

NYSLRS

**New York State and Local Retirement System**

*A pension trust fund of the State of New York*

Office of the New York State Comptroller

**Thomas P. DiNapoli**

# **2024 ANNUAL COMPREHENSIVE FINANCIAL REPORT**

**For Fiscal Year Ended March 31, 2024**

# **2024 ANNUAL COMPREHENSIVE FINANCIAL REPORT**

For Fiscal Year Ended March 31, 2024

New York State and Local Retirement System

Employees' Retirement System

Police and Fire Retirement System

[A pension trust fund of the State of New York](#)

Prepared by the staff of the

**NYSLRS**

New York State and Local Retirement System

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# INTRODUCTION





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## PROFESSIONAL AWARDS



Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

**New York State Employees' Retirement System**

For its Annual Comprehensive  
Financial Report  
For the Fiscal Year Ended

March 31, 2023

*Christopher P. Morill*

Executive Director/CEO



Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2023***

Presented to

***New York State and Local Retirement System***

In recognition of meeting professional standards for  
plan funding and administration as  
set forth in the Public Pension Standards.

*Presented by the Public Pension Coordinating Council, a confederation of*

National Association of State Retirement Administrators (NASRA)  
National Conference on Public Employee Retirement Systems (NCPERS)  
National Council on Teacher Retirement (NCTR)

A handwritten signature in black ink, reading 'Alan H. Winkle'.

Alan H. Winkle  
Program Administrator

# LETTER OF TRANSMITTAL

## NYSLRS

Office of the New York State Comptroller  
**Thomas P. DiNapoli**

New York State and Local Retirement System  
110 State Street, Albany, New York 12244-0001

Phone: 866-805-0990

Web: [www.osc.ny.gov/retirement](http://www.osc.ny.gov/retirement)

September 30, 2024



To the Governor, the State Legislature  
and the People of New York State:

I am pleased to present the Annual Comprehensive Financial Report for the New York State and Local Retirement System (the System or NYSLRS) for the fiscal year ended March 31, 2024.

We believe the enclosed financial statements and data are fairly presented in all material respects and are reported in a manner designed to present the financial position and results of the System's operations accurately. This report is intended to provide complete and reliable information as a basis for making management decisions, adhering to and complying with legal requirements, and ensuring responsible stewardship of the System's assets.

Responsibility for the accuracy of the data, and the completeness and fairness of the report, including all disclosures, rests with the System. All disclosures required and necessary to enable the public and the financial community to gain an understanding of the System's financial activities have been included. The Financial section of this report was prepared to conform with Generally Accepted Accounting Principles (GAAP) for governmental units, as set forth by the Governmental Accounting Standards Board (GASB), as well as the reporting requirements prescribed by the Government Finance Officers Association of the United States and Canada (GFOA). GAAP defines uniform minimum standards of, and guidelines for, financial accounting and reporting. These principles establish the framework within which financial transactions are recorded and reported, resulting in financial statements that provide comparability between government entities, consistency between accounting periods, and reliability for both internal and external users of financial statements.

The System's transactions are reported on the accrual basis of accounting. Sufficient internal accounting controls exist to provide reasonable assurance regarding the safekeeping of assets and the fair presentation of the financial statements and supporting schedules.

The Financial section features a Management's Discussion and Analysis (MD&A). GASB requires that the System provide a narrative introduction, overview and analysis to accompany the basic financial statements in the form of an MD&A. This letter of transmittal complements the MD&A and should be read in conjunction with it. The MD&A can be found in the Financial section immediately following the report of the independent auditors.

GFOA awarded a Certificate of Achievement for Excellence in Financial Reporting to the System for its Annual Comprehensive Financial Report for the fiscal year ended March 31, 2023. This is the 20th consecutive year the System has achieved this prestigious award. To be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current Annual Comprehensive Financial Report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to GFOA to determine its eligibility for another certificate.

NYSLRS administers two distinct systems. They are the New York State and Local Employees' Retirement System (ERS) and the New York State and Local Police and Fire Retirement System (PFRS). The assets of ERS and PFRS are held in the New York State Common Retirement Fund (Fund) and managed by the Division of Pension Investment and Cash Management in the Office of the State Comptroller.

With more than one million participants, the System is one of the largest public retirement systems in the nation.

The System offers service retirement benefits for members who reach specific ages or have completed a specified number of years of service, depending on the system and plan in which they are enrolled, as well as disability retirement and death benefits. At the end of fiscal year 2023-24, the System had a total of 1,236,057 members, retirees and beneficiaries, and 2,988 participating employers.

## Funding

The Fund's assets come from three main sources: employee (member) contributions, employer contributions, and investment income. The System is committed to meeting its long-term benefit obligations prudently and fairly. Member contributions are fixed by law. Annual employer contributions are actuarially determined, with a minimum contribution of 4.5 percent of member payroll.

The System announced in August 2023 that employer contribution rates would increase for State fiscal year 2024-25: the ERS average employer rate will increase from 13.1 percent to 15.2 percent of payroll and the PFRS average rate will increase from 27.8 percent to 31.2 percent of payroll.

Employer contribution rates are trending upward as a result of economic forces including inflation, salary increases and demographic shifts. Higher FYE 2022 investment returns continued to provide some rate relief.

The Fund's assumed rate of return remained the same as the prior fiscal year, at 5.9 percent. To strengthen the Fund, I have lowered the assumed rate of return four times to reflect changes in economic and demographic conditions. According to the National Association of State Retirement Administrators, the median assumed rate of return for public pension funds was 7 percent in July 2023. While there were nine other retirement systems with an assumed rate of return lower than 6.5 percent, they were all small funds and NYSLRS manages considerably more assets. Systems of a similar size to NYSLRS have a significantly higher assumed rate of return.

The System sets contribution rates based on sound actuarial principles, using reasonable assumptions, and collects what is billed annually to employers, ensuring that sufficient assets will be collected to pay benefits as they become due. For the fiscal year ended March 31, 2024, fiduciary net position represented 93.9 percent of total pension liability for ERS and 89.7 percent for PFRS. The Actuarial section provides a detailed discussion of the System's funding.

## Investments

The Fund's primary objective is to provide the means to pay benefits to the participants and beneficiaries of the System through an investment program designed to protect and enhance the long-term value of its assets. The Fund is managed with high levels of ethical conduct, transparency, and fund investments are made consistent with the "prudence" and "exclusive benefit" fiduciary standards of investment. Our investment policies are designed to obtain risk-adjusted returns. We continue to see steady growth in our investment returns as a result of the strategic application of these policies, our long-term diversified approach to investing, and our careful monitoring of market trends.

In addition to providing the means to pay benefits, the Fund is responsible for implementing an asset allocation strategy with an appropriate balance between risk and return across a broad spectrum of capital markets. The Fund has maintained the 2020-2024 Strategic Asset Allocation Policy, established April 1, 2020, and as of March 31, 2024, the long-term target allocation for the investment portfolio was 24 percent in fixed income assets (bonds, mortgages and Treasury Inflation-Protected Securities [TIPS] and 1 percent in cash), 47 percent in public equities, including domestic and international public equities, and 29 percent in alternative investments, including private equity, real estate, real assets, credit, and opportunistic/absolute return strategy funds.

The Fund remains well-diversified and maintains a disciplined, risk-controlled investment approach to achieve sustainable, long-term results. Strong performance across the asset classes throughout the fiscal year ending March 31, 2024, led to a total portfolio return of 11.56 percent. The Fund ended the fiscal year with an audited value of \$267.4 billion.

I will continue to manage the Fund with prudence, and a focus on stable, long-term results that ensure continued retirement security for our members, retirees and beneficiaries.

## Sustainable Investing and Stewardship

I take tremendous pride in being the Fund's steward. Protecting the value of our holdings by mitigating investment risks and seizing opportunities is of critical importance. We consider a variety of factors during the investment process, including environmental, social, and governance factors that are material to investment outcomes. The Fund continues to be a leader in sustainable investing because it is essential to protecting the Fund's long-term value.

I am deeply concerned about climate change. Climate change poses risks to the economy, financial markets, the Fund's investments, and to our entire society. One of the Fund's biggest challenges is investing in opportunities while mitigating the risks that climate change poses to its long-term value.

In 2019, I announced a Climate Action Plan—a multifaceted, comprehensive, and systematic set of actions to achieve our ambitious sustainable investment goals. Since that announcement, the Fund has issued three annual Climate Action Plan progress reports outlining our efforts to address climate risks and opportunities across the Fund's diversified portfolio, and to reach the targets we have laid out. One of those targets includes achieving net-zero greenhouse gas emissions by 2040.

My Climate Action Plan, along with our goal to transition the Fund's portfolio to net-zero greenhouse gas emissions by 2040, helps the Fund address the physical, transition and disclosure risks associated with climate change. A key component of the Fund's plan to position its portfolio for a low-carbon economy was the creation of a formal Sustainable Investments and Climate Solutions (SICS) Program.

In 2023, the Fund increased its total commitment to the SICS Program from \$20 billion to \$40 billion. To date, the Fund has made commitments that include climate-orientated index funds, green bonds, as well as investments that target renewable energy sources, pollution control, waste management, energy efficient buildings, and low carbon sources among other sustainability themes. As of March 31, 2024, the Fund has committed over \$22 billion to the SICS Program. These commitments will help us protect the Fund's long-term strength, transition its portfolio to net-zero emissions and position it for changes already happening in the markets.



## Financing for Business in New York State

In 2000, the Fund initiated the New York State Private Equity Investment Program (In-State Program) and since then we have continued our track record of supporting New York State businesses. The In-State Program is designed to generate a market value rate of return consistent with the risk of private equity while increasing the diversification of the Fund's investment portfolio and expanding the availability of capital for New York State business.

As of March 31, 2024, the In-State program has supported over 584 businesses across the state with a total value of \$3.1 billion, and helped hundreds of New York businesses add and retain thousands of jobs and grow while achieving solid returns. The In-State Program is the largest and most comprehensive of any home state-focused pension investment program in the United States.

## Diversity and Inclusion

Since I became Comptroller in 2007, I have worked to incorporate the principles of diversity and inclusion in all aspects of the Fund. Diversity has strengthened our bottom line, which demonstrates that expanding opportunities and access is not only the right approach; it's the best approach. Our Emerging Manager Program is an example of this success.

In fiscal year 2023–24, increases in market value and new allocations were particularly strong in public equities, real estate and opportunistic and absolute return strategies (OARS) asset classes. Overall, the Fund now has an all-time high of approximately \$36.8 billion invested with or committed to Minority- and Women-owned Business Enterprises (MWBE) and emerging managers representing nearly 24 percent of all Fund investments in the hands of outside managers. The Fund remains committed to the MWBE strategy and the principles it embodies.

## Accounting Practices

My staff is responsible for identifying control objectives for the protection of assets and the recording of all transactions to permit the preparation of financial statements in accordance with GAAP. The objective of internal controls is to provide reasonable assurance that the financial statements are free of material misstatements. We have designed, implemented and maintained internal controls to provide assurance that our control objectives are achieved.

The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and that the valuation of costs and benefits requires estimates and judgments by management. An internal control system includes the organization plan, the appropriate segregation of duties and responsibilities, the implementation of sound practices in the performance of duties, and the employment of personnel whose capabilities are commensurate with their responsibilities.

The System's financial information and internal controls are subject to examination by the New York State Department of Financial Services. Additionally, KPMG LLP, an independent, certified public accountant, audits the System's financial statements. KPMG's opinion appears on page 39 of this report. Lastly, pursuant to the New York State Government Accountability, Audit and Internal Control Act, the System is subject to an audit of its internal controls every three years.

We believe the internal controls in effect during the fiscal year ended March 31, 2024, adequately safeguard the System's assets and provide reasonable assurance regarding the proper recording of financial transactions.

## Fighting Pension Fraud

Since taking office, detecting and preventing public corruption and fraud, including pension fraud, has been one of my top priorities. My office is committed to protecting the Fund and holding anyone who would attempt to defraud the Fund accountable including recouping money stolen from NYSLRS members and retirees. My anti-fraud and corruption initiative has led to over 320 arrests and the recovery of over \$87 million in stolen public funds. Over the past several years, my investigations of pension fraud have led to over 54 arrests and the recovery of almost \$5.7 million. I continue to maintain close partnerships with law enforcement officials across the State and country to root out and prosecute those who attempt to defraud the retirement system. I will continue to safeguard pension funds from fraud and protect the financial security of retirees and beneficiaries.

More information about other key programs and initiatives can be found in the Overview of the New York State and Local Retirement System on page 26 and the Overview of Investments on page 91.

## Acknowledgements

I wish to thank the dedicated staff of the Office of the State Comptroller for doing the important work of our agency day in and day out. I am extremely proud of their commitment to serving our members, retirees, beneficiaries and employers.

I also wish to thank the members of the Advisory Council for the Retirement System, the Investment Advisory Committee, the Real Estate Advisory Committee, the Actuarial Advisory Committee and the Audit Advisory Committee for their commitment to the System's members, retirees and beneficiaries. We are deeply indebted to them for their continued support and counsel.

Lastly, I would like to thank the staff in our Division of Retirement Services and our Division of Pension Investment and Cash Management, who are responsible for preparing this report. Their professionalism and dedication are greatly appreciated.

I am confident you will find this report to be a complete and reliable accounting of the System.

Sincerely,



Thomas P. DiNapoli  
State Comptroller

# ADMINISTRATIVE ORGANIZATION

## Advisory Committees

### Advisory Council for the Retirement System

The Advisory Council for the Retirement System, appointed by the Comptroller pursuant to regulations of the Comptroller (2 NYCRR Part 320), advises and makes recommendations to the Comptroller on the formulation of policies in relation to the administration and management of the Common Retirement Fund and the Retirement System. At the annual meetings of the Council, the Comptroller and senior staff also exchange information and insights with the Council to help stakeholders understand the status and challenges of the Common Retirement Fund and the Retirement System.

#### **Stephen J. Acquario**

Executive Director  
New York State Association of Counties

#### **Mario Cilento**

President  
New York State AFL-CIO

#### **Sam Fresina**

President  
New York State Professional Fire Fighters Association

#### **Gerry Geist**

Executive Director  
Association of Towns of the State of New York

#### **Diana Hinchcliff**

President  
Retired Public Employees Association, Inc.

#### **Robert Jackson**

New York Senator and Chair  
Civil Service and Pensions Committee  
New York State Senate

#### **Bryant Kolner**

President  
Alliance of Public Retiree Organizations of New York

#### **Heather Briccetti Mulligan**

President & CEO  
Business Council of New York State, Inc.

#### **Charles W. Murphy**

President  
New York State Troopers PBA

#### **Michael O'Meara**

President  
Police Conference of New York, Inc.

#### **Melinda Person**

President  
New York State United Teachers

#### **Honorable Stacey Pheffer Amato**

Assemblymember and Chair  
Governmental Employees Committee  
New York State Assembly

#### **Raymond Santander**

Assistant Director, Research & Negotiations  
AFSCME District Council 37

#### **Robert Schneider**

Executive Director  
New York State School Boards Association

#### **Wayne Spence**

President  
New York State Public Employees Federation

#### **Christopher Summers**

President  
New York State Correctional Officers &  
Police Benevolent Association

#### **Fran Turner**

Director of Legislative & Political Action  
Civil Service Employees Association Local 1000, AFSCME

#### **Barbara Van Epps**

Executive Director  
Conference of Mayors

#### **Ronald J. Walsh, Jr.**

President  
Council 82, AFSCME

#### **Barbara Zaron**

President  
New York State Organization of  
Management Confidential Employees

## Investment Advisory Committee

The Investment Advisory Committee is appointed by the Comptroller pursuant to Section 423 of the Retirement and Social Security Law. The Investment Advisory Committee advises the Comptroller on general investment issues. The Investment Advisory Committee reviews the investment policy statement and any amendments to it, and reviews and provides a recommendation to the Comptroller on the proposed asset allocation plan developed by the Chief Investment Officer after the completion of an asset liability study. The Investment Advisory Committee also periodically reviews the strategic plan of each Common Retirement Fund asset class, and monitors the Common Retirement Fund's risk profile, investment activity and performance on a periodic basis.

### **Tia Breakley**

Chief Strategic Development Officer  
Blue Meridian Partners

### **Phillipe Brugere-Trelat**

Former Executive Vice President and Portfolio Manager  
Franklin Templeton

### **William G. Clark**

Chief Investment Officer  
Federal Reserve Employees Benefits System

### **Timothy Collins**

CEO & Senior Managing Director  
Ripplewood Holdings, LLC

### **Hugh Johnson**

Chairman & Chief Economist  
Hugh Johnson Economics, LLC

### **Catherine A. Lynch, CFA (Chair)**

Independent Director  
BlackRock Fixed Income Funds Board

### **James Mitchell**

Independent Board Director  
JMJ Advisors, LLC

### **Diane C. Nordin, CFA**

Director  
Fannie Mae

### **Catherine James Paglia**

Director  
Enterprise Asset Management

## Real Estate Advisory Committee

The Real Estate Advisory Committee is appointed by the Comptroller, with the consent of the Investment Advisory Committee, pursuant to Section 423 of the Retirement and Social Security Law. The Real Estate Advisory Committee reviews proposed mortgage and real estate investments. In the event the Real Estate Advisory Committee disapproves of a proposed mortgage or real estate investment, the investment will not be presented to the Comptroller and cannot be made by the Common Retirement Fund.

**Louis M. Dubin (Chair)** *as of October 5, 2023*

Managing Partner  
Redbrick LMD

**G. Gail Edwards**

Independent Director

**Michael Giliberto**

President  
S. Michael Giliberto & Company, Inc.

