8,652,971         -         3,884,342         420,647         :           1,945,006,485         216,641,361         35,424,340         7,789,561         -         4,531,012         602,550         2		2010	1,310,546,315	230,715,014	32,249,526	5,238,615	I	6,080,087	376,544	1,585,206,101
1,593,941,123         234,401,519         34,058,970         7,197,736         —         3,919,438         353,727           1,706,252,607         229,131,950         34,084,179         6,735,054         —         3,881,457         148,902           1,831,032,076         223,111,212         42,612,105         8,652,971         —         3,884,342         420,647         2           1,945,006,485         216,641,361         35,424,340         7,789,561         —         4,531,012         602,550         2		2011	1,454,083,372	232,362,028	35,107,319	7,467,889	I	4,115,476	237,855	1,733,373,939
1,706,252,607     229,131,950     34,084,179     6,735,054     —     3,881,457     148,902       1,831,032,076     223,111,212     42,612,105     8,652,971     —     3,884,342     420,647       1,945,006,485     216,641,361     35,424,340     7,789,561     —     4,531,012     602,550		2012	1,593,941,123	234,401,519	34,058,970	7,197,736	ı	3,919,438	353,727	1,873,872,513
1,831,032,076     223,111,212     42,612,105     8,652,971     —     3,884,342     420,647       1,945,006,485     216,641,361     35,424,340     7,789,561     —     4,531,012     602,550		2013	1,706,252,607	229,131,950	34,084,179	6,735,054	ı	3,881,457	148,902	1,980,234,149
1,945,006,485 216,641,361 35,424,340 7,789,561 – 4,531,012 602,550		2014	1,831,032,076	223,111,212	42,612,105	8,652,971	I	3,884,342	420,647	2,109,713,353
		2015	1,945,006,485	216,641,361	35,424,340	7,789,561	I	4,531,012	602,550	2,209,995,309

### **STATISTICAL INFORMATION**

**Schedule of Expenses by Type** 

(based on Comprehensive Annual Financial Reports for relevant years)

# **Schedule of Expenses by Type**

(based on Comprehensive Annual Financial Reports for relevant years)

Total	2,450,852	2,365,680	2,259,443	2,189,963	2,068,714	2,117,392	1,957,726	1,770,929	1,589,261	1,383,348	455,238	460,569	436,826	402,191	202,365	221,340	190,274	190,312	227,053	253,461	13,178,330	20,670,715	12,918,042	10,330,455	9,955,917	18,312,488	17,890,338	12,238,930	17,638,584	240 044
Transfer to Other Retirement Systems (7)	ı	ı	ı	I	I	I	ı	I	ı	I	I	ı	ı	I	I	ı	I	I	ı	I	ı	ı	ı	ı	I	I	ı	I	I	
Admin and Misc <sup>(6)</sup>	7,631	9,297	9,403	8,341	5,591	7,377	6,922	6,965	5,853	5,843	I	ı	ı	I	I	ı	ı	I	ı	I	1	I	ı	ı	I	I	ı	I	I	
Other Refunds <sup>(5)</sup>	ı	ı	ı	I	ı	ı	I	ı	ı	I	24,711	33,769	21,794	14,961	3,071	32,673	793	772	15,013	20,171	ı	ı	ı	ı	I	ı	ı	I	ı	
Withdrawal (4)	I	1	ı	ı	ı	ı	ı	ı	ı	I	I	ı	ı	ı	I	ı	I	ı	ı	I	ı	ı	ı	ı	ı	ı	ı	ı	ı	
Death Benefits <sup>(3)</sup>	I	ı	I	I	I	I	I	I	ı	I	I	ı	I	I	ı	ı	I	I	ı	I	1	I	I	ı	I	I	ı	I	I	
Cost-of-Living Adjustments (2)	1,149,159	1,138,138	1,104,335	1,088,687	1,046,590	1,064,245	994,367	889,542	793,174	698,360	25,713	28,234	24,690	21,862	22,018	21,677	22,155	22,214	22,214	22,214	ı	I	ı	ı	I	ı	ı	I	ı	
Retirement Benefits (1)	1,294,062	1,218,245	1,145,705	1,092,935	1,016,533	1,045,770	956,437	874,422	790,234	679,145	404,814	398,566	390,342	365,368	177,276	166,990	167,326	167,326	189,826	211,076	13,178,330	20,670,715	12,918,042	10,330,455	9,955,917	18,312,488	17,890,338	12,238,930	17,638,584	770 244
Fiscal Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	TAL 2006	2007	2008	2009	2010	2011	2012	2013	2014	1100
	PRISON	OFFICERS'	PENSION	FUND							CENTRAL	PENSION	FUND								SUPPLEMENTAL	ANNUITY	COLLECTIVE	TRUST						

**Schedule of Expenses by Type** 

(based on Comprehensive Annual Financial Reports for relevant years)

Fiscal	Retirement Benefits <sup>(1)</sup>	Cost-of-Living Adjustments (2)	Death Benefits <sup>(3)</sup>	Withdrawal (4)	Other Refunds (5)	Admin and Misc <sup>(6)</sup>	Other Retirement Systems (7)	Total
2006	80,873,250	I	I	I	ı	513,741	ı	81,386,991
COMPENSATION 2007	61,812,001	ı	1	I	ı	511,416	ı	62,323,417
2008	65,013,841	ı	ı	ı	ı	455,696	ı	65,469,537
2009	75,870,854	I	I	I	I	511,311	ı	76,382,165
2010	70,838,765	ı	I	ı	ı	456,124	ı	71,294,889
2011	110,598,362	ı	ı	ı	ı	460,327	ı	111,058,689
2012	118,211,742	ı	I	ı	I	465,127	ı	118,676,869
2013	124,062,368	ı	1	I	ı	454,350	ı	124,516,718
2014	149,393,111	ı	1	I	I	482,277	ı	149,875,388
2015	175,989,352	I	I	I	ı	464,130	I	176,453,482
9000								
CONTRIBITION 2007	I	I	I	I	I	I	I	I
	ı	I	I	ı	ı	I	ı	I
RETIREMENT 2008	ı	I	I	I	I	I	I	I
2009	I	I	I	I	I	I	ı	I
2010	I	I	I	I	I	I	ı	I
2011	ı	ı	1	ı	ı	1	1	ı
2012	\$85,280	I	I	I	I	I	I	\$85,280
2013	1,207,760	I	I	I	I	I	ı	1,207,760
2014	359,385	ı	I	ı	I	I	ı	359,385
2015	844,050	I	ı	I	ı	I	I	844,050
2006	2,987,049	ı	ı	ı	ı	ı	ı	2,987,049
2007	2,641,791	I	I	I	I	I	ı	2,641,791
LONG-TERM 2008	2,554,019	I	I	ı	ı	I	ı	2,554,019
2009	2,685,591	I	I	ı	ı	ı	ı	2,685,591
2010	2,766,031	I	I	I	I	I	ı	2,766,031
2011	2,885,114	I	I	I	ı	I	ı	2,885,114
2012	3,323,165	ı	I	I	I	I	ı	3,323,165
2013	2,949,360	I	I	I	I	I	I	2,949,360
2014	1,400,000	I	I	I	ı	I	ı	1,400,000
3100	1 550 000							1 550 000

### **Schedule of Expenses by Type**

# (based on Comprehensive Annual Financial Reports for relevant years)

	Fiscal	Retirement Benefits <sup>(1)</sup>	Cost-of-Living Adjustments <sup>(2)</sup>	Death Benefits <sup>(3)</sup>	Withdrawal (4)	Other Refunds (5)	Admin and Misc <sup>(6)</sup>	Other Retirement Systems <sup>(7)</sup>	ıt Total
STATE HEALTH	2006	\$3,347,076,683	ı	ı	ı	ı	\$8,811,546	ı	\$3,355,888,229
BENEFIT	2007	3,601,096,822	I	ı	ı	ı	7,353,509	I	3,608,450,331
PROGRAM	2008	3,563,196,052	I	ı	ı	ı	8,867,578	ı	3,572,063,630
FUNDS (8)	2009	3,895,577,809	I	ı	ı	ı	10,036,535	ı	3,905,614,344
	2010	4,382,156,209	ı	I	ı	I	13,697,892	I	4,395,854,101
	2011	4,750,880,105	ı	I	ı	ı	9,030,035	I	4,759,910,140
	2012	5,266,242,035	ı	ı	ı	ı	8,268,671	I	5,274,510,706
	2013	5,395,752,981	ı	I	ı	I	9,361,600	I	5,405,114,581
	2014	5,918,951,153	ı	I	ı	ı	9,359,616	I	5,928,310,769
	2015	6,290,847,391	ı	I	I	I	9,142,428	I	6,299,989,819
PENSION	2006	\$8,006,171,415	\$612,914,355	\$181,207,287	\$85,986,324	\$24,711	\$42,612,223	\$24,251,667	\$8,953,167,982
TRUST	2007	8,628,374,625	699,428,733	200,860,465	106,912,453	33,769	46,402,190	13,200,841	9,695,213,076
AND STATE	2008	8,988,039,725	776,545,147	229,374,574	122,159,481	21,794	51,836,123	19,647,926	10,187,624,770
HEALTH	2009	9,735,381,314	871,682,338	198,534,394	120,813,982	14,961	50,826,187	22,929,117	11,000,182,293
BENEFIT	2010	10,561,157,111	929,426,004	221,077,318	127,718,537	3,071	50,505,041	18,162,889	11,908,049,971
PROGRAM	2011	11,672,538,916	930,431,700	217,778,205	113,906,285	32,673	81,887,395	17,007,406	13,033,582,580
FUNDS	2012	12,781,205,467	930,323,417	211,990,527	142,494,636	793	46,498,279	14,775,506	14,127,288,625
TOTAL (8)	2013	13,321,635,577	899,973,325	248,111,277	151,454,564	772	49,470,944	20,679,014	14,691,325,473
	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
	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

<sup>\*</sup> Restated due to the implementation of GASB Statement No. 43 (Other Post-Employment Benefits).

<sup>(1)</sup> Indicates benefits from retirement (regular, early, or disability) other than death.

<sup>(2)</sup> Indicates supplement benefit as cost of living adjustment (pension adjustment) benefit.

Previously, indicated both Contributory Group Insurance (CGI) and Noncontributory (NCGI) benefits; however, now, indicates only NCGI. Starting FY 2015, based on GASB No. 67, we are taking out CGI items from our financial statements.

Indicates members' withdrawal of their contributions; that is, a type of refund.

<sup>(5)</sup> Indicates refund to State with excess of revenues and expenses.

<sup>®</sup> Indicates administration expenses of pension plans/systems plus petty misc adjustment items.

Indicates transfers of member/employer contributions to other pension plans/systems.

GASB No. 43 became implemented in fiscal year 2007. Fiscal years before 2007 other than the restated 2006 were presented otherwise.