**James M. Gottstine**

Chief Operations Officer  
Ciminelli Real Estate Corporation

**JoAnn Hanson**

President and Chief Executive Officer  
Church Investment Group

**L. Duane Jackson**

Managing Member  
Alinea Capital Partners, LLC

**Rosey Miller**

Chief Executive Officer  
Regional Investment & Management

**David H. Peirez, Esq. (Chair)** *through September 7, 2023*

Partner  
Reisman Peirez Reisman & Capobianco LLP

**Deborah Ratner Salzberg**

Principal  
Uplands Real Estate Partners

**Peter Tilles**

Developer

## Actuarial Advisory Committee

The Actuarial Advisory Committee, appointed by the Comptroller pursuant to regulation (11 NYCRR 136-2), reviews and advises the Comptroller on the actuarial soundness and financial condition of the Retirement System and the Common Retirement Fund, and annually reviews the proposed actuarial assumptions and employer contributions.

### Edward W. Brown

(Retired)

### Mark T. Koehne

(Retired)

### Armand de Palo

(Retired)

### Stanley Talbi

(Retired)

### Michael Heller

(Retired)

## Audit Advisory Committee

The Audit Advisory Committee, appointed by the Comptroller pursuant to regulation (11 NYCRR 136-2), reviews and reports to the Comptroller on the annual internal and external audit process related to the Retirement System, the Common Retirement Fund and the Annual Comprehensive Financial Report.

### Ruben Cardona

Emeritus Partner  
Withum

### Paul Moore

Past President  
Retired Public Employees Association, Inc.

### Alan Lubin

(Retired)

### Jennifer Mulligan (Chair)

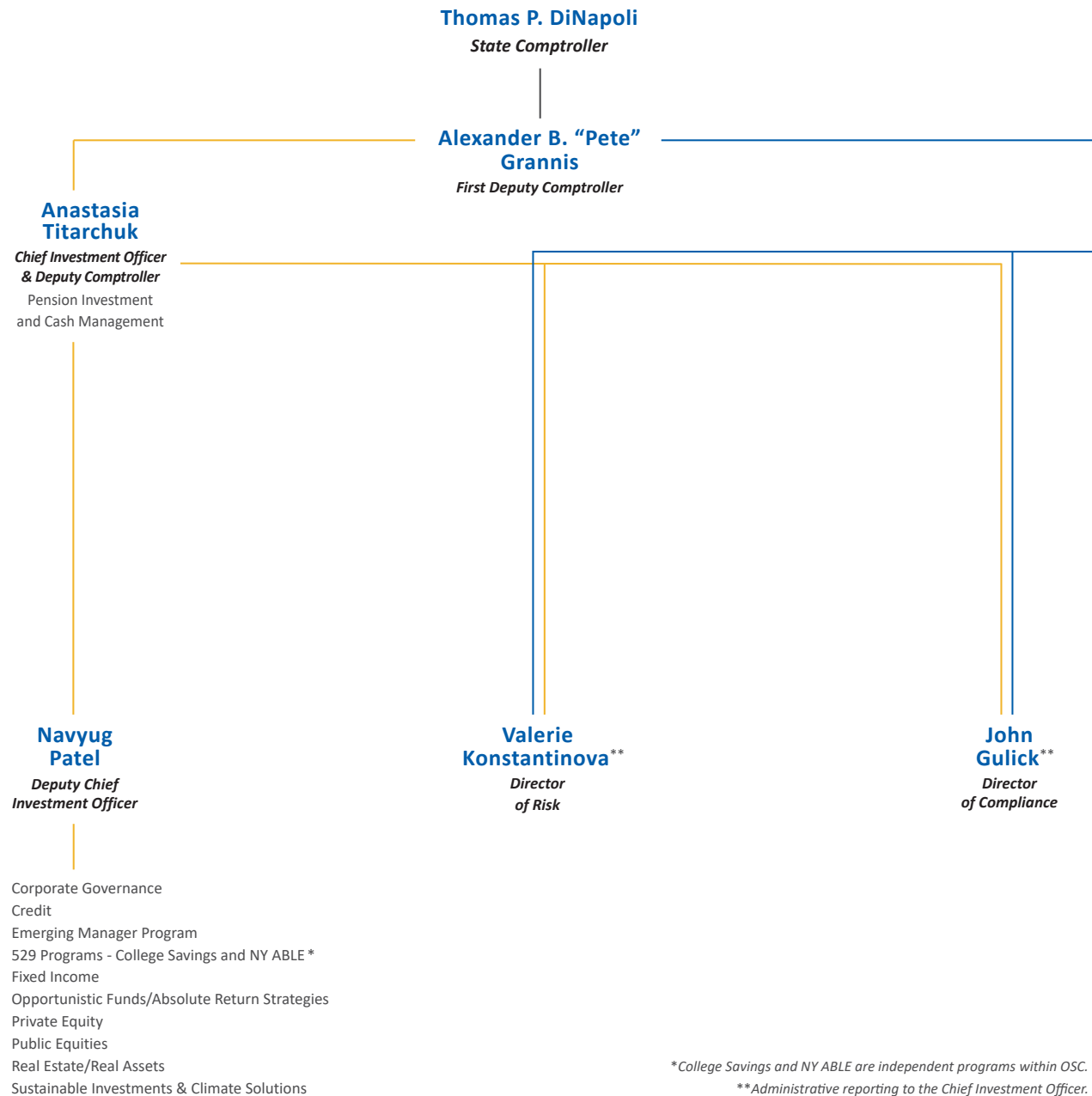
Director of Business and Finance  
East Greenbush Central School District

### Julie McDonnell

Schenectady County Auditor

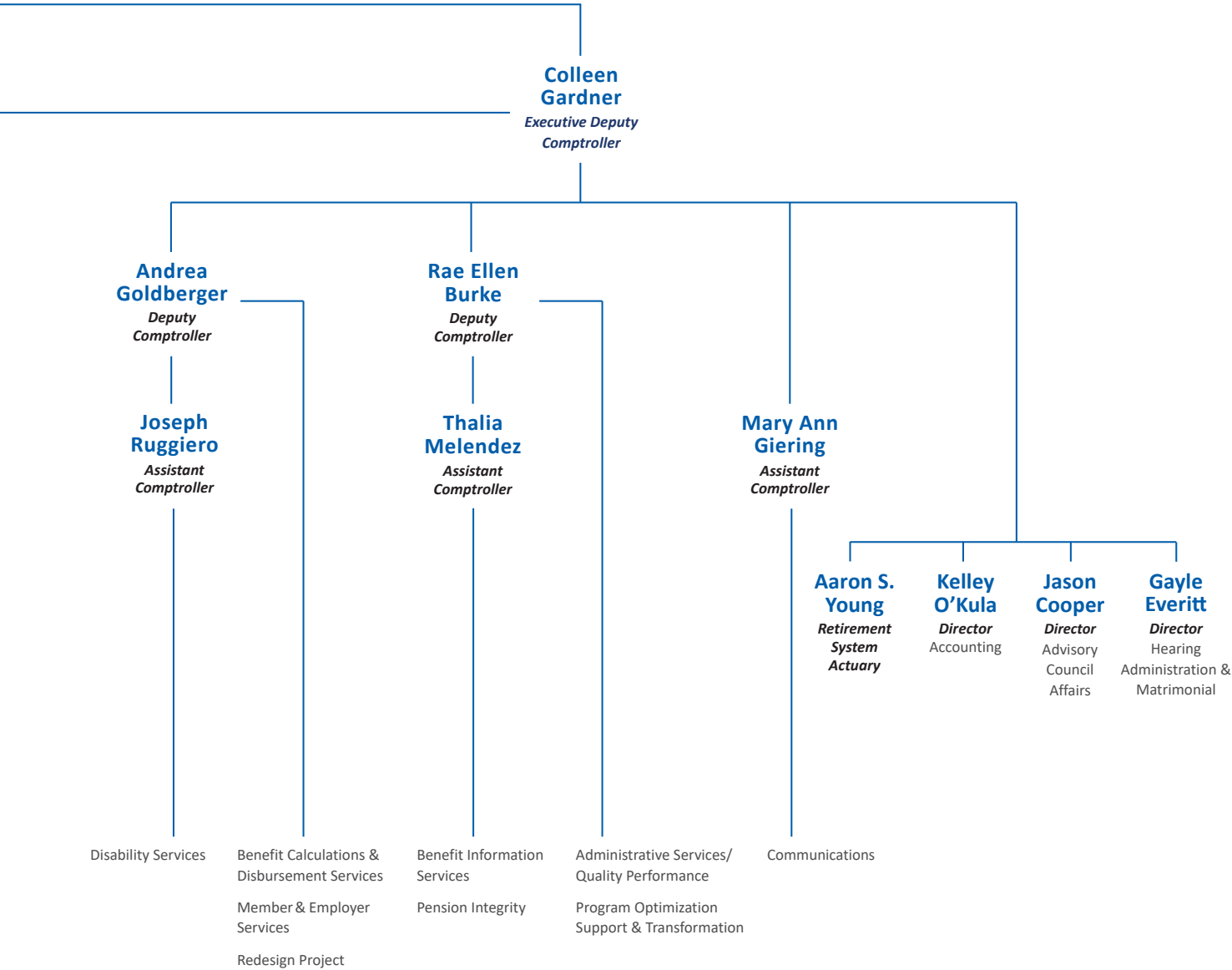


## New York State and Local Retirement System Organization Chart



### Notes:

Information regarding investment managers and consultants can be found in the Investment Section on pages 124, 128, 132 and 135-150. Information regarding consultants other than investment advisors can be found on page 86 in the Financial Section.



# OVERVIEW OF THE NEW YORK STATE AND LOCAL RETIREMENT SYSTEM

*Report from Executive Deputy Comptroller Colleen Gardner*

I am proud of the work NYSLRS accomplished during the 2023-24 State fiscal year, and I am pleased to share highlights of that work with you.

## Retirement Online

We launched *Retirement Online* in 2017. Since then, our members, retirees and beneficiaries have been using it to understand their retirement account information and to conduct business which once required calling NYSLRS or mailing in forms—filing for service retirement, changing their address, managing beneficiary designations, creating a pension income verification letter, taking out a loan or receiving an estimate of their pension benefit. Using *Retirement Online* usually results in faster response times and enables NYSLRS staff to focus on more complex issues for customers.

As of March 31, 2024, more than 500,000 members, retirees and beneficiaries have *Retirement Online* accounts, almost 21 percent more than the previous fiscal year. To date, members used *Retirement Online* to:

- Submit 164,421 beneficiary updates; and
- Complete 48,598 retirement applications.

In the last fiscal year alone, customers completed more than 660,000 individual transactions, with members using *Retirement Online* to:

- Complete 442,413 retirement benefit estimates;
- Submit 35,137 loan applications, which is nearly 84 percent of the applications received; and
- Request 4,116 new service credit purchases.

When we introduced online direct deposit and federal tax withholding tools in January 2023, more retirees and beneficiaries signed up for *Retirement Online*. During the last fiscal year, retirees and beneficiaries:

- Created 21,962 new accounts (19,386 retirees and 2,576 beneficiaries);
- Made 18,186 changes to their federal tax withholding; and
- Made 8,962 updates to their direct deposit information.

In January 2024, we added 1099-R tax form availability to *Retirement Online*. Almost 4,300 retirees and beneficiaries signed up to receive an email notification stating their 1099-R was ready, and more than 25,500 tax forms were accessed in *Retirement Online*. In February, we added Retiree Annual Statement availability for calendar year 2023. More than 2,800 retirees signed up to receive an email notification stating their Statement was ready to view, and more than 8,100 Statements were accessed online. By adding these important documents to *Retirement Online*, we offer retirees and beneficiaries earlier access to tax and pension payment information than mailed information.

# OVERVIEW OF THE NEW YORK STATE AND LOCAL RETIREMENT SYSTEM

*Report from Executive Deputy Comptroller Colleen Gardner*

CONTINUED

## Our Employer Partnership

The employers who participate in NYSLRS are critical to our success. We rely on them to accurately report information to us and deliver information to our members. More than that, we couldn't provide members the benefits they've earned without our participating employers. So, we're committed to our partnership and to assisting them.

## Upgrades for Employer Reporting

We continue to prioritize providing our employers with the online tools they need to work with us. We upgraded to an enhanced reporting process, which is more efficient for employers and captures the information needed to meet reporting changes required by law. This gives NYSLRS more of the service and salary information we need more quickly. To help employers with the transition to enhanced reporting, we provide customized training and one-on-one support, as well as reference tools and resources on our website. By the end of the fiscal year, 1,800 employers had transitioned to enhanced reporting—nearly 60 percent of all our local employers. Our older, legacy reporting process will no longer be supported by the end of 2024, so we're focusing our efforts to help the remaining employers complete their upgrades.

## Improvements to Retirement Online

For employers who already use enhanced reporting, we introduced automatic overtime capping for Tier 5 and 6 members. As an employer reports these members' overtime earnings, *Retirement Online* tracks the overtime. Once a member reaches their limit, the employer receives a notification to stop withholding member contributions from the member's overtime earnings.

We also created a new *Retirement Online* page for tracking loan and service credit purchase (SCP) deductions, which puts all the information an employer needs in one convenient place. Employers can now track a member's remaining loan or SCP balance, making it easier to know when to cease deductions.

For member enrollment, employers can now use *Retirement Online* to enroll an employee who does not work regular business hours and whose NYSLRS membership is optional. Previously, the employer could only enroll them with a paper form or by fax.

## Changes to Contribution Stabilization Programs

Updates were made to the Contribution Stabilization Program (CSP) and the Alternate Contribution Stabilization Program (Alternate Program), which allow employers to pay a portion of their annual pension contributions when due and pay the remainder over time with interest.

When the Retirement System's average contribution rates are *higher* than an employer's graded rate, employers who participate in the CSP or the Alternate Program are eligible to amortize a portion of their invoice. When the Retirement System's average contribution rate drops *below* the employer's graded rate, these employers are required to pay an additional graded payment to offset future increases in their graded rate.

Employers can now use reserve fund assets to pay a portion of their annual bill more often. Previously, they could only use reserve fund assets when their average rate exceeded the System's graded rate.

# OVERVIEW OF THE NEW YORK STATE AND LOCAL RETIREMENT SYSTEM

*Report from Executive Deputy Comptroller Colleen Gardner*

CONTINUED

Employers can also stop making graded payments when their reserve fund meets a new lower limit. Previously, reserve funds were capped at 100 percent of a location's annual payroll. Now, if at the end of a fiscal year an employer's reserve fund balance exceeds their regular annual pension contribution from their last invoice (not including Group Term Life Insurance), they will not be required to pay a graded payment during the next fiscal year.

And finally, employers may withdraw from either the CSP or Alternate Program after all prior years' amortizations are paid in full, including interest. As of the end of the fiscal year, 39 employer locations elected to withdraw from the CSP and four employer locations elected to withdraw from the Alternate Program.

## Outreach to New Members

We're also encouraging employers to ask new employees, after their member enrollment has been completed, to sign up for *Retirement Online* so they can designate beneficiaries online. This allows members to get their beneficiary information recorded in the system faster than using a paper form.

## Customer Service

Customer satisfaction is important to us, and we strive to provide a positive experience when someone needs assistance understanding their benefits. In the fall, we surveyed almost 1,000 customers who contacted the Call Center. When asked what they thought about our Call Center agents, customers said they:

- Were courteous and professional (94 percent);
- Were knowledgeable about customer questions and concerns (91 percent);
- Were empathetic and understanding (86 percent); and
- Provided clear communication (84 percent).

By having these customer insights, we can see where we perform well and focus on areas where we can improve services.

This is especially important given how our call volume has increased over time, ranging from 350,000 to almost 500,000 calls during recent fiscal years. We're continuing to use virtual and traditional points of contact so our agents can assist more customers. In the last fiscal year, our customer service representatives:

- Answered 357,621 phone calls;
- Responded to 59,802 emails;
- Conducted 30,597 phone consultations;
- Conducted 1,072 virtual consultations;
- Conducted 5,904 consultations at our Albany, Buffalo and Hauppauge sites;
- Conducted three in-person consultation events, helping 72 customers in special retirement plans;
- Conducted 11 in-person presentations, reaching 1,308 customers;
- Conducted 87 virtual presentations, reaching 6,108 customers; and
- Hosted 28 information tables (both virtual and in-person), reaching 2,058 customers.

# OVERVIEW OF THE NEW YORK STATE AND LOCAL RETIREMENT SYSTEM

*Report from Executive Deputy Comptroller Colleen Gardner*

CONTINUED

In September 2023, NYSLRS engaged a call center consultant to perform an evaluation of the NYSLRS Call Center's existing capabilities. Insufficient staffing and other challenges continue to impact NYSLRS' ability to answer calls and complete certain casework timely. The consultant identified best practices, and opportunities for efficiencies and improving customer service outcomes. The call center consultant worked with NYSLRS on a roadmap for the future and NYSLRS is in the process of implementing several recommendations.

The rising number of retirements over the years has been challenging, and our staff is working diligently to complete outstanding final retirement calculations for our retirees and respond to customer questions. We are grateful for their patience and understanding as we pursue ways to improve our services and better assist them.

## Fighting Fraud

We take preventing and detecting pension fraud very seriously. Identifying unreported retiree and beneficiary deaths is one way we detect fraud. During the last fiscal year, NYSLRS recovered more than \$3.6 million in pension overpayments.

One of the duties of our Pension Integrity Bureau is to audit retirement data to verify it has been reported accurately. In addition, each year a sampling of employers is selected to undergo an audit by our independent financial auditor of their reported data.

Retirement benefits are partially based on reported data, so these audits help ensure correct benefits are paid. The bureau also monitors *Retirement Online* for instances of online fraud and ensures appropriate internal controls are in place to protect the system and its data.