## **Schedule of Changes in Net Position**

(based on Comprehensive Annual Financial Reports for relevant years)

	Fiscal Year	Additions (1)	Deductions (2)	Total Change in Net Position	Beginning of Year	End of Year
PUBLIC	2006	3,291,342,031(3)	1,897,013,948®	1,394,328,083	23,914,516,673(3)	25,308,844,756
<b>EMPLOYEES</b> '	2007	5,140,088,340	2,073,886,832	3,066,201,508	25,308,844,756	28,375,046,264
RETIREMENT	2008	1,126,550,853	2,264,641,314	(1,138,090,461)	28,375,046,264	27,236,955,803
SYSTEM	2009	(2,270,766,187)	2,423,377,925	(4,694,144,112)	27,236,955,803	22,542,811,691
	2010	4,359,791,871	2,569,891,156	1,789,900,715	22,542,811,691	24,332,712,406
	2011	5,467,869,901	2,806,148,979	2,661,720,922	24,332,712,406	26,994,433,328
	2012	2,420,004,560	3,030,999,890	(610,995,330)	26,994,433,328	26,383,437,998
	2013	4,675,702,815 <sup>(5)</sup>	3,194,746,835 <sup>(5)</sup>	1,480,955,980	24,981,199,832®	26,462,155,812
	2014	5,874,621,920	3,337,195,959	2,537,425,961	26,462,155,812	28,999,581,773
	2015	3,018,793,058	3,464,807,925	(446,014,867)	28,999,581,773	28,553,566,906
TEACHERS'	2006	3,589,257,459®	2,284,482,847 <sup>(3)</sup>	1,304,774,612	29,631,612,619®	30,936,387,231
PENSION	2007	6,092,681,944	2,502,406,040	3,590,275,904	30,936,387,231	34,526,663,135
AND ANNUITY	2008	521,007,639	2,732,186,697	(2,211,179,058)	34,526,663,135	32,315,484,077
FUND	2009	(4,353,153,615)	2,923,509,634	(7,276,663,249)	32,315,484,077	25,038,820,828
	2010	3,936,137,470	3,082,462,465	853,675,005	25,038,820,828	25,892,495,833
	2011	4,994,093,881	3,400,392,453	1,593,701,428	25,892,495,833	27,486,197,261
	2012	1,649,691,331	3,591,052,342	(1,941,361,011)	27,486,197,261	25,544,836,250
	2013	4,245,619,356(5)	3,733,860,915(5)	511,758,441	25,376,367,599®	25,888,126,040
	2014	5,284,806,491	3,890,680,070	1,394,126,421	25,888,126,040	27,282,252,461
	2015	2,351,438,766	4,028,893,667	(1,677,454,901)	27,282,252,461	25,604,797,560
POLICE	2006	2,680,273,651	1,165,066,345	1,515,207,306	17,409,979,351	18,925,186,657
AND	2007	3,910,181,533	1,265,384,485	2,644,797,048	18,925,186,657	21,569,983,705
<b>FIREMEN'S</b>	2008	857,918,938	1,366,684,788	(508,765,850)	21,569,983,705	21,061,217,855
RETIREMENT	2009	(1,496,041,362)	1,476,246,878	(2,972,288,240)	21,061,217,855	18,088,929,615
	2010	3,340,414,302	1,585,206,101	1,755,208,201	18,088,929,615	19,844,137,816
	2011	3,181,924,007	1,733,373,939	1,448,550,068	19,844,137,816	21,292,687,884
	2012	1,588,269,194	1,873,872,513	(285,603,319)	21,292,687,884	21,007,084,565
	2013	3,478,087,129	1,980,234,149	1,497,852,980	21,007,084,565	22,504,937,545
	2014	4,625,261,593	2,109,713,353	2,515,548,240	22,504,937,545	25,020,485,785
	2015	2,296,368,445	2,209,995,309	86,373,136	25,020,485,785	25,106,858,921

**Schedule of Changes in Net Position** 

(based on Comprehensive Annual Financial Reports for relevant years)