We will continue to search out unreported retiree deaths and online fraud. When inappropriate payments are identified, we will pursue full restitution.

## Executive Management Team Update

In August 2023, three new members joined our Executive Management Team: Deputy Comptroller Rae Ellen Burke, Assistant Comptroller Thalia Melendez and Assistant Comptroller Mary Ann Giering. All three have years of experience from within the Office of the State Comptroller and are welcome additions to the team. Together, with Deputy Comptroller Andrea Goldberger and Assistant Comptroller Joseph Ruggiero, we will support the Division of Retirement Services' responsibilities for benefit administration and continue to address the needs of our membership, retirees and beneficiaries, our employers, and the work involved.

# OVERVIEW OF THE NEW YORK STATE AND LOCAL RETIREMENT SYSTEM

*Report from Executive Deputy Comptroller Colleen Gardner*

CONTINUED

## New Laws Enacted in Calendar Year 2023 Impacting NYSLRS

### Collective Bargaining, Pensionable Income for Court Employees

Chapter 1 of the Laws of 2023 implemented collective bargaining agreements between the State and public employee unions negotiating on behalf of approximately 13,400 court employees in all 12 of the Judiciary's negotiating units. It also stipulated certain bonuses, one-time lump sum bonuses, location pay, differential payments and uniform allowances are pensionable.

### Post-Retirement Earnings, Death and Disability Benefits and Employer Contribution Stabilization Program Changes

Chapter 55 of the Laws of 2023 included seven measures affecting NYSLRS:

- Part V allowed retirees employed by a school district or Board of Cooperative Educational Services (BOCES) to collect a salary without suspension or diminution of their pension through June 30, 2024.
- Part W allowed NYSLRS-participating employers to withdraw from the Contribution Stabilization Program, subject to approval by the Comptroller, provided all prior year amortizations are paid in full, including interest. The new law also provided employers more flexibility in using their reserve funds to pay for a portion of their pension contributions.
- Part Y moved the special accidental death benefit appropriation from the Department of Audit and Control to the General Fund.
- Part GG created an alternative death benefit for Westchester County Correction Officers.
- Part II created an alternative death benefit for Nassau Fire Marshalls.
- Part KK allowed those employed by Monroe County in the title of deputy sheriff–civil, as certified by the sheriff, to retire upon completion of 25 years of creditable service.
- Part LL provided a heart presumption expansion for Police and Fire Retirement System (PFRS) members, Nassau County fire marshals, and uniformed court officers.

### Retirement Plan Change for Waterfront Commission of New York Harbor Titles

Chapter 187 of the Laws of 2023 moved investigators and sworn officers of the Waterfront Commission of New York Harbor from the 20-year plan contained in Section 384-d of the Retirement & Social Security Law (RSSL) to the 20-year plan contained in Section 381-b of the RSSL.

### Special Accident Death Benefit Increase

Chapter 213 of the Laws of 2023 increased the salary used in the computation of the special accidental death benefit payable to statutory beneficiaries by 3 percent.

# OVERVIEW OF THE NEW YORK STATE AND LOCAL RETIREMENT SYSTEM

*Report from Executive Deputy Comptroller Colleen Gardner*

CONTINUED

## **Accidental Disability Retirement Benefit for Uniformed Court Officers and Peace Officers**

Chapter 685 of the Laws of 2023 established an accidental disability retirement benefit for uniformed court officers and peace officers employed in the unified court system for injuries sustained in the performance of duty as the result of a physical assault by an assailant.

## **Improved Accidental Disability Benefit for Nassau County Deputy Sheriffs**

Chapter 688 of the Laws of 2023 established an improved accidental disability benefit for Nassau County deputy sheriffs in Tiers 3 through 6. The improved disability benefit is three-quarters of their Final Average Earnings (FAE) minus workers' compensation.

## **Improved Accidental Disability Benefit for Suffolk County Deputy Sheriffs**

Chapter 694 of the Laws of 2023 established an improved accidental disability benefit for Suffolk County deputy sheriffs in Tiers 3 through 6. The improved disability benefit is three-quarters of their FAE minus workers' compensation.

## **One-Year Final Average Earnings for Certain PFRS Tier 6 Members**

Chapter 705 of the Laws of 2023 changed the calculation of FAE to a one-year FAE for Tier 6 members of the PFRS whose employer previously elected to provide the one-year FAE benefit.

## **25-Year Plan for Certain Suffolk County Fire District Titles**

Chapter 714 of the Laws of 2023 allowed fire districts in Suffolk County that participate in the Employees' Retirement System (ERS) to elect to provide individuals employed in the title of emergency medical technician or paramedic to elect to retire upon completion of 25 years of creditable service.

## **Transferring Reserves Between Public Employee Retirement Systems**

Chapter 717 of the Laws of 2023 related to the transfer of reserves between public employee retirement systems of the State as a required step in completing a transfer of membership between certain New York State public retirement systems for members with 10 or more years of credited service.

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Although the last fiscal year continued to present challenges, we remain committed to providing quality service to our members, retirees, beneficiaries and employers. I look forward to reporting the results of our efforts in our next Annual Comprehensive Financial Report.



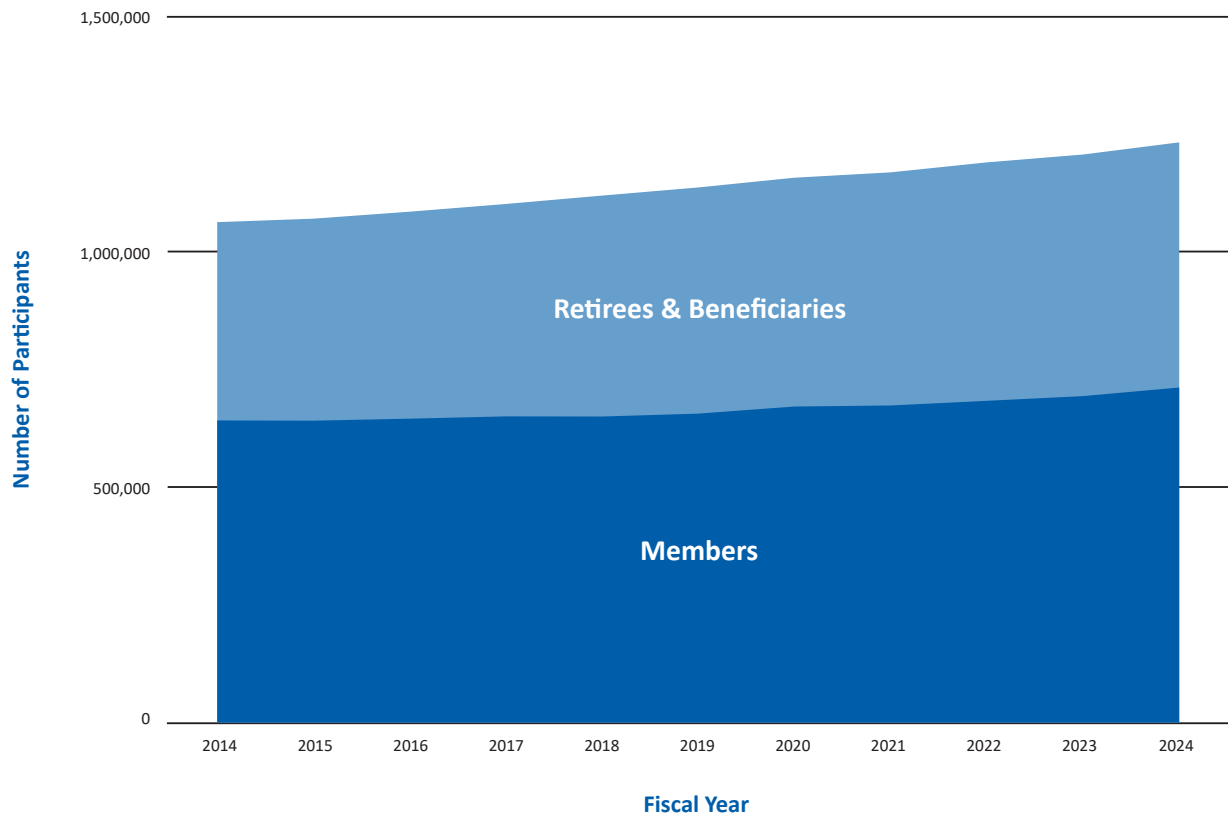
## BY THE NUMBERS

### Members and Retirees

There are 1,236,057 participants in the System, including 713,802 members and 522,255 retirees and beneficiaries.

The number of retirees is increasing more quickly than members. For example, in 2004, retirees and beneficiaries represented approximately 34 percent of the System's participants. By fiscal year 2024, that number had increased to approximately 42 percent.

Benefit payments continue to rise, reflecting improvements in final average salaries over the past decades, cost-of-living adjustment (COLA) payments and benefit improvements enacted over the years.

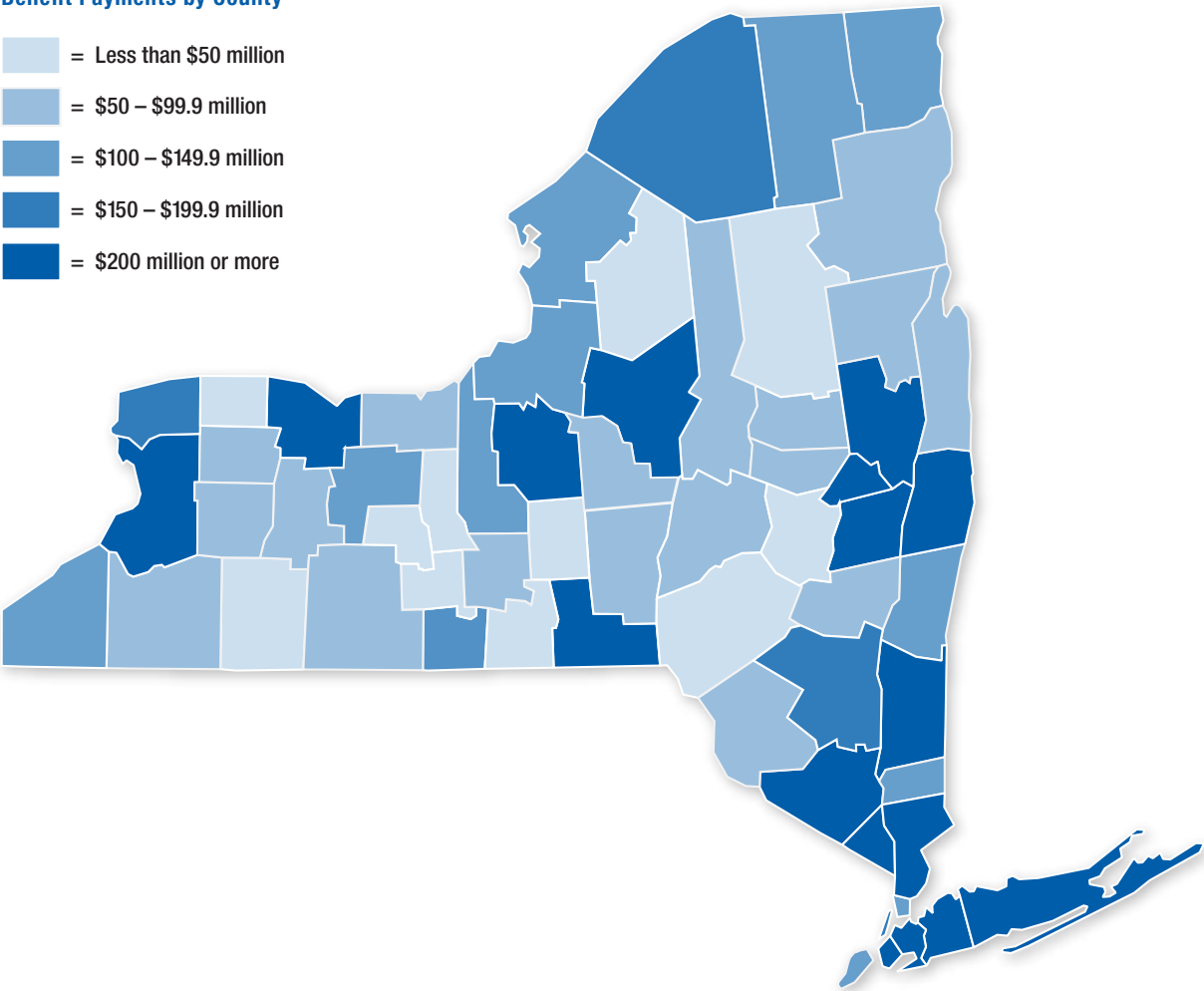


Retirees in New York State

Of the 522,255 retirees and beneficiaries in the System, 410,015 (approximately 79 percent) remain New York State residents. As such, benefit payments surpassing \$12.8 billion this year alone reached the State’s communities and businesses, representing a significant stimulus to the State’s economy.

Benefit Payments by County

- = Less than \$50 million
- = \$50 – \$99.9 million
- = \$100 – \$149.9 million
- = \$150 – \$199.9 million
- = \$200 million or more



## Annual Benefit Payments Within New York State

As of March 31, 2024.

County	Recipients	Annual Payments
Albany	20,466	\$ 736,702,197
Allegany	1,843	40,617,175
Bronx	3,850	126,400,853
Broome	8,705	201,745,103
Cattaraugus	3,815	91,612,861
Cayuga	3,726	100,233,670
Chautauqua	5,375	128,476,262
Chemung	3,974	108,675,499
Chenango	2,439	52,785,219
Clinton	5,030	147,564,270
Columbia	3,311	101,196,008
Cortland	1,994	46,769,920
Delaware	2,025	48,016,968
Dutchess	11,111	380,790,145
Erie	33,959	1,020,093,804
Essex	2,269	58,629,500
Franklin	3,660	101,986,038
Fulton	2,495	60,239,548
Genesee	2,730	69,426,786
Greene	2,812	83,012,371
Hamilton	545	12,902,528
Herkimer	2,759	64,676,405
Jefferson	4,272	113,927,465
Kings	6,367	225,318,769
Lewis	1,503	33,285,962
Livingston	3,304	84,825,790
Madison	2,944	71,771,468
Monroe	19,524	500,484,751
Montgomery	2,681	71,770,968
NY Military	9	161,123
Nassau	26,261	1,036,768,311
New York	4,651	181,230,603

County	Recipients	Annual Payments
Niagara	7,246	\$ 194,362,663
Oneida	11,007	310,072,903
Onondaga	15,492	415,016,607
Ontario	4,118	104,871,526
Orange	10,561	338,794,464
Orleans	1,867	44,988,730
Oswego	5,001	117,014,625
Otsego	2,374	51,717,961
Putnam	2,902	108,587,003
Queens	6,747	246,755,476
Rensselaer	10,231	348,722,611
Richmond	2,579	101,004,125
Rockland	7,269	265,208,114
Saratoga	12,635	418,513,656
Schenectady	9,433	316,055,293
Schoharie	1,870	49,619,948
Schuyler	949	22,425,653
Seneca	1,612	39,024,232
St. Lawrence	5,999	161,270,834
Steuben	3,781	90,053,031
Suffolk	39,837	1,530,779,742
Sullivan	3,283	94,357,797
Tioga	1,974	43,140,993
Tompkins	3,012	72,721,647
Ulster	6,798	192,867,772
Warren	3,353	92,375,563
Washington	3,048	80,090,418
Wayne	3,815	90,916,660
Westchester	17,418	678,428,631
Wyoming	2,411	63,688,119
Yates	984	22,545,829
<b>Total</b>	<b>410,015</b>	<b>\$ 12,808,090,966</b>

**Note:** The objective of this chart is to show the relative amounts paid to annuitants in the various locations within New York State. The numbers do not match the figures in the basic financial statements because the financial statement figures represent the sum of all benefit payments (including death benefits) made during the fiscal year, in accordance with Generally Accepted Accounting Principles (GAAP). The above numbers represent the sum of the annual benefits payable to all annuitants actively collecting as of the end of the fiscal year. The figures in the chart are easier to organize by county, as compared to figures found in the financial statements.

## Annual Benefit Payments Within the United States

As of March 31, 2024.

State	Recipients	Annual Payments
Alabama	897	\$ 19,836,649
Alaska	58	1,375,881
Arizona	2,612	62,641,238
Arkansas	183	3,111,929
California	2,033	44,179,726
Colorado	861	20,112,666
Connecticut	2,753	83,191,405
Delaware	1,331	43,028,280
Florida	40,638	1,193,528,382
Georgia	4,371	104,079,511
Guam	2	19,616
Hawaii	120	3,028,108
Idaho	122	2,472,365
Illinois	386	8,688,303
Indiana	342	7,036,542
Iowa	90	1,442,206
Kansas	113	2,144,639
Kentucky	475	9,637,953
Louisiana	195	4,023,117
Maine	672	16,729,610
Maryland	1,610	36,355,151
Massachusetts	1,683	43,499,908
Michigan	371	7,072,125
Minnesota	167	3,091,077
Mississippi	225	4,724,356
Missouri	287	5,436,165
Montana	127	2,842,932

State	Recipients	Annual Payments
Nebraska	53	\$ 1,075,912
Nevada	1,333	37,934,674
New Hampshire	730	22,148,483
New Jersey	8,722	376,245,680
New Mexico	402	8,470,053
New York	410,015	12,808,090,966
North Carolina	10,553	275,702,297
North Dakota	23	489,642
Ohio	890	17,628,682
Oklahoma	162	2,650,875
Oregon	291	6,150,819
Pennsylvania	5,601	157,115,500
Puerto Rico	400	7,927,225
Rhode Island	274	7,460,842
South Carolina	8,124	243,254,210
South Dakota	89	2,894,292
Tennessee	2,695	77,784,709
Texas	2,654	64,334,939
Utah	164	3,750,796
Vermont	590	13,737,098
Virginia	4,005	95,685,324
Washington	543	12,631,434
Washington, D.C.	98	2,469,957
West Virginia	205	4,504,853
Wisconsin	185	3,401,496
Wyoming	81	1,959,640
<b>Total</b>	<b>521,606</b>	<b>\$ 15,988,830,239</b>

## Annual Benefit Payments Outside the United States

As of March 31, 2024.