STATE         Today         Today         Today         Today         Today         Today         Today         Today           STATE         2006         200 C         200						Net Position	_
Table   Tabl		Fiscal Year		Deductions (2)	Total Change in Net Position	Beginning of Year	End of Year
CE         2007         33867778         111,820,873         227,068,886         1842,204,209         2,069,260,914         1.1           FM         2008         20,703,275         122,718,593         (10,462,94)         2,069,260,914         1.1           EM         2009         (27,417,898)         132,718,593         (40,687,582)         1,567,797,990         1.1           2010         234,539,845         132,718,593         (40,687,582)         1,567,797,990         1,1           2011         300,820,734         149,387,453         151,332,771         1,560,544,244         1,1           2013         24,1569,636         198,772,864         151,780,370         1,480,7628,195         1,1           2014         347,569,636         198,274,648         163,507,603         1,480,7628,195         1,1           2015         42,000,574         20,6845,348         7,780,370         1,180,763,81         1,1           2016         42,000,574         31,337,192         10,6853,362         1,237,966         1,1           2017         42,000,574         31,337,192         34,065,290         36,292,286         1,1           2018         2014         42,000,425         31,337,192         1,246,230         1,246,230	STATE	2006	203,699,531	105,416,883	98,282,648	1,743,921,381	1,842,204,029
EMNY 1         2008         20,703.75         1,21,66,199         (101,462.924)         2,09,509,0408         1,179,990         1,179,793,990         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,790         1,179,793,793         1,179,793,793         1,179,793,793         1,179,793,793         1,179,793,793         1,179,793,793         1,179,793,793         1,179,793,793         1,179,793,793         1,179,793,793         1,179,793,793         1,179,793,793         1,179,793,793         1,179,793,793         1,1	POLICE	2007	338,677,758	111,620,873	227,056,885	1,842,204,029	2,069,260,914
EM         2009         (274,178,899)         132,178,593         (406,897,852)         1497,797,900         1.1           2010         234,539,845         139,245,329         95,294,516         1,560,900,408         1.1           2011         300,820,734         149,347,432,71         1,660,900,408         1.1           2012         86,772,280         153,807,650         (77,760,370)         1,607,224,954         1,77,897         1,729,472         1,1           2013         344,530,816         163,807,650         (77,760,370)         1,607,824,924         1,1         1,1729,847,252         1,1           2014         347,659,636         196,833,824         7,047,284)         1,729,847,252         1,1         1,729,847,252         1,1           RM         2006         42,165,822         33,00,522         34,038,20         1,758,825,72         1,1           RM         2008         42,165,822         33,00,522         34,038,20         372,245,84         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,1         1,	RETIREMENT	2008	20,703,275	122,166,199	(101,462,924)	2,069,260,914	1,967,797,990
2010         234,538,45         139,245,329         139,245,329         156,60,900,408         1,1           2011         300,820,738         149,387,463         151,433,71         1,656,194,924         1,1           2012         2013         241,530,381         163,907,463         (77,803,70)         1,706,623,195         1,1           2014         347,569,686         182,752,484         164,330,672         1,726,847,825         1,1           2014         347,569,686         198,238,964         1,49,380,77         1,729,847,825         1,1           ALL         2006         42,030,74         31,37,823,964         1,40,3767         1,729,847,825         1,1           EM         2008         42,030,74         31,370,522         34,085,209         322,292,28         1,1           EM         2009         47,188,822         33,100,522         34,085,793         37,2350,548         1,1           EM         2009         47,188,822         33,100,522         44,486,169         31,300,376         32,202,288           EM         2011         46,627,192         44,486,169         34,468,169         31,300,376         32,300,388           2012         2014         46,627,192         47,446,110         46,466,100 <td>SYSTEM</td> <td>2009</td> <td>(274,178,989)</td> <td>132,718,593</td> <td>(406,897,582)</td> <td>1,967,797,990</td> <td>1,560,900,408</td>	SYSTEM	2009	(274,178,989)	132,718,593	(406,897,582)	1,967,797,990	1,560,900,408
2011   300,820,734   149,387,463   151,433,271   1,656,149,94   1,1		2010	234,539,845	139,245,329	95,294,516	1,560,900,408	1,656,194,924
2012   86,772,280   163,607,650   77,780,370   1807,68195   1, 1, 229,472,484   163,807,650   1, 1807,7281   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,472,244   1, 1729,473,244   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474   1, 1729,474		2011	300,820,734	149,387,463	151,433,271	1,656,194,924	1,807,628,195
2013   241,589,584   182,752,484   183,77897   1,179,947,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,179,647,225   1, 1,		2012	85,727,280	163,507,650	(77,780,370)	1,807,628,195	1,729,847,825
2014   347,566,536   198,238,964   149,330,672   1,788,625,722   1,186,296,644   206,645,348   700,247,284)   1,937,596,394   1,186,296,6394   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,296,648   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649   1,186,246,649		2013	241,530,381	182,752,484	58,777,897	1,729,847,825	1,788,625,722
1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,00		2014	347,569,636	198,238,964	149,330,672	1,788,625,722	1,937,956,394
Table   Tabl		2015	136,598,064	206,845,348	(70,247,284)	1,937,956,394	1,867,709,110
NEMENT         2007         67,188,822         33,100,532         34,068,290         338,292,258           EM         2008         (13,400,425)         35,825,525         (22,364,758)         372,380,548           EM         2008         (15,1500,425)         37,867,454         349,995,790         372,380,548           2010         42,495,291         41,599,635         895,656         266,022,392         266,028,396           2011         46,627,192         41,549,681         3,180,376         264,704,488         261,523,992           2012         13,492,372         47,848,101         (6,266,703)         264,704,888         265,392           2014         55,419,470         49,766,452         565,3018         226,393         226,393           2015         1,643,253         47,848,101         (1,8,700,464)         231,483,835         225,393,181           2016         1,508,7481         13,504,078         1,500,464)         225,393,181         225,383,703           201         1,504,538         10,418,712         (1,504,644)         1,504,643         1,504,644         1,504,644           201         1,504,538         10,418,712         1,504,412         1,633,433         1,343,333           201         2,50	JUDICIAL	2006	42,030,574	31,337,192	10,693,382	327,598,876	338,292,258
EM         2008         13,470,767         35,825,525         (22,354,758)         372,350,548           2009         (51,500,425)         37,867,029         (89,367,454)         349,957,790           2010         42,495,291         44,446,816         348,656         260,628,336           2011         46,627,192         44,446,816         348,6376         261,523,922           2012         13,492,372         46,161,075         (6,204,848)         264,704,368           2013         41,643,253         47,848,101         (6,204,848)         226,303,817           2014         55,419,470         49,766,452         5,653,018         226,303,817           2015         2014         55,419,470         47,848,101         (6,204,848)         226,303,817           2015         2015         41,643,253         47,848,101         (6,204,848)         226,303,817           2010         15,087,481         13,504,078         1,583,403         11,633,073           201         9,784,300         11,904,181         (2,244,248)         11,385,383           NEN'S         2009         7,060,225         8,857,525         (1,797,300)         13,483,83           EM         2012         4,878,920         7,502,404	RETIREMENT	2007	67,158,822	33,100,532	34,058,290	338,292,258	372,350,548
2009         (51,500,425)         37,867,029         (89,367,454)         349,995,790           2010         42,495,291         41,599,635         895,656         260,628,336           2011         46,627,192         43,446,816         31,80,376         261,523,992           2012         13,492,273         46,161,075         (32,668,703)         264,704,368           2013         41,643,253         47,848,101         (6,204,848)         226,703,665           2014         55,419,470         49,766,462         5,630,18         226,703,665           2015         2015         47,643,253         47,848,101         (6,204,848)         223,035,665           2015         2015         45,087,481         13,504,078         148,700,464         231,483,835           2010         45,087,481         13,504,078         1,583,403         16,630,703           ANEN'S         2007         9,784,300         11,901,817         11,385,083           ANEN'S         2010         4,878,920         7,503,268         (2,243,48)         11,385,083           EM         2011         4,878,920         7,503,268         (2,690,66)         8,760,735           EM         2012         3,389,354         3,894,398         (10	SYSTEM	2008	13,470,767	35,825,525	(22,354,758)	372,350,548	349,995,790
2010         42,495,291         41,599,635         895,656         260,628,336           2011         46,627,192         43,446,816         3,180,376         261,523,992           2012         13,492,372         46,46,810         (32,688,703)         264,704,388           2013         41,643,253         47,848,101         (6,204,848)         226,404,388           2014         55,419,470         49,766,452         5,663,018         226,830,817           2015         2014         55,419,470         49,766,452         5,663,018         226,830,817           SOLIDATED         2005         15,087,481         13,504,078         (18,700,464)         231,483,835           CE         2007         9,784,300         11,901,811         (2,117,511)         18,214,106           NEN'S         2008         7,504,538         10,418,750         (2,914,212)         16,096,595           NEN'S         2009         7,504,538         10,418,750         (2,269,056)         8,760,735           NEN'S         201         4,878,920         7,503,268         (2,269,056)         8,760,735           EM         2011         4,678,712         6,491,612         6,491,619           A         3,389,364         3,894,398 <td></td> <td>2009</td> <td>(51,500,425)</td> <td>37,867,029</td> <td>(89,367,454)</td> <td>349,995,790</td> <td>260,628,336</td>		2009	(51,500,425)	37,867,029	(89,367,454)	349,995,790	260,628,336
2011         46,627,192         43,446,816         3,180,376         201,523,992           2012         13,492,372         46,161,075         (32,688,703)         264,704,368           2013         41,643,253         47,848,101         (6,204,848)         222,035,665           2014         55,419,470         49,766,452         5,653,018         222,035,665           2015         33,898,314         52,598,778         (18,700,464)         231,483,835           SOLIDATED         2006         15,087,481         13,504,078         1,583,403         16,630,703           CE         2007         9,784,300         11,901,811         (2,117,511)         18,214,106           CE         2008         7,504,538         10,418,750         (2,914,212)         16,096,595           NEN'S         2009         7,504,538         10,418,750         (2,914,212)         13,382,383           AEMINT         2010         4,878,920         7,503,268         (2,624,348)         11,385,083           EM         2011         4,088,712         6,343,69         6,491,679         8,760,735           AC         2012         3,427,978         5,060,797         (1,632,819)         6,491,679           AC         2014		2010	42,495,291	41,599,635	895,656	260,628,336	261,523,992
2012         13,492,372         46,161,075         (32,668,703)         264,704,368           2013         41,643,253         47,848,101         (6,204,848)         222,035,665           2014         55,419,470         49,766,452         5,663,018         225,830,817           2015         33,898,314         52,598,778         (18,700,464)         231,483,835           SOLIDATED         2006         15,087,481         13,504,078         1,583,403         16,630,703           CE         2007         9,784,300         11,901,811         (2,117,511)         18,214,106           CE         2008         7,504,258         10,418,750         (2,147,212)         16,096,595           MEN'S         2009         7,060,255         8,857,525         (1,797,300)         13,182,383           EM         2011         4,058,712         6,327,68         (2,624,349)         8,660,793           2012         3,427,978         5,060,797         (1,622,819)         6,491,679           2013         3,389,354         3,894,398         (6,05,044)         4,858,860           2014         1,901,416         2,951,601         (1,050,185)         4,353,816           2014         2,577,989         2,951,601         4,105		2011	46,627,192	43,446,816	3,180,376	261,523,992	264,704,368
2013         41,643,253         47,848,101         (6,204,848)         232,035,665         22           2014         55,419,470         49,766,452         5,653,018         225,830,817         23           2015         33,898,314         52,598,778         (18,700,464)         221,483,835         21           2016         15,087,481         13,504,078         1,583,403         16,630,703         1           CE         2007         9,784,300         11,901,811         (2,117,511)         18,214,106         1           CE         2007         3,784,300         11,901,811         (2,117,511)         18,214,106         1           MEN'S         2008         7,606,225         8,857,525         (1,797,300)         13,182,383         1           AEMENT         2010         4,878,920         7,503,268         (2,624,348)         11,385,083         1           EM         2011         4,058,712         6,327,768         (2,269,056)         8,760,735         1           EM         2012         3,427,978         5,060,797         (1,650,185)         4,858,860         1,507,491         4,858,860           2014         1,901,416         2,951,601         (1,050,185)         4,353,816         1,577,94		2012	13,492,372	46,161,075	(32,668,703)	264,704,368	232,035,665
2014         55,49,470         49,766,452         5,653,018         225,830,817         23           2015         33,898,314         52,598,778         (18,700,464)         231,483,835         21           SOLIDATED         2006         15,087,481         13,504,078         1,583,403         16,630,703         1           CE         2007         9,784,300         11,901,811         (2,117,511)         18,214,106         1           NEN'S         2008         7,504,538         10,418,750         (2,914,212)         16,096,595         1           NEN'S         2009         7,060,225         8,857,525         (1,797,300)         13,182,383         1           EM         2011         4,878,920         7,503,268         (2,624,348)         11,385,083         1           EM         2012         4,658,712         6,327,768         (2,269,056)         8,760,735         8,760,735           2012         3,427,978         5,060,797         (1,632,819)         6,491,679         8           2014         1,901,416         2,951,601         (1,050,185)         4,353,816           2015         1,577,949         2,453,630         (875,681)         3,303,631		2013	41,643,253	47,848,101	(6,204,848)	232,035,665	225,830,817
2015         33,898,314         52,598,778         (18,700,464)         231,483,835         21           SOLIDATED         2006         15,087,481         13,504,078         1,583,403         16,630,703         1           CE         2007         9,784,300         11,901,811         (2,117,511)         18,214,106         1           CE         2008         7,504,538         10,418,750         (2,117,511)         18,214,106         1           MEN'S         2009         7,606,225         8,857,525         (2,1747,300)         13,182,383         1           REMENT         2010         4,878,920         7,503,268         (2,624,348)         11,385,083         1           EM         2011         4,058,712         6,327,768         (2,269,056)         8,760,735         8,760,735           EM         2012         3,389,354         3,894,398         5,060,797         (1,632,819)         4,858,860           2013         2014         1,901,416         2,951,601         2,951,601         3,393,531         3,303,531		2014	55,419,470	49,766,452	5,653,018	225,830,817	231,483,835
CE         2006         15,087,481         13,504,078         1,583,403         16,630,703         1           CE         2007         9,784,300         11,901,811         (2,117,511)         18,214,106         1           CE         2008         7,504,538         10,418,750         (2,117,511)         18,214,106         1           MEN'S         2009         7,060,225         8,857,525         (1,797,300)         13,182,383         1           AEMENT         2010         4,878,920         7,503,268         (2,624,348)         11,385,083         1           EM         2011         4,058,712         6,327,768         (2,269,056)         8,760,735         8,760,735           AEMENT         2012         3,427,978         5,060,797         (1,632,819)         6,491,679         4,858,860           ACOL3         3,389,354         3,894,398         (1,050,185)         4,353,816         4,353,816           ACOL5         1,577,949         2,453,630         (37,051,81)         3,303,631         3,303,631		2015	33,898,314	52,598,778	(18,700,464)	231,483,835	212,783,371
CE         2007         9,784,300         11,901,811         (2,117,511)         18,214,106         1           VIEW         2008         7,504,538         10,418,750         (2,914,212)         16,096,595         1           VIEW         2009         7,060,225         8,857,526         (1,797,300)         13,182,383         1           REMENT         2010         4,878,920         7,503,268         (2,624,348)         11,385,083         1           EM         2011         4,058,712         6,327,768         (2,269,056)         8,760,735         8,760,735           EM         2012         3,427,978         5,060,797         (1,632,819)         6,491,679         8,760,735           2013         3,389,354         3,894,398         (506,794)         (1,050,185)         4,358,860           2014         1,901,416         2,951,601         (1,050,185)         4,353,816           2015         1,577,949         2,453,630         (37,051,87)         3,303,631	CONSOLIDATED	2006	15,087,481	13,504,078	1,583,403	16,630,703	18,214,106
MEN'S         2008         7,504,538         10,418,750         (2,914,212)         16,096,595         1           MEN'S         2009         7,060,225         8,857,525         (1,797,300)         13,182,383         1           RAMENT         2010         4,878,920         7,503,268         (2,624,348)         11,385,083         1           EM         2011         4,058,712         6,327,768         (2,269,056)         8,760,735         8,760,735           2012         3,427,978         5,060,797         (1,632,819)         6,491,679         4,858,860           2013         3,389,354         3,894,398         (506,044)         4,858,860         4,353,816           2014         1,901,416         2,951,601         (1,050,185)         4,353,816           2015         1,577,949         2,453,630         (875,681)         3,303,631	POLICE	2007	9,784,300	11,901,811	(2,117,511)	18,214,106	16,096,595
2009         7,060,225         8,857,525         (1,797,300)         13,182,383         1           2010         4,878,920         7,503,268         (2,624,348)         11,385,083         1,1385,083           2011         4,058,712         6,327,768         (2,269,056)         8,760,735           2012         3,427,978         5,060,797         (1,632,819)         6,491,679           2013         3,389,354         3,894,398         (505,044)         4,858,860           2014         1,901,416         2,951,601         (1,050,185)         4,353,816           2015         1,577,949         2,453,630         (875,681)         3,303,631	AND	2008	7,504,538	10,418,750	(2,914,212)	16,096,595	13,182,383
2010         4,878,920         7,503,268         (2,624,348)         11,385,083           2011         4,058,712         6,327,768         (2,269,056)         8,760,735           2012         3,427,978         5,060,797         (1,632,819)         6,491,679           2013         3,389,354         3,894,398         (505,044)         4,858,860           2014         1,901,416         2,951,601         (1,050,185)         4,353,816           2015         1,577,949         2,453,630         (875,681)         3,303,631	FIREMEN'S	2009	7,060,225	8,857,525	(1,797,300)	13,182,383	11,385,083
2011         4,058,712         6,327,768         (2,269,056)         8,760,735           2012         3,427,978         5,060,797         (1,632,819)         6,491,679           2013         3,389,354         3,894,398         (505,044)         4,858,860           2014         1,901,416         2,951,601         (1,050,185)         4,353,816           2015         1,577,949         2,453,630         (875,681)         3,303,631	RETIREMENT	2010	4,878,920	7,503,268	(2,624,348)	11,385,083	8,760,735
3,427,978       5,060,797       (1,632,819)       6,491,679         3,389,354       3,894,398       (505,044)       4,858,860         1,901,416       2,951,601       (1,050,185)       4,353,816         1,577,949       2,453,630       (875,681)       3,303,631	SYSTEM	2011	4,058,712	6,327,768	(2,269,056)	8,760,735	6,491,679
3,389,354     3,894,398     (505,044)     4,858,860       1,901,416     2,951,601     (1,050,185)     4,353,816       1,577,949     2,453,630     (875,681)     3,303,631		2012	3,427,978	5,060,797	(1,632,819)	6,491,679	4,858,860
1,901,416       2,951,601       (1,050,185)       4,353,816         1,577,949       2,453,630       (875,681)       3,303,631		2013	3,389,354	3,894,398	(505,044)	4,858,860	4,353,816
1,577,949 2,453,630 (875,681) 3,303,631		2014	1,901,416	2,951,601	(1,050,185)	4,353,816	3,303,631
		2015	1,577,949	2,453,630	(875,681)	3,303,631	2,427,950

**Schedule of Changes in Net Position** 

(based on Comprehensive Annual Financial Reports for relevant years)

					Net Position	_
	Fiscal Year	Additions (1)	Deductions (2)	Total Change in Net Position	Beginning of Year	End of Year
PRISON	2006	1,682,105	2,450,852	(768,747)	14,783,465	14,014,718
OFFICERS'	2007	1,850,323	2,365,680	(515,357)	14,014,718	13,499,361
PENSION	2008	1,650,523	2,259,443	(608,920)	13,499,361	12,890,441
FUND	2009	1,286,442	2,189,963	(903,521)	12,890,441	11,986,920
	2010	1,100,162	2,068,714	(968,552)	11,986,920	11,018,368
	2011	1,096,674	2,117,392	(1,020,718)	11,018,368	9,997,650
	2012	1,004,312	1,957,726	(953,414)	9,997,650	9,044,236
	2013	898,612	1,770,929	(872, 317)	9,044,236	8,171,919
	2014	800,543	1,589,261	(788,718)	8,171,919	7,383,201
	2015	704,715	1,383,348	(678,633)	7,383,201	6,704,568
CENTRAL	2006	455,238	455,238	I	I	ı
PENSION	2007	460,569	460,569	I	ı	ı
FUND	2008	436,826	436,826	I	I	ı
	2009	402,191	402,191	I	I	I
	2010	202,365	202,365	I	ı	I
	2011	221,340	221,340	I	ı	ı
	2012	190,274	190,274	I	I	I
	2013	190,312	190,312	I	I	ı
	2014	227,053	227,053	I	I	ı
	2015	253,461	253,461	I	I	I
SUPPLEMENTAL	2006	23,673,962	13,178,330	10,495,632	151,077,194	161,572,826
ANNUITY	2007	40,328,539	20,670,715	19,657,824	161,572,826	181,230,650
COLLECTIVE TRUST	2008	(9,417,124)	12,918,042	(22,335,166)	181,230,650	158,895,484
	2009	(25,604,513)	10,330,455	(35,934,968)	158,895,484	122,960,516
	2010	23,180,756	9,955,917	13,224,839	122,960,516	136,185,355
	2011	40,605,592	18,312,488	22,293,104	136,185,355	158,478,459
	2012	12,288,247	17,890,338	(5,602,091)	158,478,459	152,876,368
	2013	37,624,576	12,238,930	25,385,646	152,876,368	178,262,014
	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

**Schedule of Changes in Net Position** 

(based on Comprehensive Annual Financial Reports for relevant years)

Fiscal						Net P	Net Position
FUNEATION   20006		Fiscal Year	Additions (4)	Deductions (2)	Total Change in Net Position	Beginning of Year	End of Year
ENSATION         2007         42,130,728         62,233,417         389,807,311         1,708           2008         (14,992,262         65,469,537         (60,477,275)         2,068           2009         (161,866,789)         77,294,889         269,160,190         1,779           2010         56,469,537         111,68,889         486,600,088         2,048           2011         560,199,581         111,86,76,889         79,401,40         2,048           2013         479,365,849         124,516,718         364,849,131         2,048           2014         606,199,581         144,65,482         1445,634         2,540           EMBUTON         2005         —         —         —         —           ARBUTON         2007         —         —         —         —           ARMIT         2008         —         —         —         —           ARMIT         2009         —         —         —         —         —           RAM         2011         \$289,593         46,56,469         1,206,314         \$3,56,449         3,396           ARMIT         2013         1,444,737         1,207,760         276,977         —         —	DEFERRED	2006	273,353,885	81,386,991	191,966,894	1,516,374,059	1,708,340,953
2008   14992,262   65,469,537   (61,467,275)   2.008     2009   (161,686,759)   71,324,889   (238,248,924)   2.017     2010   340,466,799   71,224,889   (238,148,924)   2.017     2011   569,118,777   111,058,689   458,060,088   2.048     2012   180,708,409   118,678,89   71,249,899   2.946,0131   2.586     2014   606,199,581   149,875,388   455,524,193   2.946     2015   2006   1	COMPENSATION	2007	422,130,728	62,323,417	359,807,311	1,708,340,953	2,068,148,264
2009   161,686,759   76,382,165   76,382,48924   2 077   2014	PLAN	2008	14,992,262	65,469,537	(50,477,275)	2,068,148,264	2,017,670,989
2010   340,455,079   71,294,889   269,160,190   1,779     2011   198,078,409   118,676,889   79,401,540   2,048     2012   2013   479,365,849   124,516,718   346,89,131   2,586     2013   479,365,849   124,516,718   346,89,131   2,586     2014   2015   2014,828   1198,773,88   445,324,193   2,940     2015   2006   -		2009	(161,866,759)	76,382,165	(238,248,924)	2,017,670,989	1,779,422,065
2011   569,118,777   111,058,689   458,060,088   2,048   2,048   2,048   2,014   2,012   2,013   479,365,499   124,516,718   354,949,131   2,586   2,586   2,048   2,044   2,014   2,014   2,014   2,014   2,014,828   144,513,828   455,324,131   2,586   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2,048   2		2010	340,455,079	71,294,889	269,160,190	1,779,422,065	2,048,582,255
2012   198,078,409   118,676,869   79,401,540   2,506     2013   479,365,849   124,516,718   354,494,131   2,566     2014   605,199,581   149,875,388   455,324,193   2,940     2015   2006		2011	569,118,777	111,058,689	458,060,088	2,048,582,255	2,506,642,343
2013   479,365,849   124,516,718   354,849,131   2,586     2014   605,199,581   149,875,388   445,324,193   2,940     2015   320,141,828   176,453,482   143,688,346   3,396     2006		2012	198,078,409	118,676,869	79,401,540	2,506,642,343	2,586,043,883
2014   605,199,581   149,875,388   455,324,193   2,940		2013	479,365,849	124,516,718	354,849,131	2,586,043,883	2,940,893,014
ED   2006   176,453,482   176,453,482   143,688,346   3,396     EN   2006		2014	605,199,581	149,875,388	455,324,193	2,940,893,014	3,396,217,207
ED         2006         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         — <td></td> <td>2015</td> <td>320,141,828</td> <td>176,453,482</td> <td>143,688,346</td> <td>3,396,217,207</td> <td>3,539,905,553</td>		2015	320,141,828	176,453,482	143,688,346	3,396,217,207	3,539,905,553
EMENT         2007         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —<	DEFINED	2006	ı	I	I	I	ı
EMENT         2008         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         22893774         —         —         \$2895734	CONTRIBUTION	2007	I	I	I	I	ı
RAM         2009         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         28.9377         —         —         28.289,393         —         —         29.48,76         —         —	RETIREMENT	2008	I	I	I	I	ı
2010	PROGRAM	2009	I	I	I	I	ı
2011 \$289,593		2010	I	I	I	I	ı
2012       488,324       \$85,280       403,044       \$8         2013       1,484,737       1,207,760       276,977         2014       1,411,794       359,385       1,052,409         2015       2,050,267       844,050       1,206,217       2         2015       2,050,267       2,987,049       (1,831,737)       3         FIT       2007       2,760,201       2,641,791       118,410       1         FIT       2007       2,128,401       2,554,019       (425,618)       1         FILLTY       2009       2,728,467       2,685,591       42,876       1         2010       2,779,001       2,786,031       12,370       1         2011       2,893,294       2,885,114       8,180       1         2012       3,327,297       3,323,465       90,631       1         2013       2014       1,384,318       1,400,000       (15,682)       1         2015       1,551,631       1,550,000       1,631       1		2011	\$289,593	I	\$289,593	ı	\$289,593
2013 1,484,737 1,207,760 276,977 2014 1,411,794 359,385 1,052,409 1,206,217 2,050,267 844,050 1,206,217 2,050,267 2,050,267 2,987,049 1,206,217 2,2760,201 2,760,201 2,554,019 42,876 118,410 1,2,870 2010 2,728,467 2,288,591 42,876 112,970 1,2,885,114 8,180 1,2,970 2011 2,893,294 2,885,114 8,180 1,2,970 2013 3,039,991 2,949,360 90,631 1,1550,000 1,550,000 1,631 1,151,631 1,1550,000 1,550,000 1,631 1,151,631 1,1550,000 1,631 1,151,631 1,151,631 1,151,631 1,151,631		2012	488,324	\$85,280	403,044	\$289,593	692,637
2014 1,411,794 359,385 1,052,409 2015 2,050,267 844,050 1,206,217 2  INMATE 2006 1,155,312 2,987,049 (1,831,737) 3  FIT 2007 2,760,201 2,685,591 (425,618) 118,410 118,410 2010 2,728,467 2,685,591 42,876 112,970 112,970 2011 2,893,294 2,885,114 8,180 112,970 2012 3,327,297 3,323,165 4,132 112,970 2014 1,384,318 1,400,000 (15,682) 11 2015 2,540,010 1,550,000 1,631 11		2013	1,484,737	1,207,760	276,977	692,637	969,614
PATE         2,050,267         844,050         1,206,217         2           FIT         2006         1,155,312         2,987,049         (1,831,737)         3           FIT         2007         2,760,201         2,641,791         118,410         42,876           FIT         2008         2,128,401         2,685,591         42,876         42,876           FILLTY         2009         2,728,467         2,66,031         12,970         42,876           2010         2,779,001         2,785,114         8,180         4,180           2011         2,893,294         2,885,114         8,180         4,132           2012         3,327,297         3,323,165         4,132         4,132           2013         3,039,991         2,949,360         90,631         2,949,360         1,400,000         (15,682)           2014         1,551,631         1,550,000         1,631         1,631		2014	1,411,794	359,385	1,052,409	969,614	2,022,023
FIT         2006         1,155,312         2,987,049         (1,831,737)         3           FIT         2007         2,760,201         2,641,791         118,410         118,410           -TERM         2008         2,128,401         2,554,019         (425,618)         42,876           FILLTY         2009         2,728,467         2,685,591         42,876         42,876           2010         2,779,001         2,766,031         12,970         12,970           2011         2,893,294         2,885,114         8,180           2012         3,327,297         3,323,165         4,132           2013         3,039,991         2,949,360         90,631           2014         1,384,318         1,400,000         (15,682)           2015         1,551,631         1,550,000         1,631		2015	2,050,267	844,050	1,206,217	2,022,023	3,228,240
FIT         2007         2,760,201         2,641,791         118,410           TERM         2008         2,128,401         2,554,019         (425,618)           ILLTY         2009         2,728,467         2,685,591         42,876           2010         2,779,001         2,766,031         12,970           2011         2,893,294         2,885,114         8,180           2012         3,327,297         3,323,165         4,132           2013         3,039,991         2,949,360         90,631           2014         1,384,318         1,400,000         (15,682)           2015         1,551,631         1,550,000         1,631	ALTERNATE	2006	1,155,312	2,987,049	(1,831,737)	3,626,852	1,795,115
TERM         2008         2,128,401         2,554,019         (425,618)           ILLTY         2009         2,728,467         2,685,591         42,876           2010         2,779,001         2,766,031         12,970           2011         2,893,294         2,885,114         8,180           2012         3,327,297         3,323,165         4,132           2013         3,039,991         2,949,360         90,631           2014         1,384,318         1,400,000         (15,682)           2015         1,551,631         1,550,000         1,631	BENEFIT	2007	2,760,201	2,641,791	118,410	1,795,115	1,913,525
ILITY         2009         2,728,467         2,685,591         42,876           2010         2,779,001         2,776,031         12,970           2011         2,885,144         8,180           2012         3,327,297         3,323,165         4,132           2013         3,039,991         2,949,360         90,631           2014         1,384,318         1,400,000         (15,682)           2015         1,551,631         1,550,000         1,631	LONG-TERM	2008	2,128,401	2,554,019	(425,618)	1,913,525	1,487,907
2010     2,779,001     2,786,031     12,970       2011     2,893,294     2,885,114     8,180       2012     3,327,297     3,323,165     4,132       2013     3,039,991     2,949,360     90,631       2014     1,384,318     1,400,000     (15,682)       2015     1,551,631     1,550,000     1,631	DISABILITY	2009	2,728,467	2,685,591	42,876	1,487,907	1,530,783
2,893,294       2,885,114       8,180         3,327,297       3,323,165       4,132         3,039,991       2,949,360       90,631         1,384,318       1,400,000       (15,682)         1,551,631       1,550,000       1,631	FUND	2010	2,779,001	2,766,031	12,970	1,530,783	1,543,753
3,327,297       3,323,165       4,132         3,039,991       2,949,360       90,631         1,384,318       1,400,000       (15,682)         1,551,631       1,550,000       1,631		2011	2,893,294	2,885,114	8,180	1,543,753	1,551,933
3,039,991 2,949,360 90,631 1,384,318 1,400,000 (15,682) 1,551,631 1,550,000 1,631		2012	3,327,297	3,323,165	4,132	1,551,933	1,556,065
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		2013	3,039,991	2,949,360	90,631	1,556,065	1,646,696
1,551,631 1,550,000 1,631		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