Recipients	Total Annual Payments
649	\$ 12,788,103

**Note:** The objective of this chart is to show the relative amounts paid to annuitants within the United States and outside the United States. The numbers do not match the figures in the basic financial statements because the financial statement figures represent the sum of all payments (including death benefits) made during the fiscal year, in accordance with Generally Accepted Accounting Principles (GAAP). The above numbers represent the sum of the annual benefits payable to all annuitants actively collecting as of the end of the fiscal year. The figures in the chart are easier to organize by state and country, as compared to figures found in the financial statements.

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# FINANCIAL



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# INDEPENDENT AUDITORS' REPORT



KPMG LLP  
515 Broadway  
Albany, NY 12207-2974

## Independent Auditors' Report

The Trustee  
New York State and Local Retirement System:

### Report on the Audit of the Financial Statements

#### *Opinion*

We have audited the financial statements of the New York State and Local Retirement System (the System) as of and for the year ended March 31, 2024, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System as of March 31, 2024, and the changes in its fiduciary net position for the year then ended in accordance with U.S. generally accepted accounting principles.

#### *Basis for Opinion*

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

#### *Responsibilities of Management for the Financial Statements*

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

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

#### *Auditors' Responsibilities for the Audit of the Financial Statements*

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

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substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

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

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

#### *Required Supplementary Information*

U.S. generally accepted accounting principles require that the management's discussion and analysis, schedule of changes in employers' net pension liability (asset) and related ratios, schedule of employer contributions, schedule of investment returns, and notes to required supplementary information be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### *Supplementary Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The schedule of administrative expenses, schedule of investment expenses and schedule of consulting fees are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of



administrative expenses, schedule of investment expenses and schedule of consulting fees are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

#### *Other Information*

Management is responsible for the other information included in the annual comprehensive financial report. The other information comprises the introduction, investment, actuarial and statistical sections. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

#### **Other Reporting Required by Government Auditing Standards**

In accordance with *Government Auditing Standards*, we have also issued our report dated July 24, 2024 on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

**KPMG LLP**

Albany, New York

July 24, 2024, except for the Other Information section of our report, as to which the date is September 27, 2024

# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

March 31, 2024

The following overview of the financial activity of the New York State and Local Retirement System (the System) for the fiscal year ended March 31, 2024 is intended to provide the reader with an analysis of the System's overall financial position. The System is comprised of the New York State and Local Employees' Retirement System (ERS) and the New York State and Local Police and Fire Retirement System (PFRS). The net position of the System is held in the New York State Common Retirement Fund (the Fund), which was established to hold all assets and record changes in fiduciary net position allocated to the System. This management's discussion and analysis should be read in conjunction with the basic financial statements of the System, which follow.

## Financial Highlights

The fiduciary net position of the System held in trust to pay pension benefits was \$267.4 billion as of March 31, 2024 and \$249.5 billion as of March 31, 2023. This amount reflects an increase of \$17.9 billion from the prior fiscal year. This change is primarily the result of the net appreciation of the fair value of the investment portfolio. The Fund continues to diversify and monitor downside risks. Net appreciation/(depreciation) in fair value of investments for the fiscal years ended March 31, 2024 and 2023 was \$24.3 billion and \$(17.3) billion, respectively.

- The System's investments reported a positive money-weighted rate of return, net of investment expense, of 11.34 percent for the fiscal year ended March 31, 2024 and a negative money-weighted rate of return, net of investment expense, of 4.43 percent for the fiscal year ended March 31, 2023.
- Retirement and death benefits paid during the fiscal year ended March 31, 2024 to 522,255 annuitants totaled \$16.1 billion, as compared to \$15.5 billion paid to 514,629 annuitants for the fiscal year ended March 31, 2023. The increase is primarily due to the number of new retirees.
- Contributions from employers increased to \$5.1 billion for the fiscal year ended March 31, 2024, from \$4.4 billion for the fiscal year ended March 31, 2023. The increase in employer contributions was related to an increase in contribution rates from the previous year.
- The Net Pension Liability (NPL) for ERS was \$14.7 billion for the measurement period ended March 31, 2024 as compared to \$21.4 billion for the measurement period ended March 31, 2023. The fiduciary net position, restricted for pension benefits as of March 31, 2024, was \$226.0 billion, which represents 93.9 percent of the calculated total pension liability for ERS. This NPL is allocated to participating employers and reported in their financial statements pursuant to Governmental Accounting Standards Board (GASB) Statement No. 68.
- The NPL for PFRS was \$4.7 billion for the measurement period ended March 31, 2024 as compared to \$5.5 billion for the measurement period ended March 31, 2023. The fiduciary net position, restricted for pension benefits as of March 31, 2024, was \$41.4 billion, which represents 89.7 percent of the calculated total pension liability for PFRS. This NPL is allocated to participating employers and reported in their financial statements pursuant to GASB Statement No. 68.

# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

CONTINUED

## Overview of the Financial Statements

The financial statements consist of the combining basic statement of fiduciary net position, the combining basic statement of changes in fiduciary net position, and the notes to the basic financial statements. The required supplementary information that appears after the notes to the basic financial statements is not a required part of the basic financial statements, but is supplementary information required by the GASB. The other supplementary information following the required supplementary information is not required, but management has chosen to include such information to increase transparency.

The combining basic statement of fiduciary net position reflects the resources available to pay members, retirees and beneficiaries at the close of the System's fiscal year. This statement also provides information about the fair value and composition of the System's fiduciary net position.

The combining basic statement of changes in fiduciary net position presents the changes to the System's fiduciary net position for the fiscal year, including net investment income, which includes net appreciation in fair value of the investment portfolio, and contributions from members and employers. Benefits and administrative expenses paid by the System are included under the deductions section of the statement.

The notes to the basic financial statements are an integral part of the basic financial statements and provide additional information about the plans, policies, and performance of the System.

The required supplementary information includes: Management's Discussion and Analysis, Schedule of Changes in the Employers' Net Pension Liability (Asset) and Related Ratios, Schedule of Employer Contributions and Schedule of Investment Returns and related notes to the required supplementary information.

The additional supplementary information includes: Schedule of Administrative Expenses, Schedule of Investment Expenses, and Schedule of Consulting Fees.

# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

CONTINUED

## Analysis of the Overall Financial Position of the System

The purpose of the System's investments is to provide for long-term growth, while also ensuring a reliable cash flow that meets the funding requirements of the near-term pension obligations. To achieve these goals, the investments are allocated to a variety of asset types and strategies in order to meet the System's current funding needs as well as future growth requirements. Equity-related investments are included for their long-term return and growth characteristics. While a majority of fixed income and debt-related investments are generally included in the allocation for their ability to control investment risk and provide for a reliable cash flow that meets the funding requirements, a portion is strategically invested in more actively traded markets. It is important to note that the change from year to year is due not only to changes in fair values but also to purchases, sales, and redemptions. Tables 1, 2, and 3 summarize and compare financial data for the current and prior years.

**Table 1**

Summary schedule of fiduciary net position as of March 31, 2024, as compared to March 31, 2023:

	(Dollars in Thousands)			Percentage Change
	2024	2023	Dollar Change	
Assets:				
Investments	\$ 268,088,704	\$ 248,524,917	\$ 19,563,787	7.9%
Securities lending collateral — invested	28,142,425	29,078,812	(936,387)	(3.2)
Receivables and other assets	<u>2,692,163</u>	<u>2,724,190</u>	<u>(32,027)</u>	<u>(1.2)</u>
Total assets	298,923,292	280,327,919	18,595,373	6.6
Liabilities:				
Securities lending obligations	28,134,545	29,079,603	(945,058)	(3.2)
Payables and other liabilities	<u>3,421,052</u>	<u>1,740,230</u>	<u>1,680,822</u>	<u>96.6</u>
Total liabilities	31,555,597	30,819,833	735,764	2.4
Net position, restricted for pension benefits	\$ 267,367,695	\$ 249,508,086	\$ 17,859,609	7.2%

The fiduciary net position of the System totaled \$267.4 billion as of March 31, 2024, an increase of \$17.9 billion from the prior fiscal year, primarily attributable to the appreciation of invested assets.

# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

CONTINUED

**Table 2**

Schedule of invested assets as of March 31, 2024, as compared to March 31, 2023:

	(Dollars in Thousands)			Percentage Change
	2024	2023	Dollar Change	
Domestic equity	\$ 76,125,183	\$ 75,054,447	\$ 1,070,736	1.4%
Global fixed income	52,574,780	48,479,229	4,095,551	8.4
International equity	37,944,432	33,944,147	4,000,285	11.8
Private equity	39,570,276	36,976,567	2,593,709	7.0
Real estate	24,864,472	25,054,357	(189,885)	(0.8)
Short-term investments	5,844,462	4,018,739	1,825,723	45.4
Real assets	9,335,274	7,811,998	1,523,276	19.5
Opportunistic funds/ARS investments	8,139,099	6,463,357	1,675,742	25.9
Mortgage loans	1,383,474	1,310,637	72,837	5.6
Credit	12,307,252	9,411,439	2,895,813	30.8
<b>Total investments</b>	<b>\$ 268,088,704</b>	<b>\$ 248,524,917</b>	<b>\$ 19,563,787</b>	<b>7.9%</b>

The largest percentage increases to the invested assets were in short-term investments and credit, which represent 2.2 percent and 4.6 percent of the total portfolio, respectively. In the short-term and credit portfolios, the growth reflects asset appreciation and new allocations to bring these portfolios closer to the targeted allocation.

The one decrease to the invested assets was in real estate, which represents 9.3 percent of the total portfolio. The decrease in real estate primarily reflects market depreciation.

# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

CONTINUED

**Table 3**

Summary schedule of changes in fiduciary net position for the year ended March 31, 2024, as compared to the year ended March 31, 2023:

	(Dollars in Thousands)			Percentage Change
	2024	2023	Dollar Change	
Additions:				
Net investment income (loss)	\$ 28,363,232	\$ (13,540,771)	\$ 41,904,003	309.5%
Total contributions	<u>5,931,673</u>	<u>5,133,771</u>	<u>797,902</u>	<u>15.5</u>
Total additions	34,294,905	(8,407,000)	42,701,905	507.9
Deductions:				
Total benefits paid	16,199,817	15,595,642	604,175	3.9
Administrative expenses	<u>235,478</u>	<u>207,995</u>	<u>27,483</u>	<u>13.2</u>
Total deductions	16,435,295	15,803,637	631,658	4.0
Net increase (decrease)	17,859,610	(24,210,637)	42,070,247	173.8
Net position, restricted for pension benefits — beginning of year	249,508,085	273,718,723	(24,210,638)	(8.8)
Net position, restricted for pension benefits — end of year	\$ 267,367,695	\$ 249,508,086	\$ 17,859,609	7.2%

The change in net investment income is primarily attributable to the net appreciation in fair value of investments from 2023 to 2024. The increase in total benefits paid is attributable to the number of new retirees.

# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

CONTINUED

## Economic Factors and Rates of Return

The Fund announced a positive investment performance for the fiscal year ended March 31, 2024, with a time-weighted rate of return of positive 11.56 percent. All asset class portfolios reported positive returns except for Real Estate. While Real Estate experienced a negative return, it outperformed its benchmark. Bolstered by mostly positive economic news and solid corporate earnings, total Public Equities led the Fund's strong performance providing a return of over 24 percent as markets maneuvered a Fed pivot on monetary policy and the ensuing uncertainty around interest rates. We continue to closely monitor geopolitical tensions, labor markets, and monetary policy as inflation continues to be reined in.

## Requests for Information

This financial report is designed to provide a general overview of the System's finances for all interested parties. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the New York State and Local Retirement System, 110 State Street, Albany, New York 12244-0001. The report can also be accessed on the Comptroller's website at: [www.osc.ny.gov/retirement/resources/financial-statements-and-supplementary-information](http://www.osc.ny.gov/retirement/resources/financial-statements-and-supplementary-information).



# BASIC FINANCIAL STATEMENTS

## Combining Basic Statement of Fiduciary Net Position

Year Ended March 31, 2024

	(Dollars in Thousands)		
	Employees' Retirement System	Police and Fire Retirement System	Total
<b>Assets:</b>			
<b>Investments (notes 2(b), 4, 5, 8, and 11):</b>			
Domestic equity	\$ 64,347,368	\$ 11,777,815	\$ 76,125,183
Global fixed income	44,440,599	8,134,181	52,574,780
Private equity	33,448,105	6,122,171	39,570,276
International equity	32,073,806	5,870,626	37,944,432
Real estate	21,017,530	3,846,942	24,864,472
Credit	10,403,118	1,904,134	12,307,252
Real assets	7,890,954	1,444,320	9,335,274
Opportunistic/ARS	6,879,847	1,259,252	8,139,099
Short-term	4,940,228	904,234	5,844,462
Mortgage loans	1,169,428	214,046	1,383,474
<b>Total investments</b>	<b>226,610,983</b>	<b>41,477,721</b>	<b>268,088,704</b>
<b>Securities lending collateral — invested (notes 7 and 8)</b>	<b>23,788,330</b>	<b>4,354,095</b>	<b>28,142,425</b>
<b>Forward foreign exchange contracts (notes 6 and 8)</b>	<b>29,285</b>	<b>5,360</b>	<b>34,645</b>
<b>Receivables:</b>			
Employers' contributions	41,598	84,867	126,465
Members' contributions	10,493	1,515	12,008
Member loans	969,392	13,410	982,802
Investment income	433,049	79,263	512,312
Investment sales	256,492	46,947	303,439
Other	81,763	13,109	94,872
<b>Total receivables</b>	<b>1,792,787</b>	<b>239,111</b>	<b>2,031,898</b>
<b>Capital assets, at cost, net of accumulated depreciation</b>	<b>528,826</b>	<b>96,794</b>	<b>625,620</b>
<b>Total assets</b>	<b>252,750,211</b>	<b>46,173,081</b>	<b>298,923,292</b>
<b>Liabilities:</b>			
Securities lending obligations (notes 7 and 8)	23,781,669	4,352,876	28,134,545
Forward foreign exchange contracts (notes 6 and 8)	29,287	5,361	34,648
Employer reserve and prepayments	1,799,650	244,806	2,044,456
Accounts payable — investments	580,706	106,290	686,996
Benefits payable	221,779	12,197	233,976
Other liabilities (note 2(f))	364,320	56,656	420,976
<b>Total liabilities</b>	<b>26,777,411</b>	<b>4,778,186</b>	<b>31,555,597</b>
<b>Net position, restricted for pension benefits</b>	<b>\$ 225,972,800</b>	<b>\$ 41,394,895</b>	<b>\$ 267,367,695</b>

See accompanying notes to basic financial statements.

# BASIC FINANCIAL STATEMENTS

CONTINUED

## Combining Basic Statement of Changes in Fiduciary Net Position

Year Ended March 31, 2024

	(Dollars in Thousands)		
	Employees' Retirement System	Police and Fire Retirement System	Total
<b>Additions:</b>			
<b>Income from investing activities:</b>			
Interest income	\$ 1,572,373	\$ 285,491	\$ 1,857,864
Dividend income	1,291,924	234,570	1,526,494
Other income	1,438,831	261,244	1,700,075
Less: investment expenses	(928,627)	(168,608)	(1,097,235)
Net appreciation in fair value of investments	20,573,883	3,735,558	24,309,441
<b>Total gain from investing activities</b>	<b>23,948,384</b>	<b>4,348,255</b>	<b>28,296,639</b>
<b>Income from securities lending activities:</b>			
Securities lending income	1,372,331	249,170	1,621,501
Less: securities lending rebates	(1,311,070)	(238,047)	(1,549,117)
Less: securities lending management fees	(4,901)	(890)	(5,791)
<b>Total income from securities lending activities</b>	<b>56,360</b>	<b>10,233</b>	<b>66,593</b>
<b>Total net investment gain</b>	<b>24,004,744</b>	<b>4,358,488</b>	<b>28,363,232</b>
<b>Contributions:</b>			
Employers	3,886,387	1,168,126	5,054,513
Members	676,976	111,795	788,771
Interest on accounts receivable	3,812	3,232	7,044
Other, net	60,973	20,372	81,345
<b>Total contributions</b>	<b>4,628,148</b>	<b>1,303,525</b>	<b>5,931,673</b>
<b>Total additions</b>	<b>28,632,892</b>	<b>5,662,013</b>	<b>34,294,905</b>
<b>Deductions:</b>			
<b>Benefits paid:</b>			
Retirement benefits	13,262,820	2,545,834	15,808,654
Death benefits	283,616	17,198	300,814
Other, net	86,243	4,106	90,349
<b>Total benefits paid</b>	<b>13,632,679</b>	<b>2,567,138</b>	<b>16,199,817</b>
<b>Administrative expenses</b>	<b>210,635</b>	<b>24,843</b>	<b>235,478</b>
<b>Total deductions</b>	<b>13,843,314</b>	<b>2,591,981</b>	<b>16,435,295</b>
<b>Net increase</b>	<b>14,789,578</b>	<b>3,070,032</b>	<b>17,859,610</b>
<b>Net position, restricted for pension benefits — beginning of year</b>	<b>211,183,223</b>	<b>38,324,863</b>	<b>249,508,086</b>
<b>Net position, restricted for pension benefits — end of year</b>	<b>\$ 225,972,801</b>	<b>\$ 41,394,895</b>	<b>\$ 267,367,696</b>

See accompanying notes to basic financial statements.