**Net Position** 

### **Schedule of Changes in Net Position**

# (based on Comprehensive Annual Financial Reports for relevant years)

	Fiscal Year	Additions (4)	Deductions (2)	Total Change in Net Position	Beginning of Year	End of Year
STATE HEALTH	2006	\$3,549,816,481	\$3,355,888,229	\$193,928,252	\$367,924,070	\$561,852,322
BENEFIT	2007	3,597,829,109	3,608,450,331	(10,621,222)	561,852,322	551,231,100
PROGRAM	2008	3,722,023,682	3,572,063,630	149,960,052	551,231,100	701,191,152
FUNDS (4)	2009	3,688,960,344	3,905,614,344	(216,654,000)	701,191,152	484,537,152
	2010	4,366,329,943	4,395,854,101	(29,524,158)	484,537,152	455,012,994
	2011	4,843,404,735	4,759,910,140	83,494,595	455,012,994	538,507,589
	2012	4,967,678,805	5,274,510,706	(306,831,901)	538,507,589	231,675,688
	2013	5,469,006,328	5,405,114,581	63,891,747	231,675,688	295,567,435
	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
PENSION TRUST	2006	\$13,671,827,710®	\$8,953,167,982(3)	\$4,718,659,728	\$75,098,045,243(3)	\$79,816,704,971
AND STATE HEALTH	2007	19,623,932,166	9,695,213,076	9,928,719,090	79,816,704,971	89,745,424,061
BENEFIT	2008	6,278,970,580	10,187,624,770	(3,908,654,190)	89,745,424,061	85,836,769,871
PROGRAM	2009	(4,932,674,181)	11,000,182,293	(15,932,856,474)	85,836,769,871	69,903,913,397
FUNDS TOTAL (4)	2010	16,652,305,005	11,908,049,971	4,744,255,034	69,903,913,397	74,648,168,431
	2011	19,453,024,432	13,033,582,581	6,419,441,851	74,648,168,431	81,067,610,282
	2012	10,943,668,383	14,127,288,625	(3,183,620,242)	81,067,610,282	77,883,990,040
	2013	18,677,582,693(5)	14,691,325,472 <sup>(5)</sup>	3,986,257,221	76,313,283,223®	80,299,540,444
	2014	22,726,609,543	15,687,946,839	7,038,662,704	80,299,540,444	87,338,203,148
	2015	14,556,031,996	16,466,779,161	(1,910,747,165)	87,338,203,148	85,427,455,983

<sup>(4)</sup> See Schedule of Revenues by Source.

See Schedule of Expenses by Type. (2)

Restated due to the implementation of GASB Statement No. 43 (Other Post-Employment Benefits). 3

GASB No. 43 became implemented in fiscal year 2007. Fiscal years before 2007 other than the restated 2006 were presented otherwise.

Restated due to the implementation of GASB Statement No. 67 (Financial Reporting for Pension Plans — an Amendment of GASB No. 25).

GASB No. 67 became implemented in fiscal year 2014. Fiscal years before 2014 other than the restated 2013 were presented otherwise.

### **Participating County and Municipal Employers**

Atlantic County \* **Bergen County** 

**Burlington County/Payroll Dept** 

Camden Co Board Of Chosen Freeholders

**Cape May County Cumberland County Essex County Gloucester County** 

**Hudson County \* Hunterdon County** Mercer County \* Middlesex County

Monmouth County/Hall Of Records

**Morris County** Ocean County \* **Passaic County** Salem County \*

**Somerset County Finance Office** 

**Sussex County Union County** 

Warren Co Bd Of Chosen Freeholders

Atlantic County Welfare Board \* Bergen Co Board Of Social Services Burlington Co Bd Of Soc Services \* Camden Co Bd Of Social Services \* Cape May Co Board Social Services Cumberland Co Bd Social Services \* Gloucester Co Bd Of Social Services **Hunterdon Co Board Social Services** Mercer Co Board Of Social Service \* Middlesex Co Bd Of Social Services Monmouth Co Div Of Social Services Ocean Co Board Of Social Services \* Passaic Co Board Of Social Services Salem Co Board Of Social Services \* Somerset Co Bd Of Social Services \* **Union Co Board Of Social Services** 

NJ Assoc Of Counties \* NJ School Boards Association \* NJ State League Of Municipalities \*

Comm Workers Of America # 1034 Comm Workers Of America #1037 Comm Workers Of America # 1033

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 \* 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 \* Bergenfield Borough \* Berkeley Heights 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 Twp** Bound Brook Borough \* **Bradley Beach Borough \* Branchburg Township** Branchville Borough \* **Brick Township** 

**Bridgeton City Bridgewater Twp Brielle Borough Brigantine City Brooklawn Borough** Buena Borough \* Buena Vista Township \* Burlington City \* **Burlington Township** 

**Butler Borough Byram Township** Caldwell Borough Califon Borough \* **Camden City** 

Cape May City \* Cape May Point Borough \* **Carlstadt Borough** 

**Carteret Borough** Cedar Grove Township \* **Chatham Borough** 

**Carneys Point Township** 

**Chatham Township Cherry Hill Township** 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 \* Corbin City \*

Cranbury Township \* Cranford Township Cresskill Borough 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 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 Fells Borough \* Estell Manor City \* **Evesham Township** 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 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 Town (Hudson) Harrison Township (Gloucester) \*

Harvey Cedars Borough \*

Hasbrouck Heights Borough \*

<sup>\*</sup> 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**

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 Hopatcong Borough** Hope Township

Hopewell Township (Cumberland) Hopewell Township (Mercer)

**Howell Township** 

Independence Twp/ Mun. Bldg \*

Interlaken Borough

Hopewell Borough \*

Irvington Twp 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
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 Twp \*
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 (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
Metuchen Borough
Middle Township \*
Middlesex Borough \*
Middlesex Borough \*
Middletown Township
Midland Park Borough \*
Milford Borough \*
Milford Borough \*
Milford Borough \*

Millstone Borough

Millstone Township \*
Milltown Borough \*
Millville City
Mine Hill Township \*
Monmouth Beach Borough \*
Monroe Township (Gloucester)
Monroe Township (Middlesex)

Montague Township \*
Montclair Township \*
Montgomery Township \*
Montvale Borough
Montville Township \*
Moonachie Borough
Moorestown Township
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 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 \*
N. Hunterdon Municipal Court \*
North Plainfield Borough \*
North Wildwood City
Northfield City \*
Northvale Borough \*
Norwood Borough \*

Nutley Township \*

**Oakland Borough** 

Oaklyn Borough

Ocean City
Ocean Gate Borough \*
Ocean Gate Borough \*
Ocean Township (Monmouth) \*
Ocean Township (Ocean)
Oceanport Borough
Ogdensburg Borough
Old Bridge Township
Old Tappan Borough
Oldmans Township
Oradell Borough \*
Orange City
Oxford Township \*
Palisades Park Borough
Palmyra Borough \*
Paramus Borough \*

Parsippany Troy Hills Township

Passaic City \*
Paterson City
Paulsboro Borough
Peapack Gladstone Borough \*
Pemberton Borough \*

Park Ridge 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 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 3 Ringwood Borough River Edge Borough \* River Vale Township \* Riverdale Borough \* Riverside Township Riverton Borough \* Robbinsville Township Rochelle Park Township \* Rockaway Borough \* Rockaway Township \* Rockleigh Borough \* Rocky Hill Borough Roosevelt Borough \* Roseland Borough 3 Roselle Borough