## Notes to Basic Financial Statements

March 31, 2024

### 1. Description of Plans

The Office of the New York State Comptroller administers the following plans: the New York State and Local Employees' Retirement System (ERS) and the New York State and Local Police and Fire Retirement System (PFRS), which are collectively referred to as the New York State and Local Retirement System (the System). The net position of the System is held in the New York State Common Retirement Fund (the Fund), which was established to hold all assets and record changes in fiduciary net position allocated to the System.

The Comptroller of the State of New York serves as the trustee of the Fund and is the administrative head of the System. The Comptroller is an elected official determined in a direct statewide election and serves a four-year term. Thomas P. DiNapoli has served as Comptroller since February 7, 2007. In November 2022, he was elected for a new term commencing January 1, 2023.

The external advisory committees appointed by the Comptroller meet periodically throughout the year and provide independent, expert assistance in guiding the Fund. These committees include: the Advisory Council for the Retirement System; the Investment Advisory Committee; the Real Estate Advisory Committee; the Actuarial Advisory Committee; and the Audit Advisory Committee.

System benefits are established under the provisions of the New York State Retirement and Social Security Law (RSSL). Once a public employer elects to participate in the System, the election is irrevocable. The New York State Constitution provides that pension membership is a contractual relationship and plan benefits cannot be diminished or impaired. Benefits can be changed for future members only by enactment of a State statute. Generally, members of the System are employees, other than teachers, of the State and its municipalities, other than New York City.

ERS and PFRS are cost-sharing, multiple-employer, defined benefit pension plans. The System is included in the State of New York's financial report as a pension trust fund. The Public Employees' Group Life Insurance Plan (GLIP) provides death benefits in the form of life insurance. In these statements, GLIP amounts are apportioned to and included in ERS and PFRS.

As of March 31, 2024, the number of participating employers for ERS and PFRS consisted of the following:

	ERS	PFRS
State	1	1
Counties	57	4
Cities	61	61
Towns	920	169
Villages	484	298
Other	771	38
School districts	692	—
<b>Total</b>	<b>2,986</b>	<b>571</b>

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

CONTINUED

As of March 31, 2024, the System membership for ERS and PFRS consisted of the following:

	ERS	PFRS
Retirees and beneficiaries currently receiving benefits	481,370	40,885
Active members	494,556	32,848
Inactive members*	183,048	3,350
<b>Total members and benefit recipients</b>	<b>1,158,974</b>	<b>77,083</b>
* Includes vested members not currently receiving benefits and nonvested members.		

### (a) Membership Tiers

Pension legislation enacted in 1973, 1976, 1983, 2009 and 2012 established distinct classes of membership. For convenience, the System uses a tier concept to distinguish these groups, generally:

#### ERS

- Tier 1** Those persons who last became members before July 1, 1973.
- Tier 2** Those persons who last became members on or after July 1, 1973, but before July 27, 1976.
- Tier 3** Generally, those persons who are State correction officers who last became members on or after July 27, 1976, but before January 1, 2010, and all others who last became members on or after July 27, 1976, but before September 1, 1983.
- Tier 4** Generally, except for correction officers, those persons who last became members on or after September 1, 1983, but before January 1, 2010.
- Tier 5** Those persons who last became members on or after January 1, 2010, but before April 1, 2012.
- Tier 6** Those persons who first became members on or after April 1, 2012.

#### PFRS

- Tier 1** Those persons who last became members before July 31, 1973.
- Tier 2** Those persons who last became members on or after July 31, 1973, but before July 1, 2009.
- Tier 3** Those persons who last became members on or after July 1, 2009, but before January 9, 2010.
- Tier 4** Not applicable.
- Tier 5** Those persons who last became members on or after January 9, 2010, but before April 1, 2012, or who were previously PFRS Tier 3 members who elected to become Tier 5.
- Tier 6** Those persons who first became members on or after April 1, 2012.

### (b) Vesting

Members who joined the System prior to January 1, 2010 need five years of service to be 100 percent vested. Members who joined on or after January 1, 2010 (ERS) or January 9, 2010 (PFRS) require ten years of service credit to be 100 percent vested.

As of April 9, 2022, legislation was passed that reduced the number of years of service credit from ten years to five years. Therefore, all members are vested when they reach five years of service.

### (c) Employer Contributions

Participating employers are required under the RSSL to contribute to the System at an actuarially determined rate adopted annually by the Comptroller. The average contribution rate for ERS for the fiscal year ended March 31, 2024 was approximately 13.1 percent of covered payroll. The average contribution rate for PFRS for the fiscal year ended March 31, 2024 was approximately 27.8 percent of covered payroll. Delinquent annual bills for employer contributions accrue interest at the actuarial interest rate applicable during the year. For the fiscal year ended March 31, 2024, the applicable interest rate was 5.9 percent.

### (d) Member Contributions

Generally, Tier 3, 4, and 5 members must contribute 3 percent of their salary to the System. As a result of Article 19 of the RSSL, eligible Tier 3 and 4 employees, with a membership date on or after July 27, 1976, who have ten or more years of membership or credited service with the System, are not required to contribute. Members cannot be required to begin making contributions or to make increased contributions beyond what was required when membership began. For Tier 6 members, the contribution rate varies from 3 percent to 6 percent depending on salary. Generally, Tier 5 and 6 members are required to contribute for all years of service.

### (e) Benefits

#### Tiers 1 and 2

**Eligibility:** Tier 1 members, with the exception of those retiring under special retirement plans, must be at least age 55 to be eligible to collect a retirement benefit. There is no minimum service requirement for Tier 1 members. Tier 2 members, with the exception of those retiring under special retirement plans, must have five years of service and be at least age 55 to be eligible to collect a retirement benefit. The age at which full benefits may be collected for Tier 1 is 55, and the full benefit age for Tier 2 is 62.

**Benefit Calculation:** Generally, the benefit is 1.67 percent of final average salary for each year of service if the member retires with less than 20 years. If the member retires with 20 or more years of service, the benefit is 2 percent of final average salary for each year of service. Tier 2 members with five or more years of service can retire as early as age 55 with reduced benefits. Tier 2 members age 55 or older with 30 or more years of service can retire with no reduction in benefits. As a result of Article 19 of the RSSL, Tier 1 and Tier 2 members who worked continuously from April 1, 1999 through October 1, 2000 received an additional month of service credit for each year of credited service they have at retirement, up to a maximum of 24 additional months.

Final average salary is the average of the wages earned in the three highest consecutive years of employment. For Tier 1 members who joined on or after June 17, 1971, each year's compensation used in the final average salary calculation is limited to no more than 20 percent greater than the previous year. For Tier 2 members, each year of final average salary is limited to no more than 20 percent greater than the average of the previous two years.

#### Tiers 3, 4, and 5

**Eligibility:** Tier 3, 4 and 5 members, with the exception of those retiring under special retirement plans, must have five years of service and be at least age 55 to be eligible to collect a retirement benefit. The full benefit age for Tiers 3, 4 and 5 is 62.

**Benefit Calculation:** Generally, the benefit is 1.67 percent of final average salary for each year of service if the member retires with less than 20 years. If a member retires with between 20 and 30 years of service, the benefit is 2 percent of final average salary for each year of service. If a member retires with more than 30 years of service, an additional benefit of 1.5 percent of final average salary is applied for each year of service over 30 years. Tier 3 and 4 members with five or more years of service and Tier 5 members with five or more years of service can retire as early as age 55 with reduced benefits. Tier 3 and 4 members age 55 or older with 30 or more years of service can retire with no reduction in benefits.

Final average salary is the average of the wages earned in the three highest consecutive years of employment. For Tier 3, 4 and 5 members, each year's compensation used in the final average salary calculation is limited to no more than 10 percent greater than the average of the previous two years.

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

CONTINUED

### Tier 6

**Eligibility:** Tier 6 members, with the exception of those retiring under special retirement plans, must have five years of service and be at least age 55 to be eligible to collect a retirement benefit. The full benefit age for Tier 6 is 63 for ERS members and 62 for PFRS members.

**Benefit Calculation:** Generally, the benefit is 1.67 percent of final average salary for each year of service if the member retires with less than 20 years. If a member retires with 20 years of service, the benefit is 1.75 percent of final average salary for each year of service. If a member retires with more than 20 years of service, an additional benefit of 2 percent of final average salary is applied for each year of service over 20 years. Tier 6 members with five or more years of service can retire as early as age 55 with reduced benefits.

Final average salary is the average of the wages earned in the five highest consecutive years of employment. For Tier 6 members, each year's compensation used in the final average salary calculation is limited to no more than 10 percent greater than the average of the previous four years.

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

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### Special Plans

The 25-Year Plans allow a retirement after 25 years of service with a benefit of one-half of final average salary, and the 20-Year Plans allow a retirement after 20 years of service with a benefit of one-half of final average salary. These plans are available to certain PFRS members, sheriffs, and correction officers.

### Disability Retirement Benefits

Disability retirement benefits are available to ERS and PFRS members unable to perform their job duties because of permanent physical or mental incapacity. There are three general types of disability benefits: ordinary, performance of duty, and accidental disability benefits. Eligibility, benefit amounts, and other rules such as any offsets of other benefits depend on a member's tier, years of service, and plan.

### Ordinary Death Benefits

Death benefits are payable upon the death, before retirement, of a member who meets eligibility requirements as set forth by law. The first \$50,000 of an ordinary death benefit is paid in the form of group term life insurance. The benefit is generally three times the member's annual salary. For most members, there is also a reduced post-retirement ordinary death benefit available.

### Post-Retirement Benefit Increases

A cost-of-living adjustment is provided annually to: (i) all retirees who have attained age 62 and have been retired for five years; (ii) all retirees who have attained age 55 and have been retired for ten years; (iii) all disability retirees, regardless of age, who have been retired for five years; (iv) ERS recipients of an accidental death benefit, regardless of age, who have been receiving such benefit for five years; and (v) the spouse of a deceased retiree receiving a lifetime benefit under an option elected by the retiree at retirement. An eligible spouse is entitled to one-half the cost-of-living adjustment amount that would have been paid to the retiree when the retiree would have met the eligibility criteria. This cost-of-living adjustment is a percentage of the annual retirement benefit of the eligible retiree as computed on a base benefit amount not to exceed \$18,000 of the annual retirement benefit. The cost-of-living percentage shall be 50 percent of the annual Consumer Price Index as published by the U.S. Bureau of Labor, but cannot be less than 1 percent or exceed 3 percent.



## 2. Summary of Significant Accounting Policies

### (a) Basis of Accounting

The System maintains records and accounts, and prepares financial statements using the accrual basis of accounting. Employer contributions are recognized when legally due, pursuant to statutory requirements, in accordance with the terms of each plan. Member contributions are based on earned member salaries and are recognized when due. Benefits, expenses, and refunds are recognized when due and payable.

### (b) Investments

Investments are recorded on a trade-date basis and reported at fair value. Fair value is defined as the amount that can reasonably be expected to be received for an investment in a current sale between a willing buyer and a willing seller. Due to the nature of investments, it is reasonable that changes in the value of investments will occur in the near future, and such changes could materially affect the amounts reported. The amounts reported as investments on the financial statements are allocated between ERS and PFRS based on each system's monthly average equity in the Fund. See note 4(c) for detailed information on the System's policy on investment valuation and note 8 for more detail regarding the methods used to measure the fair value of investments.

### (c) Member Loan Programs

Members who joined prior to January 1, 2018 are entitled to participate in a loan program that allows them to borrow up to 75 percent of their member contributions or \$50,000, whichever is less. Members who joined on or after January 1, 2018, may borrow up to 50 percent of their contribution balance or \$50,000, whichever is less. Repayment of outstanding amounts is generally made through payroll deductions within five years. The interest rate charged for COESC Member Loans is fixed at 1 percent below the actuarial interest rate at the time the loan is granted. The rate for loans issued during the fiscal year ended March 31, 2024 was 5.0 percent.

### (d) Capital Assets

Capital assets are capitalized at cost and depreciated on a straight-line basis over the related assets estimated useful lives.

The System has capitalized outlays associated with the redesign of its pension administration system. As of March 31, 2024, capitalized outlays for the project total \$588 million and is considered substantially complete. The cost will be depreciated over 15 years.

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

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### (e) Contributions Receivable

Employers' contributions receivable are presented net of withdrawals, refunds, advance employer payments, and credits due employers. Receivable amounts from participating employers include \$15.7 million for amortization of retirement incentives, new plan adoptions, and retroactive membership. The RSSL includes several provisions related to the amortization of employer contribution amounts. These include:

- Chapter 57 of the Laws of 2010 authorized the State and local employers to amortize a portion of their annual pension costs during periods when actuarial contribution rates exceed thresholds established by the statute. Amortized amounts will be paid in equal annual installments over a ten-year period including a rate of interest set by the Comptroller annually. Employers may prepay these amounts at any time without penalty. The first payment will be due in the fiscal year following the decision to amortize. Chapter 57 further provides that when contribution rates fall below legally specified levels and all outstanding amortizations have been paid, employers that elected to amortize will be required to pay additional moneys into reserve funds, specific to each employer, which will be used to offset their contributions in the future. These reserve funds will be invested separately from pension assets.

The following represents the amortized receivable balance from the State and Local participating employers as of March 31, 2024, including the statutory amortization threshold and interest rate, for each respective fiscal year:

### Chapter 57, Laws of 2010

Year	(Percentage of Payroll)		Interest	(Dollars in Millions)	
	ERS	PFRS		Local	
2011	9.5%	17.5%	5.00%	\$	—
2012	10.5	18.5	3.75		—
2013	11.5	19.5	3.00		—
2014	12.5	2.5	3.67		—
2015	13.5	21.5	3.15		2.0
2016	14.5	22.5	3.21		2.0
2017	15.1	23.5	2.33		0.3
2018	14.9	24.3	2.84		0.2
2019	14.4	23.5	3.64		—
2020	14.2	23.5	2.55		—
2021	14.1	24.4	1.33		—
2022	15.1	25.4	1.76		0.8
2023	14.1	26.4	3.61		—
2024	13.1	27.4	4.85		—
				\$	5.3

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

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- The fiscal year 2014 Enacted Budget included an alternate contribution program (the Alternate Contribution Stabilization Program) that provided certain participating employers with a one-time election to amortize slightly more of their required contributions than would be available for amortization under the 2010 legislation. In addition, the maximum payment period was increased from ten years to twelve years. The election was available to: counties, cities, towns, villages, BOCES, school districts and the four public health care centers operated in the counties of Nassau, Westchester and Erie. The State was not eligible to participate in the Alternate Contribution Stabilization Program.

The following represents the amortized receivable balance from Local participating employers as of March 31, 2024, including the statutory amortization threshold and interest rate, for each respective fiscal year:

### Chapter 57, Laws of 2013

Year	(Percentage of Payroll)		Interest	(Dollars in Millions)
	ERS	PFRS		Local
2014	12.0%	20.0%	3.76%	\$ 4.9
2015	12.0	20.0	3.50	6.2
2016	12.5	20.5	3.31	9.8
2017	13.0	21.0	2.63	9.0
2018	13.5	21.5	3.31	9.8
2019	14.0	22.0	3.99	6.2
2020	14.2	22.5	2.87	5.0
2021	14.1	23.0	1.60	6.0
2022	14.6	23.5	2.24	16.8
2023	14.1	24.0	3.70	11.9
2024	13.6	24.5	5.10	3.8
				\$ 89.4

### (f) Postemployment Benefits Other than Pensions

Employees of the System participate in a Postemployment Benefits Other than Pensions (OPEB) Plan administered by the State. The State has established a trust to fund the OPEB plan. Substantially all of the System's employees may become eligible for postemployment benefits if they reach retirement age while working for the System. The costs of providing the postemployment benefits, which primarily consists of health insurance coverage, are shared between the System and the retired employee.

The System's net OPEB liability was measured as of March 31, 2023 and was determined by an actuarial valuation as of April 1, 2022 rolled forward to March 31, 2023. The net OPEB liability and related OPEB amounts were allocated to the System based on the percentage of the System's full-time equivalents to the total full-time equivalents of the State. The OPEB amounts recorded by the System include the net OPEB liability (\$233.0 million), deferred outflows of resources (\$24.9 million), deferred inflows of resources (\$48.8 million) and OPEB expense (\$5.3 million). OPEB expense is recorded as part of administrative expenses on the combining statement of changes in fiduciary net position. Due to immateriality of the OPEB amounts to the System as a whole, the net OPEB liability, deferred outflows of resources and deferred inflows of resources are netted and included in other liabilities on the combining statement of fiduciary net position. Additionally, due to immateriality, the System has not presented all disclosures and required supplementary information prescribed by GASB Statement No. 75. For the fiscal year ended March 31, 2024, the System paid \$10.2 million in benefit payments.

### (g) Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingencies. These estimates are subject to a certain amount of uncertainty in the near term, which could result in changes in the values reported for those assets in the combined statement of fiduciary net position. Estimates also affect the reported amounts of income/additions and expenses/deductions during the reporting period. Actual results could differ from these estimates.

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

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### 3. System Reserves

The legally required reserves, as covered by provisions of the RSSL, are maintained by the System, are fully funded as of March 31, 2024, and are described below:

- *Annuity Savings Funds* – Funds in which contributions of Tier 1 and Tier 2 members are accumulated.
- *Annuity Reserve Funds* – Funds from which member contribution annuities are paid.
- *Pension Accumulation Funds* – Funds in which employer contributions and income from the investments of the System are accumulated.
- *Pension Reserve Funds* – Funds from which pensions are paid.
- *Designated Annuitant Funds* – Funds from which beneficiary annuities are paid.
- *Loan Insurance Funds* – Funds that provide loan insurance coverage for members with existing no default loan balances at time of death.
- *Group Life Insurance Plan Reserve* – Reserves that provide group term death benefits not to exceed \$50,000, payable upon the death of eligible members.
- *Coescalation (COESC) Contribution Funds* – Funds in which member contributions are accumulated. These funds are transferred to the Pension Accumulation Fund at retirement.

As of March 31, 2024, the System reserves for ERS and PFRS consisted of the following:

	(Dollars in Thousands)	
	ERS	PFRS
Annuity savings	\$ 2,085	\$ 74,785
Annuity reserve	43,772	45,034
Pension accumulation	81,839,389	11,528,255
Pension reserve	134,192,196	29,238,016
Designated annuitant	42,496	23,973
Loan insurance	2,286	152
Group Life Insurance Plan reserve	114,000	3,365
COESC contribution	9,736,576	481,315
<b>Total</b>	<b>\$ 225,972,800</b>	<b>\$ 41,394,895</b>

## 4. Investments

### (a) Investment Policy

The State Comptroller, currently Comptroller Thomas P. DiNapoli, is Trustee of the Fund. He is directly accountable for the investment of Fund assets and for the oversight and management of the Fund. Comptroller DiNapoli is responsible for implementing an asset allocation with an appropriate balance of risk and return. The Trustee has put in place investment policies and practices designed to ensure that investments are made for the exclusive benefit of the participants and beneficiaries of the System, on whose behalf the assets of the Fund are invested, and that Fund investments are made with the care that a prudent person serving in a like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with like aims – the “prudence” and “exclusive benefit” fiduciary standards of investment. Additionally, the Trustee has adopted policies and practices to ensure that the Fund is managed with high levels of ethical conduct and transparency.

The Comptroller seeks the input of a wide range of internal and external advisors to determine the allocation of assets and the appropriate investment choices for the Fund. The Comptroller appoints a Chief Investment Officer to oversee the Division of Pension Investment and Cash Management (PICM) operations, manage staff, and supervise investments on a day-to-day basis. The Fund also relies on advice from a network of outside advisors, consultants, and legal counsel, as well as the members of independent external advisory committees appointed by the Comptroller. Outside advisors and internal investment staff are part of the chain of approval that must recommend all investment decisions before they reach the Comptroller for final approval.

The asset allocation is not intended to be an absolute limit on the type of investments that can be made by the Comptroller or considered by staff. The Comptroller is expressly permitted to invest the assets of the Fund pursuant to various provisions of State law, including, among others, Article 4-A of the RSSL, which also contains limitations on the amount and quality of investments the Fund may hold in certain asset categories. Investments purchased pursuant to these provisions are so-called “legal list” investments. In addition to the foregoing, section 177(9) of the RSSL contains a provision that currently provides that up to 35 percent of the Fund’s assets may be placed in investments not specifically authorized by any other provision of law. In making investments under this provision, the Comptroller is subject to the exclusive benefit and prudence standards in the statute. Subject to such standards, investments made under this provision must also, to the extent reasonably possible, benefit the overall economic health of the State. Investments made pursuant to section 177(9) of the RSSL are so-called “basket clause” investments.

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

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### (b) Asset Allocation

The following was the adopted asset allocation policy as of March 31, 2024:

Asset Class	Target Allocation
Domestic equity	32.0%
International equity	15.0
Private equity	10.0
Real estate	9.0
Opportunistic/Absolute Return Strategy	3.0
Credit	4.0
Real assets	3.0
Fixed Income	23.0
Cash	1.0
	<b>100.0%</b>

### (c) Methods Used to Value Investments

Equity securities traded on a national or international exchange are reported at current quoted fair values.

Bonds and other fixed income assets are primarily reported at fair values obtained from independent pricing services.

Mortgages are valued on the basis of future principal and interest payments and are discounted at prevailing interest rates for similar instruments.

Direct investments in real estate are valued based on independent appraisals made every three years or according to the contract.

Real estate partnerships, global fixed income funds, commingled international equity funds and various alternative investments (private equity, opportunistic/ARS funds, real assets, and credit) are reported at net asset values as provided by the general partners or investment managers.

Information on securities lending is available in note 7. Information on foreign currency risks and derivative financial instruments can be found in note 5(f) and note 6, respectively.

The Fund trades in foreign exchange contracts in the normal course of its investing activities in order to manage exposure to market risks. Such contracts, which are generally for a period of less than one year, are used to purchase and sell foreign currency at a guaranteed future price. These contracts are recorded at fair value using foreign currency exchange rates.

### (d) Rates of Return

In accordance with U.S. generally accepted accounting principles, the money-weighted rate of return on plan investments, net of investment expenses, was 11.34 percent for the year ended March 31, 2024. For internal purposes, the System evaluates investment performance using the time-weighted rate of return, gross of certain investment fees, which was 11.56 percent for the year ended March 31, 2024.

## 5. Deposit and Investment Risk Disclosure

### (a) Custodial Credit Risk for Investments

Investment securities are exposed to custodial credit risk if the securities are not registered in the name of the Fund, or are held either by the counterparty or the counterparty's trust department or agent, but not in the name of the Fund.

Equity and fixed income investments owned directly by the Fund, which trade in the United States (U.S.) markets, are generally held by the Fund's custodian, in separate accounts, in the name of the Comptroller of the State of New York in Trust for the Fund. These securities are typically held in electronic form through the Federal Book Entry System and by the Depository Trust Company (DTC) and its subsidiaries acting as an agent of the Fund's custodian bank. Securities held directly by the Fund that trade in markets outside the U.S. are held by a subsidiary of the Fund's custodian bank in the local market, a bank performing custodial services in the local market acting as an agent for the Fund's custodian bank, and in some foreign markets, the securities are held in electronic form by a DTC subsidiary or an organization similar to DTC.

Equity investments held indirectly by the Fund via limited partnerships, commingled investment funds, joint ventures, and other similar vehicles are held in custody by an organization contracted by the general partner and/or the investment management firm responsible for the management of each investment organization.

Title to real estate invested in by the Fund is held either by a real estate holding company or a real estate investment fund. Ownership of mortgage assets is documented by the Fund's holding of original mortgage and note documents by the Office of the State Comptroller's PICM.

### (b) Custodial Credit Risk for Deposits

Deposits are exposed to custodial credit risk if the deposits are not covered by depository insurance or the deposits are uncollateralized, collateralized with securities held by the pledging financial institution, or collateralized with securities held by the pledging institution's trust department or agent, but not in the name of the Fund.

In accordance with existing policies and procedures, the PICM in the Office of the State Comptroller monitors deposit balances for the purpose of determining collateralization levels. Collateral sufficient to cover all uninsured deposits is held at the State's custodial bank.



# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

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### (c) Interest Rate Risk

The System is subject to interest rate risk, which is the risk that changes in market interest rates will adversely affect the fair value of the Fund's fixed income securities. Pursuant to the Fund's investment policies and procedures and to address changing economic factors and their impact on various sectors of the economy, PICM staff meets regularly to discuss the investment strategy for the fixed income portfolio. Several factors are taken into account when formulating this strategy, including sector weightings and the current duration of the portfolio.

The price volatility of the Fund's fixed income holdings is measured by duration. Effective duration is a measure of the price sensitivity of a bond to interest rate movements. Effective duration follows the concept that interest rates and bond prices move in opposite directions.

As of March 31, 2024, the duration of the fixed income portfolio is as follows (Dollars in Thousands):

Category	Fair Value	Percentage of Portfolio	Effective Duration (In Years)
<b>Global fixed income:</b>			
<b>Core Portfolio:</b>			
Treasury	\$ 21,391,481	40.7%	7.78
Treasury Inflation-Protected Securities (TIPS)	250,909	0.5	12.29
Federal agency	408,101	0.8	2.64
Corporate	12,487,614	23.7	5.30
Asset-backed	2,134,971	4.1	2.71
Commercial mortgage-backed	1,092,985	2.1	2.54
Mortgage-backed	8,409,386	16.0	5.14
Collateralized loan obligations	2,915,380	5.5	0.12
Municipal bonds	594,097	1.1	9.25
<b>Core portfolio</b>	<b>49,684,924</b>	<b>94.5</b>	<b>5.93</b>
<b>Externally managed funds:</b>			
Advent Capital	473,965	0.9	2.96
Calvert Research and Management	260,962	0.5	5.97
DoubleLine Capital	217,478	0.4	14.14
Morgan Stanley Investment Management	232,004	0.4	7.7
New Century Advisors	538,429	1.0	5.4
Ramirez Asset Management	345,650	0.7	7.72
Schroder Investment Management	244,900	0.5	1.97
Teachers Advisors (Nuveen)	241,605	0.5	6.22
Wellington Management Company	334,863	0.6	6.88
<b>Total global fixed income</b>	<b>\$ 52,574,780</b>	<b>100.0%</b>	
<b>Mortgage loans:</b>			
Berkadia	1,015,226	73.4	4.54
CPC	368,248	26.6	12.18
<b>Total mortgage loans</b>	<b>\$ 1,383,474</b>	<b>100.0%</b>	
<b>Total</b>	<b>\$ 53,958,254</b>		

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

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### (d) Credit Risk of Debt Securities

Fixed income obligations purchased pursuant to section 177(1-a) of the RSSL must be investment grade at the time of their acquisition. A bond is considered investment grade if its credit rating is Baa or higher by Moody's or BBB– or higher by Standard & Poor's. Fixed income obligations purchased pursuant to section 177(9) of the RSSL, the "basket clause," are subject to a standard of prudence. As of March 31, 2024, credit ratings, obtained from several industry rating services, for the fixed income portfolio are as follows (Dollars in Thousands):

Quality Rating	Fair Value	Percentage of Fair Value
Global fixed income:		
AAA	\$ 6,463,719	12.29%
AA	32,778,376	62.35
A	6,615,718	12.58
BBB	6,297,007	11.98
BB	48,070	0.09
B	15,159	0.03
CCC	13,878	0.03
C	5,441	0.01
Not Rated	337,412	0.64
<b>Total Global fixed income</b>	<b>\$ 52,574,780</b>	<b>100.0%</b>
Mortgage loans:		
Not Rated	\$ 1,383,474	100.0%
<b>Total</b>	<b>\$ 53,958,254</b>	

### (e) Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the Fund's investment in a single issuer.

As of March 31, 2024, the System did not hold any investments in any one issuer that totaled 5 percent or more of the pension plan's fiduciary net position. Investments issued or explicitly guaranteed by the U.S. government and pooled investments are excluded.

Issuer limits for investments held by the Fund are established by law and by policy guidelines adopted by PICM.

Short-term fixed income investments not purchased pursuant to section 177(9) of the RSSL are generally limited to the following investment types maturing in one year or less:

- Obligations for which the full faith and credit of the U.S. government is pledged to provide payment of interest and principal.
- Obligations issued by any Federal Home Loan Bank or obligations fully guaranteed as to principal and interest by the Federal National Mortgage Association or the Federal Home Loan Mortgage Corporation.
- Commercial paper that has received the highest rating from two nationally recognized rating services. A maximum of \$500 million of the short-term portfolio may be invested in any one commercial paper issuer.
- Simultaneous purchase and sale of U.S. Treasury obligations may be executed with Primary Government dealers.
- Corporate and asset-backed securities (ABS) that are rated investment grade by two nationally recognized rating services. ABS must have a weighted average life of one year or less.

Fixed income investments not purchased pursuant to section 177(9) of the RSSL are generally limited to the following investment types with maturities longer than one year:

- Obligations for which the full faith and credit of the U.S. government is pledged to provide payment of principal and interest.
- Obligations payable in U.S. dollars issued by any department, agency, or political subdivision of the U.S. government or issued by any corporation, company, or other issuer of any kind or description created or existing under the laws of the U.S., any state of the U.S., the District of Columbia, or the Commonwealth of Puerto Rico, and obligations payable in U.S. funds of Canada or any province or city of Canada, provided each obligation at the time of investment shall be rated investment grade by two nationally recognized rating services (or by one nationally recognized rating service in the event only one such service rates such obligation). The aggregate investment by the Fund in the obligations of any one issuer shall not exceed 2 percent of the assets of the Fund or 5 percent of the direct liabilities of the issuer.
- Interest-bearing obligations payable in U.S. funds, which at the time of investment are rated in one of the three highest rating grades by each rating service approved by the New York State Department of Financial Services that has rated such obligations. The aggregate amount invested in the obligations of any single issuer may not exceed 1 percent of the assets of the Fund.
- Bonds issued or guaranteed by the State of Israel and approved by the United States Comptroller of the Currency, payable in U.S. dollars, not to exceed 5 percent of the assets of the Fund.
- Obligations issued or guaranteed by the International Bank for Reconstruction and Development (not to exceed 5 percent of the assets of the Fund), the Inter-American Development Bank, the Asian Development Bank, or the African Development Bank.

Fixed income investments purchased pursuant to section 177(9) of the RSSL are subject to standards of prudence and the exclusion benefit rules. Subject to such standards, investments made under section 177(9) must, to the extent reasonably possible, benefit the overall economic health of the State.

### (f) Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The Fund has exposure through direct investments in international equities, international equity commingled funds, international real estate investments, international private equity investments, international opportunistic/ARS funds, international real asset funds and international credit funds. The Fund's asset allocation and investment policies allow for active and passive investments in international securities. The Fund permits the managers of direct investments in international equities to use forward currency contracts to manage their exposure to foreign currencies relative to the U.S. dollar. Where the Fund participates in commingled funds, limited partnerships, or other investment arrangements, the decision whether or not to use forward currency contracts to manage their foreign currency exposure is left up to the individual investment managers. To address the impact of changes in exchange rates, forward foreign exchange contracts are allowed when used to lessen portfolio volatility or hedge the portfolio's currency exposure.

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

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Foreign investments included in the combining basic statement of fiduciary net position as of March 31, 2024 are as follows:

(Dollars in Thousands)

	Equity	Cash	Real Estate	Private Equity, OARS, Real Assets, and Credit	Total
Albanian Lek	\$ —	\$ —	\$ 2	\$ —	\$ 2
Algerian Dinar	—	—	43	—	43
Angolan Kwanza	—	—	—	911	911
Argentine Peso	—	—	—	3,727	3,727
Australian Dollar	428,835	5,857	175,666	809,294	1,419,652
Azerbaijani Manat	—	—	—	117	117
Bahamian Dollar	—	—	8,631	297	8,928
Bahraini Dinar	—	—	—	6,732	6,732
Barbadian Dollar	—	—	—	385	385
Bermudian Dollar	—	—	—	237,222	237,222
Botswana Pula	—	—	—	10,353	10,353
Brazilian Real	373,439	939	47,458	629,412	1,051,248
British Pound Sterling	2,646,995	7,421	764,312	5,245,072	8,663,800
Bulgarian Lev	—	—	65	23,347	23,412
Burmese Kyat	—	—	—	2,099	2,099
Cambodian Riel	—	—	—	177	177
Canadian Dollar	554,254	2,355	251,123	1,211,733	2,019,465
Cayman Islands Dollar	—	—	—	1,136,345	1,136,345
Central African CFA Franc	—	—	—	1,108	1,108
Chilean Peso	6,223	96	—	116,894	123,213
Chinese Renminbi (Yuan)	311,535	15	168,006	1,404,668	1,884,224
Colombian Peso	703	32	1	73,816	74,552
Costa Rican Colón	—	—	—	(1,257)	(1,257)
Czech Koruna	4,056	62	47,301	19,893	71,312
Danish Krone	674,489	1,719	127,603	303,256	1,107,067
Dominican Peso	—	—	—	(663)	(663)
Egyptian Pound	1,055	87	2,767	20,328	24,237
Ethiopian Birr	—	—	—	119	119
Euro	5,445,868	24,953	2,086,858	8,205,918	15,763,597
Georgian Lari	—	—	—	33	33
Ghanaian Cedi	—	—	—	19,050	19,050
Guatemalan Quetzal	—	—	—	1,608	1,608
Honduran Lempira	—	1,353	—	(421)	932
Hong Kong Dollar	1,113,411	6	37,108	255,809	1,406,334
Hungarian Forint	29,888	—	—	11,911	41,799
Icelandic Króna	—	—	—	6,870	6,870
Indian Rupee	825,141	1,655	227,068	1,762,102	2,815,966
Indonesian Rupiah	111,330	80	—	118,633	230,043
Iraqi Dinar	—	—	—	460	460
Israeli New Shekel	23,490	1,118	—	720,544	745,152
Jamaican Dollar	—	—	—	24,537	24,537
Japanese Yen	2,959,561	3,356	73,928	411,454	3,448,299
Jordanian Dinar	—	—	—	(658)	(658)
Kazakhstani Tenge	—	—	—	(929)	(929)
Kenyan Shilling	—	—	—	23,160	23,160
Kuwaiti Dinar	219	3	—	—	222

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## Notes to Basic Financial Statements