Runnemede Borough Rutherford Borough Saddle Brook Township Saddle River Borough Salem City \* Sandyston Township \* Sayreville Borough Scotch Plains Township Sea Bright Boro \* Sea Girt Borough \* Sea Isle City

Roselle Park Borough

**Roxbury Township** 

Rumson Borough \*

Sea Isle City
Seaside Heights Borough \*
Seaside Park Borough \*
Secaucus Town
Shamong Township \*
Shiloh Borough
Ship Bottom Borough
Shrewsbury Borough

<sup>\*</sup> 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**

**Shrewsbury Township** Somerdale Borough \* **Somers Point City** 

Somerville Borough 3

**South Amboy City** 

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 <sup>3</sup>

Summit City <sup>1</sup>

Surf City Borough

Sussex Borough

Swedesboro Borough

Tabernacle Township \*

**Tavistock Borough** 

Teaneck Township \*

Tenafly Borough \*

Teterboro Borough \*

Tewksbury Township \* **Tinton Falls Borough** 

Toms River Township

Totowa Borough \*

Trenton City \*

Tuckerton Borough \*

Union Beach Borough \*

**Union City** 

Union Township (Hunterdon) \*

Union Township (Union)

Upper Deerfield Township \*

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

Wallington Borough

Wallpack Township Wanaque Borough

Wantage Township

Warren Township \*

Washington Borough \*

Washington Township (Bergen) \*

Washington Twp (Burlington)

Washington Twp (Gloucester)

Washington Twp (Morris)

Washington Twp (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 3 Woodland Township \*

Woodlynne Borough \*

Wood-Ridge Borough

Woodstown Borough

**Woolwich Township** Wrightstown Borough \* Wyckoff Township \*

<sup>\*</sup> In addition to participating in the retirement system, also participates in the State Health Benefits Program/School Employees' Health Benefits Program

### **Participating Education Employers**

Atlantic Co Audio Visual Aids Comm \* Burlington Co Audio Visual Aids Comm \* Gloucester Co Audio Visual Aid Comm \* Morris Audio Visual Commission Ocean Co Audio Visual Aids Commission \* Warren Co Audio Visual Aids

**Absecon Board Of Education 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 City Board Of Education** Atlantic Highlands Board Of Education \* **Audubon Borough Board Of Education Avalon Borough Board Of Education** Avon By The Sea Boro Board Of Ed **Barnegat Twp Board Of Education** Barrington Boro Board Of Education \* Bass River Twp Board Of Education \* **Bay Head Board Of Education Bayonne Board Of Education** Beach Haven Borough Board Of Ed \* **Bedminster Twp Board Of Education Belleville Board Of Education** Bellmawr Borough Board Of Education \* **Belmar Boro Board Of Education Belvidere Town Board Of Education** 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** Bridgewater-Raritan Regional School Dist **Brielle Boro Board Of Education Brigantine City Board Of Education \* Brooklawn Boro Board Of Education Buena Regional School District Burlington City Board Of Education Burlington Twp Board Of Education** 

**Butler Boro Board Of Education** Byram Twp Board Of Education Caldwell West Caldwell Board Of Ed \* Califon Boro Board Of Education \* Camden City Board Of Education \* Cape May City Board Of Education \* Cape May Pt Boro Board Of Education **Carlstadt Borough Board Of Education** Carlstadt East Rutherford Board Of Ed **Carteret Board Of Education** Cedar Grove Twp Board Of Education Central Regional High School District 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 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 \* Collingswood Borough Board Of Education Colts Neck Twp Board Of Education Commercial Two Board Of Education Corbin City Board Of Education \* **Cranbury Township Board Of Education** Cranford Twp Board Of Education \* **Cresskill Board Of Education Cumberland Regional School Dist** Deal Boro Board Of Education \* **Deerfield Township Board Of Education** Delanco Two Board Of Education Delaware Twp Board Of Education \* Delaware Valley Regional High School Dist. **Delran Twp Board Of Education** 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 Dumont Borough Board Of Education Dunellen Board Of Education** Eagleswood Twp Board Of Education \* East Amwell Township Board Of Ed East Brunswick Twp Board Of Education East Greenwich Board Of Education 3 East Hanover Twp Board Of Education \* East Newark Borough Board Of Ed \* East Orange City Board Of Education \* 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 \*

**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 \* Emerson Borough Board Of Education Englewood City Board Of Education \* Englewood Cliffs Board Of Education \* Essex Fells Board Of Education Estell Manor Board Of Education \* **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) Fredon Township Board Of Education 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 Twp Board Of Education Great Meadows Regional Board Of Ed 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** 

**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 Ed (Hudson) Harrison Twp Board Of Ed (Gloucester) Hasbrouck Heights Board Of Education Haworth Borough Board Of Education \* **Hawthorne Board Of Education 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** Ho-Ho-Kus Board Of Education \* **Holland Twp Board Of Education** Holmdel Township Board Of Education \* **Hopatcong Board Of Education** Hope Twp Board Of Education \* Hopewell Twp Board Of Ed (Cumberland) Hopewell Valley Regional School District **Howell Twp Board Of Education Hunterdon Central High School** Interlaken Borough Board Of Education **Irvington 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 Public Schools \* **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 Ed

**Haddonfield Board Of Education** 

<sup>\*</sup> 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**

**Lavallette Borough Board Of Education** Lawnside Borough Board Of Education Lawrence Twp Board Of Ed (Cumberland) Lawrence Twp Board Of Education (Mercer) Lebanon Borough Board Of Education 3 **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 3 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 Twp Board Of Education Longport Borough Board Of Education \* **Lopatcong Township Board Of Education** Lower Alloways Creek Board Of Ed 3 Lower Cape May Regional School District \* Lower Township Board Of Education \* **Lumberton Twp Board Of Education** Lyndhurst Twp Board Of Education **Madison Boro Board Of Education** Magnolia Borough Board Of Education Mahwah Board Of Education Mainland Regional High School \* Manalapan Englishtown Reg Schools \* Manasquan Borough Board Of Education **Manchester Township Board Of Education** Mannington Township Board Of Education Mansfield Twp Board Of Ed (Burlington) Mansfield Twp Board Of Ed (Warren) Mantoloking Boro Board Of Education Mantua Township Board Of Education Manville Borough Board Of Education Maple Shade Board Of Education Margate City Board Of Education \* Marlboro Township Board Of Education Matawan-Aberdeen Regional School Maurice River Township Board Of Ed 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 \* **Metuchen Boro Board Of Education** Middle Township Board Of Education \* Middlesex Board Of Education Middletown Twp Board Of Education Midland Park Boro Board Of Education \* Milford Borough Board Of Education \* Millburn Twp Public Schools Millstone Borough Board Of Education Millstone Township Board Of Education

Milltown Borough Board Of Education Millville Board Of Education Mine Hill Twp Board Of Education \* Monmouth Beach Board Of Education \* Monmouth Regional School Monroe Twp Board Of Ed (Gloucester) Monroe Twp Board Of Ed (Middlesex) Montague Board Of Education **Montclair Board Of Education** Montgomery Twp Board Of Education Montvale Borough Board Of Education \* Montville Twp Board Of Education Moonachie Borough Board Of Education Moorestown Township Board Of Ed 3 Morris Hills Regional District **Morris Plains Board Of Education** Morris School District Mount Arlington Board Of Education Mount Ephraim Board Of Education **Mount Holly Twp Board Of Education** Mount Laurel Twp Board Of Education Mount Olive Twp Board Of Education Mountain Lakes Boro Board Of Ed \* Mountainside Boro Board Of Education \* Mullica Twp Board Of Education \* National Park Borough Board Of Ed **Neptune City Board Of Education Neptune Twp Board Of Education Netcong Borough Board Of Education** New Brunswick Board Of Education **New Hanover Twp Board Of Education New Milford Board Of Education New Providence Board Of Education** Newark Public Schools \* 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 Ed North Hunterdon-Voorhees North Plainfield Board Of Education North Warren Regional High School North Wildwood Board Of Education \* Northern Burlington Co Regional Northern Highlands Reg High School \* Northern Valley Regional High School Dist Northfield Board Of Education Northyale Board Of Education \* Norwood Board Of Education \* **Nutley Board Of Education Oakland Board Of Education** Oaklyn Borough Board Of Education Ocean City Board Of Education Ocean Gate Board Of Education \* Ocean Twp Board Of Ed (Monmouth) Ocean Twp Board Of Education (Ocean) \* **Oceanport Schools Ogdensburg Board Of Education Old Bridge Board Of Education Old Tappan Board Of Education Oldmans Twp Board Of Education** 

**Oradell Board Of Education** Orange City Board Of Education \* Oxford Twp Board Of Education **Palisades Park Board Of Education** Palmyra Borough Board Of Education **Paramus Board Of Education** Park Ridge Boro Board Of Education Parsippany Troy Hills Board Of Education Pascack Valley Regional High School Dist \* Passaic Board Of Education \* Passaic Co Manchester Regional High \* Passaic Co Regional High School Dist 1 \* Paterson Board Of Education \* Paulsboro Boro Board Of Education 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 Pequannock Twp Board Of Education **Perth Amboy Board Of Education** Phillipsburg Town Board Of Education Pine Hill Borough Board Of Education Pinelands Regional School District \* Piscataway Board Of Education Admn Bldg Pitman Board Of Education Pittsgrove Twp Board Of Education **Plainfield Board Of Education** Pleasantville Board Of Education Plumsted Twp Board Of Education Pohatcong Twp Board Of Education Point Pleasant Beach Board Of Education Point Pleasant Boro Board Of Education **Pompton Lakes Board Of Education** Port Republic City Board Of Education \* Princeton Regional School Prospect Park Board Of Education \* Ouinton Township Board Of Education \* Rahway City Board Of Education \* Ramapo Indian Hills Reg High School Dist Ramsey Borough Board Of Education Rancocas Valley Regional High School Randolph Township Board Of Education Readington Twp Board Of Education Red Bank Board Of Education \* Red Bank Regional High School District Ridgefield Boro Board Of Education \* Ridgefield Park Board Of Education \* Ridgewood Twp Board Of Education Ringwood Boro Board Of Education \* 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** Robbinsville Two Board Of Education Rochelle Park Twp Board Of Education \* Rockaway Borough Board Of Education \* **Rockaway Township Board Of Education** Rockleigh Borough Board Of Ed **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 **Roxbury Twp Board Of Education Rumson Boro Board Of Education** Rumson Fair Haven Regional High School Runnemede Borough Board Of Education **Rutherford Boro Board Of Education** Saddle Brook Board Of Education \* Saddle River Board Of Education \* Salem City Board Of Education Sandyston Walpack School Dist \* Savreville 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** Somerdale Boro Board Of Education **Somers Point City Board Of Education** 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 Sterling High School District Stillwater Township Board Of Education \* 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-Wantage Regional School District **Swedesboro Woolwich Board Of Education Tabernacle Twp Board Of Education** Teaneck Board Of Education \* Tenafly Board Of Education \* **Tewksbury Twp Board Of Education** Tinton Falls Board Of Education \* **Toms River School District** 