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	Equity	Cash	Real Estate	Private Equity, OARS, Real Assets, and Credit	Total
Lebanese Pound	\$ —	\$ —	\$ —	\$ 207	\$ 207
Malaysian Ringgit	51,383	48	—	86,120	137,551
Maldivian Rufiyaa	—	—	7,049	9,221	16,270
Mauritian Rupee	—	—	25	28,007	28,032
Mexican Peso	142,070	270	688	260,697	403,725
Moroccan Dirham	—	—	—	10,387	10,387
Mozambican Metical	—	—	—	888	888
New Taiwan Dollar	791,178	2,009	—	93,155	886,342
New Zealand Dollar	519	14	3,923	47,953	52,409
Nigerian Naira	—	—	—	102,419	102,419
Norwegian Krone	68,690	115	11,891	102,965	183,661
Omani Rial	—	—	—	(206)	(206)
Panamanian Balboa	—	—	—	(613)	(613)
Paraguayan Guaraní	—	—	—	(930)	(930)
Peruvian Sol	53	—	—	63,029	63,082
Philippine Peso	6,300	40	—	82,623	88,963
Polish Zloty	49,116	59	162,385	75,945	287,505
Qatari Riyal	4,542	207	—	9,375	14,124
Romanian Leu	—	—	784	3,770	4,554
Russian Ruble	—	—	900	13,142	14,042
Saudi Riyal	71,876	260	—	(3,478)	68,658
Serbian Dinar	—	—	1	2,018	2,019
Singapore Dollar	270,952	144	13,381	324,305	608,782
South African Rand	77,571	116	—	32,538	110,225
South Korean Won	641,161	245	45,784	457,616	1,144,806
Sri Lankan Rupee	—	—	72	2,054	2,126
Swazi Lilangeni	418,246	—	—	—	418,246
Swedish Krona	1,055,739	960	152,934	834,946	2,044,579
Swiss Franc	—	10,191	—	776,054	786,245
Tanzanian Shilling	—	—	—	578	578
Thai Baht	113,944	—	—	74,827	188,771
Tunisian Dinar	—	—	—	3,190	3,190
Turkish Lira	42,276	115	—	61,459	103,850
Ugandan Shilling	—	—	—	5,274	5,274
Ukrainian Hryvnia	—	—	2,101	19,004	21,105
United Arab Emirates Dirham	38,672	347	12,200	90,685	141,904
Uruguayan Peso	—	—	—	(1,494)	(1,494)
Venezuelan Sovereign Bolívar	—	—	—	8,823	8,823
Vietnamese đồng	472	68	499	111,237	112,276
West African CFA Franc	—	—	—	5,691	5,691
Zambian Kwacha	—	—	—	800	800
Other	—	—	20,134	—	20,134
Total Subject to Foreign Currency Risk	19,355,252	66,315	4,452,691	26,609,747	50,484,005
Commingled International Equity in US Dollars	14,301,664	—	—	—	14,301,664
Foreign Investments in US Dollars	4,287,516	—	301	14,380,661	18,668,478
<b>Total foreign investments</b>	<b>\$ 37,944,432</b>	<b>\$ 66,315</b>	<b>\$ 4,452,992</b>	<b>\$ 40,990,408</b>	<b>\$ 83,454,147</b>

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

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### 6. Derivatives

A derivative is generally defined as an investment contract or security with a value that depends on, or is derived from, the value of an underlying asset, reference rate, or financial index.

#### Forward Currency Contracts

The System may enter into forward currency contracts to manage exposure to fluctuations in foreign currency exchange rates on portfolio holdings. The System also enters into forward exchange contracts to settle future obligations. A forward exchange contract is a commitment to purchase or sell a foreign currency at a future date at a negotiated forward rate. A contract is classified as a forward contract when the settlement date is more than two days after the trade date. Risk associated with such contracts includes movement in the value of a foreign currency relative to the U.S. dollar. The contracts are valued at forward exchange rates and include net appreciation/depreciation in the combining statement of fiduciary net position. Realized gain or loss on forward currency contracts is the difference between the original contract and the closing value of such contract and is included in the combining basic statement of changes in fiduciary net position.

The table below summarizes the fair value of foreign currency contracts as of March 31, 2024 (Dollars in Thousands):

Currency	Forward Currency Contracts	Spot Currency Contracts	Totals
Australian Dollar	\$ (2,454)	\$ —	\$ (2,454)
Brazilian Real	—	(108)	(108)
British Pound Sterling	(96)	—	(96)
Canadian Dollar	256	175	431
Danish Krone	(488)	—	(488)
Euro	(6,109)	—	(6,109)
Hong Kong Dollar	(1,924)	(136)	(2,060)
Hungarian Forint	(4)	—	(4)
Israeli New Shekel	—	(137)	(137)
Japanese Yen	(514)	10,529	10,015
New Zealand Dollar	5	—	5
Norwegian Krone	(118)	—	(118)
Polish Zloty	(5)	—	(5)
Saudi Riyal	—	(81)	(81)
Singapore Dollar	149	(14)	135
South African Rand	(33)	—	(33)
South Korean Won	—	(157)	(157)
Swedish Krona	(1,155)	—	(1,155)
Swiss Franc	(2,713)	—	(2,713)
Thai Baht	—	(25)	(25)
Turkish Lira	—	(9)	(9)
US Dollar	15,201	(10,033)	5,168
<b>Total</b>	<b>\$ (2)</b>	<b>\$ 4</b>	<b>\$ 2</b>

## 7. Securities Lending Program

Section 177-d of the RSSL authorizes the Fund to enter into security loan agreements with broker/dealers and state or national banks. The Fund has one provider to manage a securities lending program. This program is subject to a written contract between the Fund and the Contractor who acts as securities lending agent for the Fund. The securities lending agent is authorized to lend securities within the borrower limits and guidelines established by the Fund. Types of collateral received from borrowers for securities loaned are cash, government securities, and obligations of federal agencies. The securities lending provider is authorized to invest the cash collateral in short-term investments that are legal for the Fund. These include domestic corporate and bank notes, U.S. Treasury obligations, obligations of federal agencies, repurchase agreements, and specific asset-backed securities. All rights of ownership to securities pledged as collateral remain with the borrower except in the event of default. As of March 31, 2024, there were no violations of legal or contractual provisions. The Fund has not experienced any losses resulting from the default of a borrower or lending agent during the year ended March 31, 2024.

The Fund lends fixed income, domestic equity, and international equity securities to approved broker/dealers. Collateral for securities loaned equals 102 percent of fair market value for domestic securities and 105 percent for international securities. Credit risk associated with the investment of cash collateral pledged by borrowers is mitigated by the maturity restrictions, percentage limitations, and rating requirements for individual asset classes included in the Fund's reinvestment guidelines. The Contractor acknowledges responsibility to reimburse the Fund for losses that might arise from managing the program in a manner inconsistent with the contract. The Fund manages its market risk by recording investments at market value daily and maintaining the value of the collateral held by the Fund in excess of the value of the securities loaned. As of March 31, 2024, the fair value of securities on loan was \$27.71 billion. The associated collateral was \$28.22 billion, all of which was cash collateral. The cash collateral has been reinvested in other instruments, which had a fair value of \$28.14 billion as of March 31, 2024. The securities lending obligations were \$28.13 billion. The unrealized gain in invested cash collateral on March 31, 2024 was \$7.88 million, which is reported in the combining basic statement of changes in fiduciary net position as part of "Net appreciation in fair value of investments."

All open security loans can be terminated on demand by either the Fund or the borrower. To provide sufficient liquidity, the policy of the Fund is to maintain a minimum of 5 percent collateral in overnight investments, 10 percent must mature within seven days, and 20 percent must mature within 30 days. While the Fund's Securities Lending Investment Guidelines allow investments up to a maximum of three years for U.S. Treasury and federal agency obligations and one year for all other investments, the average term of open security loans at March 31, 2024 was 16.5 days. All loans were open loans. There were no direct matching loans.

The collateral pool is valued at fair value obtained from independent pricing services.



### 8. Fair Value Measurement

The System's investments, measured and reported at fair value, including securities lending collateral and obligations and forward foreign exchange contracts, are classified according to the following hierarchy in which the levels are based on the nature of inputs used to measure the fair value of the investment:

Level 1 – Investment fair values based on prices quoted or published in active markets for identical assets.

Level 2 – Investment fair values based on observable inputs for the assets either directly or indirectly, other than those considered Level 1 inputs, which may include quoted or published prices for identical assets in markets that are not considered to be active, and quoted or published prices of similar assets in active or inactive markets.

Level 3 – Investment fair values based on unobservable inputs.

The categorization of investments within the hierarchy above is based solely upon the objectivity of the inputs used in the measurement of the fair value of the investments and does not reflect the level of risk associated with the investments. Investments classified in Level 1 of the fair value hierarchy are valued from predetermined external pricing vendors or primary dealers who source quoted or published prices in active markets which are readily attainable exit values of these securities. Investments classified in Level 2 are subject to alternative pricing sources, including a combination of price sources, descriptive data and pricing models based on attributes such as spread data, sector, quality, duration, and prepayment characteristics. Investments classified as Level 3 are valued using best available sources such as property appraisals, discounted cash flow models and public market comparables of similar assets where applicable. The values are supplied by advisors or general partners who hold those or similar assets in investment vehicles they oversee. These pricing sources may or may not be indicative of realizable exit values attainable for the assets.

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

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The table below summarizes assets and liabilities carried at fair value based on levels from the fair value hierarchy as of March 31, 2024, with certain assets carried at net asset value (NAV) and cost also included to allow reconciliation to the statement of fiduciary net position (Dollars in Thousands):

	Total	Level 1	Level 2	Level 3
<b>Assets:</b>				
<b>Investments by fair value level:</b>				
<b>Fixed income securities:</b>				
Short-term instruments	\$ 5,165,063	\$ —	\$ 5,165,063	\$ —
Global fixed income securities	52,574,780	115,944	52,458,836	—
<b>Total fixed income securities</b>	<b>57,739,843</b>	<b>115,944</b>	<b>57,623,899</b>	<b>—</b>
<b>Equity securities:</b>				
Domestic equities	71,211,895	71,211,706	—	189
International equities	36,081,825	36,081,672	18	135
<b>Total equity securities</b>	<b>107,293,720</b>	<b>107,293,378</b>	<b>18</b>	<b>324</b>
<b>Credit</b>	<b>17,643</b>	<b>—</b>	<b>—</b>	<b>17,643</b>
<b>Mortgages</b>	<b>1,383,474</b>	<b>—</b>	<b>—</b>	<b>1,383,474</b>
<b>Private equity</b>	<b>357,690</b>	<b>—</b>	<b>—</b>	<b>357,690</b>
<b>Opportunistic/ARS</b>	<b>546</b>	<b>—</b>	<b>—</b>	<b>546</b>
<b>Real assets</b>	<b>151,581</b>	<b>—</b>	<b>—</b>	<b>151,581</b>
<b>Real estate</b>	<b>1,437,383</b>	<b>—</b>	<b>—</b>	<b>1,437,383</b>
<b>Securities lending collateral</b>	<b>24,876,441</b>	<b>—</b>	<b>24,876,441</b>	<b>—</b>
<b>Forward foreign exchange contracts</b>	<b>34,645</b>	<b>—</b>	<b>34,645</b>	<b>—</b>
<b>Total investment assets by fair value level</b>	<b>\$ 193,292,966</b>	<b>\$ 107,409,322</b>	<b>\$ 82,535,003</b>	<b>\$ 3,348,641</b>
<b>Investments measured at cost:</b>				
Securities lending collateral	\$ 3,265,984			
<b>Total investments measured at cost</b>	<b>\$ 3,265,984</b>			
<b>Investments measured at Net Asset Value (NAV):</b>				
Domestic equities <sup>1</sup>	\$ 4,913,288			
International equities <sup>2</sup>	1,862,607			
<b>Alternative investments:<sup>3</sup></b>				
Credit	12,289,609			
Private equity	39,212,586			
Opportunistic/ARS	8,138,553			
Real assets	9,183,693			
Real estate	23,427,089			
<b>Total alternative investments</b>	<b>92,251,530</b>			
<b>Total investments measured at NAV</b>	<b>\$ 99,027,425</b>			
<b>Investment related cash and cash equivalents not included in above</b>	<b>679,399</b>			
<b>Total investment assets</b>	<b>\$ 296,265,774</b>			
<b>Liabilities:</b>				
<b>Investments by fair value level:</b>				
Forward foreign exchange contracts	(34,648)	—	(34,648)	—
<b>Total investment liabilities by fair value level</b>	<b>\$ (34,648)</b>	<b>\$ —</b>	<b>\$ (34,648)</b>	<b>\$ —</b>

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

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The table below summarizes liquidity information for investments valued at NAV (Dollars in Thousands):

Investments measured at NAV	Amount	Unfunded Commitments	Redemption Frequency	Notice Period
Domestic equities <sup>1</sup>	\$ 4,913,288	\$ N/A	N/A, Weekly, Monthly, Annually	N/A, 2-90 days
International equities <sup>2</sup>	1,862,607	N/A	Daily, Monthly, Quarterly	15-120 days
Alternative investments <sup>3</sup>				
Credit	12,289,609	9,069,121	N/A, Monthly, 1-3 years	N/A, 1-60 days, 18 months
Private equity	39,212,586	14,726,447	N/A	N/A
Opportunistic/ARS	8,138,553	4,442,090	N/A, Monthly, Quarterly	NA, 5-90 days
Real assets	9,183,693	5,694,795	N/A	N/A
Real estate	23,427,089	7,887,932	N/A	N/A
<b>Total investments measured at NAV</b>	<b>\$ 99,027,425</b>	<b>\$ 41,820,385</b>		

<sup>1</sup> Domestic equities consist of one commingled investment vehicle and one fund for which the System is the only investor. The funds invest primarily in publicly traded domestic equity securities. The investments are valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.

<sup>2</sup> International equities consist of six commingled investment vehicles and one fund for which the System is the only investor. The funds invest primarily in publicly traded international equity securities. The investments are valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.

<sup>3</sup> Alternative investments include private equity, opportunistic/ARS funds, real assets, credit and real estate through various fund structures. Private equity (13.3 percent\* at March 31, 2024) consists of buyout, growth equity, co-investments, special situations, distressed/turnaround, venture capital, and fund of funds. Opportunistic/ARS (2.8 percent\* at March 31, 2024) consists of investments in strategies including hedged equity, credit, global macro, closed-end funds, and investments that don't fit the mandates of the other asset classes. Real assets (3.2 percent\* at March 31, 2024) consist of commodities, farmland, capital assets, infrastructure, and renewables. Credit (4.2 percent\* at March 31, 2024) consists of non-investment grade public and private credit strategies in direct lending, distressed and special situations, specialty finance, structured credit and real assets credit through closed-end and open-end funds, co-investments, separately managed accounts and fund-of-funds. Real estate (8.4 percent\* at March 31, 2024) consists of investments in separate accounts, joint ventures, co-investments and commingled funds. The fair values of the alternative investments have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partner's capital. NAV is used as a practical expedient to estimate fair value. Private equity, real assets, and real estate are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over a span of 5-10 years.

\*Percentages are stated relative to total investments and securities lending collateral invested.

See note 7 for detailed securities lending information and note 6 for detail forward foreign currency information.

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

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### 9. Net Pension Liability of Participating Employers

The components of the net pension liability of the employers participating in the System as of March 31, 2024, were as follows:

	(Dollars in Thousands)		
	Employees' Retirement System	Police and Fire Retirement System	Total
Employers' total pension liability	\$ 240,696,851	\$ 46,137,717	\$ 286,834,568
Fiduciary net position	225,972,801	41,394,895	267,367,696
<b>Employers' net pension liability</b>	<b>\$ 14,724,050</b>	<b>\$ 4,742,822</b>	<b>\$ 19,466,872</b>
Ratio of fiduciary net position to the employers' total pension liability	93.88%	89.72%	93.21%

#### (a) Actuarial Assumptions

The total pension liability at March 31, 2024 was determined using a roll forward procedure to advance the liability calculated using system assumptions and member demographics from the actuarial valuation completed as of April 1, 2023.

Economic assumptions used in the April 1, 2023 actuarial valuation include:

	ERS	PFRS
Inflation	2.9%	2.9%
Salary increases	4.4	6.2
Investment rate of return (net of investment expense, including inflation)	5.9	5.9
Cost-of-living adjustments	1.5	1.5

To set the long-term expected rate of return on pension plan investments, consideration was given to a building-block method using best-estimate ranges of expected future real rates of return (expected return, net of investment expenses and inflation) 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.

Demographic assumptions used in the April 1, 2023 actuarial valuation are based on the results of an actuarial experience study completed April 1, 2020. Demographic assumptions are primarily based on System experience over the period April 1, 2015 – March 31, 2020. Annuitant mortality rates are adjusted to incorporate mortality improvements under the Society of Actuaries' Scale MP-2021.

# BASIC FINANCIAL STATEMENTS

## Notes to Basic Financial Statements

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Best estimates of arithmetic real rates of return for each major asset class included in the target asset allocation as of March 31, 2024 (see Investment policy – note 4(a)) are summarized below:

Asset Class	Long-Term Expected Real Rate of Return
Domestic equity	4.00%
International equity	6.65
Private equity	7.25
Real estate	4.60
Opportunistic/ARS portfolio	5.25
Credit	5.40
Real assets	5.79
Fixed Income	1.50
Cash	0.25

The real rate of return is net of the long-term inflation assumption of 2.90 percent.

### (b) Discount Rate

The discount rate used to calculate the total pension liability was 5.9 percent. The projection of cash flows used to determine the discount rate assumes that contributions from plan members will be made at the current contribution rates and that contributions from employers will be made at statutorily required rates, actuarially. Based upon the assumptions, the System's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

### (c) Sensitivity of the Net Pension Liability to the Discount Rate Assumption

The following presents the current period net pension liability of the employers calculated using the current-period discount rate assumption of 5.9 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is one percentage-point lower (4.9 percent) or one percentage-point higher (6.9 percent) than the current assumption (Dollars in Thousands):

	One Percent Decrease (4.9%)	Current Assumption (5.9%)	One Percent Increase (6.9%)
ERS net pension liability (asset)	\$ 46,293,909	\$ 14,724,050	\$ (11,643,337)
PFRS net pension liability	\$ 11,085,093	\$ 4,742,822	\$ (496,816)

### 10. Federal Income Tax Status

ERS and PFRS are qualified defined benefit retirement plans under section 401(a) of the Internal Revenue Code (IRC) and are exempt from federal income taxes under section 501(a) of the IRC. ERS and PFRS last received favorable determination letters from the Internal Revenue Service dated August 28, 2014 stating that ERS and PFRS are in compliance with the applicable requirements of the Internal Revenue Code. Therefore, no provision for income taxes has been included in the System's financial statements.