<sup>\*</sup> 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**

Totowa Borough Board Of Education \* Trenton City Board Of Education **Tuckerton Boro Board Of Education Union Beach Boro Board Of Education** Union City Board Of Education **Union Twp Board Of Education (Union)** Union Twp Of Ed (Hunterdon) **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 \* **Vineland City Board Of Education 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 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 (Burl) \* 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 Deptford Twp 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 Dist ' West New York Board Of Education \* West Orange Township Board Of Education West Paterson Boro Board Of Education \* West Windsor Plainsboro Regional \* **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 City Board Of Education \* Wildwood Crest Board Of Education \* Willingboro Twp Board Of Education \* Winfield Township Board Of Education \* Winslow Township Board Of Education **Woodbine Borough Board Of Education Woodbridge Township Board Of Education 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 \*

Atlantic Cape Community College \* Bergen Community College \* **Brookdale Community College \* Burlington Co College \*** Camden County College \* Cumberland County College \* Essex County College \* Gloucester County College \* **Hudson Co Community College \*** Mercer Co Community College 3 Middlesex County College Morris County College \* Ocean County College \* Passaic County Community College \* Raritan Valley Community College Salem Community College 3 Sussex County Comm. College \* Union County College \* Warren County Community College \*

Academy For Urban Leadership **Academy Charter High School** Adelaide Sanford Charter School Barack Obama Green Charter High School Bergen Arts And Science Charter School **Burch Charter School For Excellence** Camden Academy Charter High School **Camden Promise Charter School** Camden's Pride Charter School Central Jersey Arts Charter School \* Central Jersey College Prep Charter Charter Tech \* Classical Acad. Charter School \* **Community Charter School Of Paterson** Dr Lena Edwards Academy Chater School D.U.E. Season Charter School \* Discovery Charter School \* **East Orange Community Chart School Eco Charter School** Elysian Charter School Of Hoboken \* **Emily Fisher Charter School \*** Englewood On The Palisades Char \* **Ethical Comm Charter School Jersey City** Foundation Academy Charter School \* Franklin Charter School Freedom Academy Charter School **Galloway Community Charter School Gateway Charter School Granville Charter Middle School** Grav Charter School \* **Great Oaks Charter School Greater Brunswick Charter School \*** Hatikvah International Academy C S **Hoboken Charter School** Hoboken Dual Language Charter School Hope Academy Charter School

Institute For Excellence Charter School International Charter School Jersey City Comm Charter School \* Jersey City Golden Door Charter John P Holland Charter School **Lady Liberty Academy Charter School Leap Academy Charter School** Learning Comm. Charter School \* **Liberty Academy Charter School** Maria L. Varisco-Rogers Charter \* Marion P. Thomas Charter School \* Mets Chater School Millville Public Charter School **New Horizon Community Charter School Newark Legacy Charter School** Newark Charter School \* **Newark Educators' Comm Charter School** North Star Academy Charter School Oceanside Charter School Pace Charter School Of Hamilton \* Paterson Chart School - Science/Tech Paul Robeson Charter School **Peoples Preparatory Chater School** Pleasantech Academy Charter School **Pride Academy Charter School Princeton Charter School** Queen City Academy Charter School **Red Bank Charter School** Renaissance Regional Leadership CS Ridge And Valley Charter School Riverbank Charter School Of Excellence **Robert Treat Academy Charter School** Roseville Community Charter School **Schomburg Charter School** Soaring Heights Charter School \* Sussex County Charter School **Team Academy Charter School** Teaneck Community Charter School \* Trenton Community Charter School \* Union County Teams Charter School Unity Charter School \* **University Academy Charter High School** University Heights Charter School \* Village Charter School \* Vineland Public Charter School Visions Academy Charter High School

**Communications Workers Of America** Newark Teachers' Union NJ State Federation Of Teachers NJEA Piscataway Twp Education Association **Trenton Education Association** Woodbridge Twp Ed Association Camden Co Ed Services Commission Essex Co Educational Service Commission **Hunterdon Co Ed Services Commission** Middlesex Co Ed Services Commission Monmouth Ocean Ed Service Commission Morris Co Education Services Commission Passaic Co. Ed Services Commission \* Somerset Co Ed Services Commission \* Sussex Co Ed Services Comm Bd Of Ed \*

Union Co Ed Services Commission \*

Ramapo College Of New Jersey \* Richard Stockton College Of NJ \* State Library Affiliated W/TESC \* The College Of New Jersey \* Thomas Edison State University \*

Atlantic Co Special Services \* Bergen Co Bd Of Special Services **Burlington Co Bd Special Services** Cape May Co Special Services \* Gloucester Co Sp Services School District Mercer Co Special Ser School Dist Salem Co Sp Services School Dist \* Stockton Affiliated Services Inc Warren Co Sp Services School Dist

Kean University \* Montclair State University \* New Jersey City University \* NJ Institute Of Technology \* Rowan University \* Rutgers University \* Univ. Of Med & Dentistry New Brunswick \* Univ. Of Medicine & Dentistry - Newark \* Univ. Of Medicine & Dentistry - Stratford \* William Paterson University Of NJ \*

Atlantic Co Vocational Schools \* Bergen Co Vocational School **Burlington Co Institute Of Tech** Camden County Technical Schools \* Cape May Co Technical School Dist Cumberland Co Bd Of Voc Ed **Essex Co Vocational School** Gloucester Co Vo-Tech School Dist **Hudson Co Schools Of Technology Hunterdon County Vocational \*** Mercer Co Vocational Schools Middlesex Co Vocational School \* Monmouth Co Vocational Schools \* **Morris Co Vocational School District** Ocean County Vocational School Passaic Co Vocational School Salem Co Vocational School \* Somerset Co Vocational School **Sussex County Vocational** Union Co Vocational Schools \* Warren Co Vocational School \*

<sup>\*</sup> 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 \* Bordentown Fire District #1 \* Bordentown Twp Fire District 2 \* **Brick Township Fire Dist 2 Brick Twp Fire District 1** Brick Twp Joint Board Of Fire Commission \* **Burlington Twp Fire District 1** Cherry Hill Fire District 13 Chesterfield-Ham. Fire District #1 \* Cinnaminson Twp Fire Dist #1 Delran Twp Fire District #1 \* Deptford Twp Fire District \* Dover Twp Fire District 2 East Brunswick Twp Fire District #1 Florence Twp. Fire District #1 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 \* Haddon Twp Fire District 1 \* 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 \* Hanover Twp Fire District 2 Hanover Twp Fire District 3 Harrison Township Fire District #1 Hazlet Township Fire District #1 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 Jackson Bd Fire District 2 \* Jackson Twp Fire District 3 \* Jackson Twp Fire District 4 Jersey City Fire Department Lakewood Twp Fire District 1 Lambertville City Fire District #1 Lindenwold Twp Fire District 1 \* Manalapan Fire District 2 Manalapan Twp Fire District 1 Manasquan Boro Fire District 1 Marlboro Twp Fire District 1 Marlboro Twp Fire District 3 Middle Township Fire District #1 \* Millstone Township Fire District #1 \* Monroe Twp Fire District 1 \* Monroe Twp Fire District 2 \* Monroe Twp Fire District 3 \* Montville Twp Fire District 1 \* Montville Twp Fire District 3 \* Moorestown Twp Fire District 1 \* Moorestown Twp Fire District 2 Mount Laurel Fire District #1 \* Neptune Fire District 1 \*

Ocean Grove Board Of Fire Commission Ocean Twp Fire District 1 \* Ocean Twp Fire District 2 \* Old Bridge Twp District 1 Old Bridge Twp Fire District 2 Old Bridge Twp Fire District 3 \* Old Bridge Twp Fire District 4 Pine Hill Fire District 1 Pine Hill Fire District 1 Plainsboro Twp Fire District 1 \* Plumsted Fire District #1 \* Riverside Twp Fire District # 1 Toms River Twp Fire District 1 **Towaco Fire District 2** Voorhees Fire District 3 Wall Township Fire District 2 Wall Township Fire District 3 Washington Twp Board Of Fire Commission Washington Twp Fire District #1 Westville Fire District # 1 Winslow Twp Fire District 1 \* Woodbridge Bd Of Fire Commission 9 Woodbridge Fire District 5 \* Woodbridge Twp Fire District 2 \* Woodbridge Twp Fire District #12 Woodbridge Twp Fire District 1 \* Woodbridge Twp Fire District 11 Woodbridge Twp Fire District 8 Woodbridge Twp Fire District 7 \*

Asbury Park Housing Authority \* Atlantic City Housing Authority \* Bayonne Housing Authority \* **Belmar Housing Authority** Bergen Co Housing Authority Berkeley Twp Housing Authority \* Beverly City Housing Authority \* **Boonton Housing Authority \* Brick Twp Housing Authority \* Bridgeton City Housing Auth \*** Buena Boro Housing Auth \* **Burlington City Housing Auth \*** Camden City Housing Authority \* Cape May City Housing Authority \* Carteret Housing Authority \* **Clementon Housing Authority** Cliffside Park Housing \* Collingswood Boro Housing Auth \* **Dover Town Housing Authority** East Orange Housing Authority \* **Edgewater Housing Authority \*** Edison Twp Housing Authority \* Elizabeth City Housing Authority \* **Englewood Housing Authority** Florence Twp Housing Authority Fort Lee Housing Authority \* Franklin Twp Housing Authority Freehold Boro Housing Authority \* Garfield Housing Authority \* Glassboro Borough Housing Authority \* Gloucester Co Housing Authority \* Gloucester Twp Housing Authority \* **Guttenberg Housing Authority \*** 

Hackensack Housing Authority \* Haddon Township Housing Authority \* **Harrison Town Housing Authority** Highland Park Housing Authority \* Highlands Housing Authority \* Hightstown Boro Housing Authority \* Hoboken Housing Authority \* Irvington Housing Authority \* Jersey City Housing Authority \* Keansburg Boro Housing Authority \* **Lakewood Housing Authority** Linden City Housing Authority \* Lodi Housing Authority \* Long Branch City Housing Authority \* Madison Boro Housing Authority Middletown Twp Housing Authority \* Millville Housing Authority Morris County Housing Authority Morristown Housing Authority \* Neptune City Housing Authority Neptune Twp Housing Authority ' New Brunswick Housing Authority \* Newark Housing Authority \* Newton Town Housing Authority \* North Bergen Housing Authority \* Ocean City Housing Authority \* **Old Bridge Housing Authority** Orange City Housing Authority \* Passaic City Housing Authority \* Paterson Housing Authority \* Penns Grove Housing Authority \* **Perth Amboy Housing Authority Phillipsburg Housing Authority** Plainfield Housing Authority \* Pleasantville Housing Authority \* Princeton Housing Authority \* Rahway City Housing Authority \* Red Bank Boro Housing Auth \* Salem City Housing Authority \* Sayreville Housing Authority \* Secaucus Housing Authority South Amboy Housing Authority \* Trenton Housing Authority \* Union City Housing Authority \* **Vineland Housing Authority** Weehawken Twp Housing Authority \* **West New York Housing Authority** Wildwood City Housing Authority \* Woodbridge Housing Authority \*

Camden Co Health Services Center
Essex Regional Health Commission \*
Hudson Regional Health Commission \*
Mid Bergen Regional Health Commission \*
Middle Brook Regional Health Comm \*
Monmouth Co Health Department \*
Monmouth Co Regional Health Comm 1
Northwest Bergen Health Commission \*
Ocean Co Board Of Health

Middlesex Co Joint Health Insurance Fund Middlesex Co Municipal Joint Ins Fund \* NJ School Board Association Ins Group \* Statewide Insurance Fund
Bayshore Jointure Commission \*
Morris-Union Jointure Commission
South Bergen Jointure Commission

Burlington County Bridge Commission Cape May Co Bridge Commission \* Essex & Union Joint Meeting \* Madison-Chatham Joint Meeting \* Second River Joint Meeting

General Assembly \*
Senate \*

Bedminster & Far Hills Pub Library \* Chatham Joint Free Public Library \* Chester Boro/Twp Public Library \* Elizabeth Public Library \* Hillside Public Library **Linden City Free Public Library** Matawan Aberdeen Public Library \* Montclair Library \* Morristown/Morris Joint Library \* **Orange City Library** Princeton Joint Public Library \* Rahway Public Library Ridgewood Public Library \* Roselle Borough **Union Township Library** West Orange Library \*

Atlantic City Convention Center \*
NJ Public Broadcasting Authority
Northwest Bergen Central Dispatch \*
Trenton Downtown Association

Middlesex Co Mosquito Exterm Comm Monmouth Co Mosquito Exterm Comm \* Ocean Co Mosquito Commission \* Salem Co Mosquito Commission \* Warren Co Mosquito Exterm Commission

Camden County Park Police
Mercer County Park Commission \*
Morris County Park Commission
Somerset Co Park Commission

Bayonne City Parking Authority \* **Bloomfield Parking Authority** Camden City Park Authority \* **Dover Twp Parking Authority Dunellen Parking Authority \*** East Orange Parking Authority \* Elizabeth City Parking Authority \* Fort Lee Parking Authority **Hackettstown Parking Authority Hoboken City Parking Authority** Jersey City Parking Authority \* Long Branch Parking Authority \* **Metuchen Parking Authority** Montclair Parking Authority \* Morristown Parking Authority New Brunswick Parking Authority \*

North Hudson Regional Fire & Rescue

<sup>\*</sup> 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**

**Newark Parking Authority** North Bergen Parking Authority North Plainfield Parking Authority \* Paterson Parking Authority \* **Perth Amboy City Parking Authority** Rahway Parking Authority \* South Orange Twp Parking Authority \* **South River Parking Authority** Trenton Parking Authority \* **Union City Parking Authority** West New York Parking Authority West Windsor Parking Authority \*

**Camden Co Pollution Control Fin Union Co Pollution Control Authority** Warren Co Pollution Control \*

**Carteret Port Authority Perth Amboy Port Authority** Salem City Municipal Port Authority \*

Atlantic Co Improvement Authority \* Bayonne Local Redevelopment Agency \* Bergen County Improvement Authority \* Bridgeton Zone Development Authority \* **Camden City Redevelopment Agency Camden Co Improvement Authority** Carteret Redevelopment Agency \* Cumberland Co Improvement Authority \* Essex Co Improvement Authority \* **Gloucester Co Improvement Authority** Greater Wildwood Tourism Imp & Da **Hudson Co Economic Development Corp Hudson Co Improvement Authority \*** Jersey City Redevelopment Agency \* Mercer Co Improvement Authority \* Middlesex County Improvement Authority **Passaic County Improvement Authority** Rahway City Redevelopment Agency Salem Co Improvement Authority \* Sayreville Economic & Redev Agency \* South Jersey Economic Development Dist \* Vineland-Millville Urban Enterprise Zone \* Wildwoods Joint Construction

Casino Reinvestment Development Auth \* Compensation Rating & Ins Bureau \* Delaware River Basin Commission **Delaware River Joint Toll Bridge Comm Delaware River Port Authority Ed Information & Resource Center** Fort Monmouth Planning Authority \* Interstate Environmental Commission \* Lake Hopatcong Commission \* **Meadowlands Conservation Trust** 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 Redevelopment Authority \* NJ Schools Development Authority \* NJ Sports & Exposition Authority NJ Transit Corporation NJ Turnpike Authority NJ Water Supply Authority \* North Jersey Water Supply Commission Palisades Interstate Park Commission \* Passaic Valley Sewerage Commission Pinelands Commission \* **Rowan University Foundation** South Jersey Port Corporation **South Jersey Transportation Authority** Waterfront Commission Of Ny Harbor \*

Joint Dispatch Authority For Spring Lake

Bergen County Soil Conservation District \* **Burlington Co Soil Conservation District \*** Camden Co Soil Conservation District \* Cape Atlantic Soil Conservation District \* Cumberland-Salem Conservation District \* Freehold Soil Conservation District \* Gloucester Co Soil Conservation District \* **Hunterdon Co Soil Conservation District \*** Mercer Co Soil Conservation District \* Morris Co Soil Conservation District \* Ocean Co Soil Conservation District \* Sussex Co Soil Conservation \* Warren Co Soil Conservation District \*

Atlantic Highlands-Highlands Regional Sewerage Authority Atlantic City Municipal Utilities Authority \* Atlantic Co Utilities Authority \* Bayonne Municipal Utilities Authority \* Bayshore Regional Sewerage Authority \* Beach Haven Sewerage Authority \* **Beachwood Sewerage Authority** Bergen Co Utilities Authority Berkeley Twp Sewerage Authority \* Berkeley Twp Municipal Utilities Authority \* Bernards Twp Sewerage Authority \* Beverly Sewerage Authority \* Bordentown Sewerage Authority \* **Brick Twp Municipal Utilities Authority \*** Buena Boro Municipal Utilities Authority \* **Camden Co Municipal Utilities Authority** Cape May Co Municipal Utilities Authority **Carlstadt Sewerage Authority Carneys Point Twp Sewerage Authority** 

**Cinnaminson Sewerage Authority** Clinton Twp Sewerage Authority Cumberland Co Utilities Authority \* Delanco Sewerage Authority **Delaware Twp Municipal Utilities Authority** Delran Sewerage Authority \* Deptford Twp Municipal Utilities Auth \* East Windsor Municipal Utilities Authority \* **Eatontown Sewerage Authority Edgewater Park Sewerage Authority** Egg Harbor Twp Municipal Utilities Auth \* **Elk Township Municipal Utilities Authority Evesham Municipal Utilities Authority \*** Ewing Lawrence Sewerage Authority \* Florham Park Sew Authority Franklin Twp Sewerage Authority \* **Gloucester Co Utilities Authority** Gloucester Twp Municipal Utilities Auth \* Hackettstown Municipal Utilities Auth \* Hamilton Twp Municipal Utilities Auth \* Hanover Sewerage Authority Hazlet Twp Sewerage Authority \* Hillsborough Twp Mun. Utilities Authority \* Hudson-Essex Passaic \* Jackson Twp Municipal Utilities Authority \* Jersey City Incinerator Authority Jersey City Municipal Utilities Authority Kearny Municipal Utilities Authority Lacev Municipal Utilities Authority \* Lakewood Twp Municipal Utilities Auth \* Lambertville Sewerage Authority Landis Sewerage Authority Lebanon Boro Sew Authority \* Linden Roselle Sewerage Authority \* Little Egg Harbor Mun. Utilities Authority \* Logan Twp Municipal Utilities Authority \* Long Branch Sewerage Authority \* Lower Twp Municipal Utilities Authority \* Manasquan River Reg Sewerage Auth **Manchester Utilities Authority** Mantua Twp Municipal Utilities Authority \* Marlboro Twp Municipal Utilities Auth Merchantville Pennsauken Water Comm Middlesex Co Utilities Authority Middletown Twp Sewerage Authority \* Monmouth Co Bayshore Outfill Authority \* Monroe Twp Mun. Ut Auth. (Gloucester) \* **Montville Twp Municipal Utilities Authority** Mount Holly Municipal Utilities Authority Mount Laurel Twp Municipal Utilities Auth Musconetcong Sewerage Authority \* Neptune Twp Sewerage Authority \* North Bergen Municipal Utilities Authority North Hudson Sewerage Authority 3 Northwest Bergen Co Utility Authority \* Ocean Co Utilities Authority \* Ocean Grove Sewerage Authority

Ocean Twp Municipal Utility Authority Ocean Twp Sewerage Authority \* **Old Bridge Municipal Utility Authority** Passaic County Utility Authority **Passaic Valley Water Commission** Pemberton Twp Municipal Utilities Auth \* Penns Grove Sewerage Authority Pennsauken Sewerage Authority \* Pennsville Sewerage Authority Pequannock, Lincoln Park & Fairfield \* Pine Hill Boro Municipal Utilities Authority Plainfield Area Regional Sewer Authority Plainfield Municipal Utilities Authority Pompton Lakes Municipal Utilities Auth \* Rahway Valley Sewerage Authority \* Raritan Twp Municipal Utilities Authority \* Readington-Lebanon Sewerage Authority \* Riverside Sew Authority Rockaway Valley Regional Sewer Auth \* **Rockleigh Boro Sewerage Authority Runnemede Sewerage Authority Secaucus Municipal Utilities Authority** Somers Point Sewerage Authority Somerset Raritan Valley Sewerage Auth \* Somerset Regional Animal Shelter \* South Monmouth Reg Sewerage Auth \* South Toms River Sewerage Authority ' Southeast Morris Co Muni Utilities Auth \* Stafford Municipal Utilities Authority Stony Brook Regional Sewerage Auth \* Sussex Co Municipal Utilities Authority \* Toms River Twp Municipal Utilities Auth \* Two Rivers Water Reclamation Authority \* Union Co Utilities Authority Wanaque Borough Sewerage Authority \* Wanaque Valley Reg Sewerage Authority \* Warren Co Municipal Utilities Authority Washington Twp Mun. Ut Auth. (Mercer) Washington Twp Mun. Ut Auth. (Gloucester) \* Washington Twp Mun. Ut Auth. (Morris) \* Waterford Twp Municipal Utilities Auth \* W. Milford Twp Municipal Utilities Auth \* Western Monmouth Utilities Authority \* Weymouth Twp Municipal Utilities Auth Willingboro Municipal Utilities Authority \* Woodbine Municipal Utilities Authority \* **Woodstown Sewerage Authority** Wrightstown Municipal Utilities Authority \*

### **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

<sup>\*</sup> In addition to participating in the retirement system, also participates in the State Health Benefits Program/School Employees' Health Benefits Program