### 11. Commitments

As of March 31, 2024, the System had contractual commitments totaling \$15.0 billion to fund future private equity investments, \$7.9 billion to fund future real estate investments, \$4.4 billion to fund future investments in opportunistic/Absolute Return Strategy funds, \$6.2 billion to fund future real asset investments and \$9.3 billion to fund future credit investments. When compared to note 8 the variances that exist are due to the above representing total commitments of the investment type inclusive of investments measured at fair value and net asset value. Future commitments will be funded over the commitment period through distributions, redemptions, and maturities.

### 12. Contingencies

The System is a defendant in litigation proceedings involving individual benefit payments, participant eligibility, and other issues arising from its normal activities. Management of the System believes there will be no material adverse effect on the basic financial statements as a result of the outcome of these matters.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

## Schedule of Changes in the Employers' Net Pension Liability (Asset) and Related Ratios (Unaudited)

(Dollars in Thousands)

	2024 Employees' Retirement System	2023 Employees' Retirement System	2022 Employees' Retirement System	2021 Employees' Retirement System	2020 Employees' Retirement System
<b>Total pension liability:</b>					
Service cost	\$ 4,409,328	\$ 4,208,576	\$ 4,046,170	\$ 4,157,172	\$ 3,365,522
Interest	13,328,607	12,826,486	12,656,540	11,133,759	12,529,672
Changes of benefit terms	—	543,056	—	—	—
Difference between expected and actual experience	3,964,336	2,518,585	(1,003,716)	299,922	745,602
Changes in assumptions	—	1,797,644	—	22,441,226	(575,504)
Benefit payments	(13,546,436)	(13,035,556)	(12,415,017)	(11,850,537)	(11,207,761)
Refunds of contributions	(86,243)	(106,420)	(89,246)	(97,646)	(64,699)
<b>Net change in total pension liability</b>	<b>8,069,592</b>	<b>8,752,371</b>	<b>3,194,731</b>	<b>26,083,896</b>	<b>4,792,832</b>
<b>Total pension liability — beginning</b>	<b>232,627,259</b>	<b>223,874,888</b>	<b>220,680,157</b>	<b>194,596,261</b>	<b>189,803,429</b>
<b>Total pension liability — ending (a)</b>	<b>240,696,851</b>	<b>232,627,259</b>	<b>223,874,888</b>	<b>220,680,157</b>	<b>194,596,261</b>
<b>Fiduciary net position:</b>					
Contributions — employer	3,886,387	3,305,845	4,528,207	4,062,302	3,920,360
Contributions — member	676,976	565,110	494,802	427,032	395,338
Net investment income (loss)	24,004,744	(11,475,648)	18,984,398	59,964,043	(7,470,542)
Benefit payments	(13,546,436)	(13,035,556)	(12,415,017)	(11,850,537)	(11,207,761)
Refunds of contributions	(86,243)	(106,420)	(89,246)	(97,646)	(64,699)
Administrative expense	(210,635)	(184,229)	(144,128)	(144,234)	(121,694)
Other additions	64,785	64,648	109,874	103,941	(53,444)
<b>Net change in fiduciary net position</b>	<b>14,789,578</b>	<b>(20,866,250)</b>	<b>11,468,890</b>	<b>52,464,901</b>	<b>(14,602,442)</b>
<b>Fiduciary net position — beginning</b>	<b>211,183,223</b>	<b>232,049,473</b>	<b>220,580,583</b>	<b>168,115,682</b>	<b>182,718,124</b>
<b>Fiduciary net position — ending (b)</b>	<b>225,972,801</b>	<b>211,183,223</b>	<b>232,049,473</b>	<b>220,580,583</b>	<b>168,115,682</b>
<b>Net pension liability (asset) — ending (a) – (b)</b>	<b>\$ 14,724,050</b>	<b>\$ 21,444,036</b>	<b>\$ (8,174,585)</b>	<b>\$ 99,574</b>	<b>\$ 26,480,579</b>
<b>Ratio of fiduciary net position to total pension liability</b>	<b>93.88%</b>	<b>90.78%</b>	<b>103.65%</b>	<b>99.95%</b>	<b>86.39%</b>
<b>Covered payroll</b>	<b>\$ 31,467,421</b>	<b>\$ 29,933,841</b>	<b>\$ 28,772,307</b>	<b>\$ 27,976,135</b>	<b>\$ 28,169,321</b>
<b>Net pension liability (asset) as a percentage of covered payroll</b>	<b>46.79%</b>	<b>71.64%</b>	<b>(28.41)%</b>	<b>0.36%</b>	<b>94.01%</b>

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.  
See accompanying independent auditors' report and notes to required supplementary information.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

CONTINUED

## Schedule of Changes in the Employers' Net Pension Liability (Asset) and Related Ratios (Unaudited)

(Dollars in Thousands)

	2019 Employees' Retirement System	2018 Employees' Retirement System	2017 Employees' Retirement System	2016 Employees' Retirement System
<b>Total pension liability:</b>				
Service cost	\$ 3,218,553	\$ 3,004,697	\$ 2,951,979	\$ 2,916,374
Interest	12,463,933	12,063,525	11,723,859	11,198,823
Changes of benefit terms	—	—	—	—
Difference between expected and actual experience	704,393	1,235,058	226,737	(2,378,116)
Changes in assumptions	888,656	—	—	5,350,157
Benefit payments	(10,781,781)	(10,200,205)	(9,740,272)	(9,224,904)
Refunds of contributions	(90,915)	(103,071)	(65,261)	(150,294)
<b>Net change in total pension liability</b>	<b>6,402,839</b>	<b>6,000,004</b>	<b>5,097,042</b>	<b>7,712,040</b>
<b>Total pension liability — beginning</b>	<b>183,400,590</b>	<b>177,400,586</b>	<b>172,303,544</b>	<b>164,591,504</b>
<b>Total pension liability — ending (a)</b>	<b>189,803,429</b>	<b>183,400,590</b>	<b>177,400,586</b>	<b>172,303,544</b>
<b>Fiduciary net position:</b>				
Contributions — employer	3,890,215	3,949,873	3,949,710	4,347,619
Contributions — member	345,846	318,439	306,218	289,332
Net investment income (loss)	9,140,487	18,128,993	17,194,267	(327,068)
Benefit payments	(10,781,781)	(10,200,205)	(9,740,272)	(9,224,904)
Refunds of contributions	(90,915)	(103,071)	(65,261)	(150,294)
Administrative expense	(119,304)	(106,972)	(93,943)	(93,012)
Other additions	160,431	181,725	200,379	198,333
<b>Net change in fiduciary net position</b>	<b>2,544,979</b>	<b>12,168,782</b>	<b>11,751,098</b>	<b>(4,959,994)</b>
<b>Fiduciary net position — beginning</b>	<b>180,173,145</b>	<b>168,004,363</b>	<b>156,253,265</b>	<b>161,213,259</b>
<b>Fiduciary net position — ending (b)</b>	<b>182,718,124</b>	<b>180,173,145</b>	<b>168,004,363</b>	<b>156,253,265</b>
<b>Net pension liability (asset) — ending (a) – (b)</b>	<b>\$ 7,085,305</b>	<b>\$ 3,227,445</b>	<b>\$ 9,396,223</b>	<b>\$ 16,050,279</b>
<b>Ratio of fiduciary net position to total pension liability</b>	<b>96.27%</b>	<b>98.24%</b>	<b>94.70%</b>	<b>90.68%</b>
<b>Covered payroll</b>	<b>\$ 27,374,387</b>	<b>\$ 26,686,412</b>	<b>\$ 26,200,001</b>	<b>\$ 25,644,078</b>
<b>Net pension liability (asset) as a percentage of covered payroll</b>	<b>25.88%</b>	<b>12.09%</b>	<b>35.86%</b>	<b>62.59%</b>

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available. See accompanying independent auditors' report and notes to required supplementary information.



# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

CONTINUED

## Schedule of Changes in the Employers' Net Pension Liability (Asset) and Related Ratios (Unaudited)

(Dollars in Thousands)

	2024 Police and Fire Retirement System	2023 Police and Fire Retirement System	2022 Police and Fire Retirement System	2021 Police and Fire Retirement System	2020 Police and Fire Retirement System
<b>Total pension liability:</b>					
Service cost	\$ 1,032,506	\$ 990,375	\$ 951,585	\$ 970,797	\$ 743,762
Interest	2,511,639	2,420,655	2,363,162	2,020,024	2,252,536
Changes of benefit terms	44,918	42,038	—	—	—
Difference between expected and actual experience	1,280,459	417,029	86,530	180,496	76,209
Changes in assumptions	—	181,610	—	4,930,229	147,086
Benefit payments	(2,563,032)	(2,448,940)	(2,304,619)	(2,172,230)	(2,038,392)
Refunds of contributions	(4,106)	(4,726)	(96,141)	(1,558)	(284)
<b>Net change in total pension liability</b>	<b>2,302,384</b>	<b>1,598,041</b>	<b>1,000,517</b>	<b>5,927,758</b>	<b>1,180,917</b>
<b>Total pension liability — beginning</b>	<b>43,835,333</b>	<b>42,237,292</b>	<b>41,236,775</b>	<b>35,309,017</b>	<b>34,128,100</b>
<b>Total pension liability — ending (a)</b>	<b>46,137,717</b>	<b>43,835,333</b>	<b>42,237,292</b>	<b>41,236,775</b>	<b>35,309,017</b>
<b>Fiduciary net position:</b>					
Contributions — employer	1,168,126	1,098,241	1,099,539	967,488	862,346
Contributions — member	111,795	91,654	82,792	65,309	58,360
Net investment income (loss)	4,358,488	(2,065,123)	3,389,717	10,685,563	(1,328,229)
Benefit payments	(2,563,032)	(2,448,940)	(2,304,619)	(2,172,230)	(2,038,392)
Refunds of contributions	(4,106)	(4,726)	(96,141)	(1,558)	(284)
Administrative expense	(24,843)	(23,766)	(19,372)	(20,863)	(17,356)
Other additions/deductions	23,604	8,273	16,834	12,711	(23,402)
<b>Net change in fiduciary net position</b>	<b>3,070,032</b>	<b>(3,344,387)</b>	<b>2,168,750</b>	<b>9,536,420</b>	<b>(2,486,957)</b>
<b>Fiduciary net position — beginning</b>	<b>38,324,863</b>	<b>41,669,250</b>	<b>39,500,500</b>	<b>29,964,080</b>	<b>32,451,037</b>
<b>Fiduciary net position — ending (b)</b>	<b>41,394,895</b>	<b>38,324,863</b>	<b>41,669,250</b>	<b>39,500,500</b>	<b>29,964,080</b>
<b>Net pension liability — ending (a) — (b)</b>	<b>\$ 4,742,822</b>	<b>\$ 5,510,470</b>	<b>\$ 568,042</b>	<b>\$ 1,736,275</b>	<b>\$ 5,344,937</b>
<b>Ratio of fiduciary net position to total pension liability</b>	<b>89.72%</b>	<b>87.43%</b>	<b>98.66%</b>	<b>95.79%</b>	<b>84.86%</b>
<b>Covered payroll</b>	<b>\$ 4,398,679</b>	<b>\$ 4,185,198</b>	<b>\$ 4,043,065</b>	<b>\$ 3,862,735</b>	<b>\$ 4,024,660</b>
<b>Net pension liability as a percentage of covered payroll</b>	<b>107.82%</b>	<b>131.67%</b>	<b>14.05%</b>	<b>44.95%</b>	<b>132.80%</b>

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.  
See accompanying independent auditors' report and notes to required supplementary information.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

CONTINUED

## Schedule of Changes in the Employers' Net Pension Liability (Asset) and Related Ratios (Unaudited)

(Dollars in Thousands)

	2019 Police and Fire Retirement System	2018 Police and Fire Retirement System	2017 Police and Fire Retirement System	2016 Police and Fire Retirement System
<b>Total pension liability:</b>				
Service cost	\$ 713,480	\$ 674,079	657,407	\$ 628,863
Interest	2,236,527	2,154,117	2,065,752	1,935,222
Changes of benefit terms	—	—	—	—
Difference between expected and actual experience	106,384	241,387	302,375	(537,163)
Changes in assumptions	118,521	—	—	1,531,662
Benefit payments	(1,959,831)	(1,827,136)	(1,708,410)	(1,683,580)
Refunds of contributions	(1,404)	1,493	5,632	(1,694)
<b>Net change in total pension liability</b>	<b>1,213,677</b>	<b>1,243,940</b>	<b>1,322,756</b>	<b>1,873,310</b>
<b>Total pension liability — beginning</b>	<b>32,914,423</b>	<b>31,670,483</b>	<b>30,347,727</b>	<b>28,474,417</b>
<b>Total pension liability — ending (a)</b>	<b>34,128,100</b>	<b>32,914,423</b>	<b>31,670,483</b>	<b>30,347,727</b>
<b>Fiduciary net position:</b>				
Contributions — employer	854,094	873,434	837,253	792,585
Contributions — member	40,673	30,950	22,609	17,297
Net investment income (loss)	1,621,289	3,209,040	3,030,977	(57,765)
Benefit payments	(1,959,831)	(1,827,136)	(1,708,410)	(1,683,580)
Refunds of contributions	(1,404)	1,493	5,631	(1,694)
Administrative expense	(17,173)	(15,834)	(13,191)	(13,608)
Other additions/deductions	9,723	33,889	36,021	134,548
<b>Net change in fiduciary net position</b>	<b>547,371</b>	<b>2,305,836</b>	<b>2,210,890</b>	<b>(812,217)</b>
<b>Fiduciary net position — beginning</b>	<b>31,903,666</b>	<b>29,597,830</b>	<b>27,386,940</b>	<b>28,199,157</b>
<b>Fiduciary net position — ending (b)</b>	<b>32,451,037</b>	<b>31,903,666</b>	<b>29,597,830</b>	<b>27,386,940</b>
<b>Net pension liability — ending (a) — (b)</b>	<b>\$ 1,677,063</b>	<b>\$ 1,010,757</b>	<b>\$ 2,072,653</b>	<b>\$ 2,960,787</b>
<b>Ratio of fiduciary net position to total pension liability</b>	<b>95.09%</b>	<b>96.93%</b>	<b>93.46%</b>	<b>90.24%</b>
<b>Covered payroll</b>	<b>\$ 3,730,337</b>	<b>\$ 3,683,960</b>	<b>\$ 3,633,237</b>	<b>\$ 3,526,980</b>
<b>Net pension liability as a percentage of covered payroll</b>	<b>44.96%</b>	<b>27.44%</b>	<b>57.05%</b>	<b>83.95%</b>

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available. See accompanying independent auditors' report and notes to required supplementary information.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

CONTINUED

## Schedule of Employer Contributions (Unaudited)

(Dollars in Millions)

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
<b>ERS</b>										
Actuarially determined contribution (1)	\$ 3,886	\$ 3,273	\$ 4,528	\$ 4,062	\$ 3,920	\$ 3,890	\$ 3,950	\$ 3,950	\$ 4,348	\$ 4,893
Contributions in relation to the actuarially determined contribution (2)	3,886	3,273	4,528	4,062	3,920	3,890	3,950	3,950	4,348	4,893
Contribution deficiency (excess)	—	—	—	—	—	—	—	—	—	—
Covered payroll	31,467	29,934	28,772	27,976	28,169	27,374	26,686	26,200	25,644	24,480
Contributions as a percentage of covered payroll	12.35%	10.93%	15.74%	14.52%	13.92%	14.21%	14.80%	15.08%	16.96%	19.99%
<b>PFRS</b>										
Actuarially determined contribution (1)	\$ 1,168	\$ 1,077	\$ 1,100	\$ 968	\$ 862	\$ 854	\$ 873	\$ 837	\$ 793	\$ 904
Contributions in relation to the actuarially determined contribution (2)	1,168	1,077	1,100	968	862	854	873	837	793	904
Contribution deficiency (excess)	—	—	—	—	—	—	—	—	—	—
Covered payroll	4,399	4,185	4,043	3,863	4,025	3,730	3,684	3,633	3,527	3,257
Contributions as a percentage of covered payroll	26.55%	25.73%	27.21%	25.06%	21.42%	22.90%	23.70%	23.04%	22.48%	27.76%
(1) The actuarially determined contribution includes normal costs, the GLIP amounts, adjustments made to record the reconciliation of projected salary to actual salary, and miscellaneous accounting adjustments.										
(2) The contributions in relation to the actuarially determined contribution reflects actual payments and installment payment plans.										

See accompanying independent auditors' report and notes to required supplementary information.

## Schedule of Investment Returns (Unaudited)

	2024	2023	2022	2021	2020	2019	2018	2017	2016
Annual money-weighted rate of return, net of investment expenses <sup>1</sup>	11.34%	(4.43)%	9.44%	33.43%	(2.64)%	5.14%	11.29%	11.40%	0.03%
<sup>1</sup> Investment expenses include management fees, investment and accounting staff salaries and benefits, and other investment-related expenses.									

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.  
See accompanying independent auditors' report and notes to required supplementary information.

# REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)

CONTINUED

## Notes to Required Supplementary Information

Year Ended March 31, 2024

### Changes of Assumptions

2024: For the April 1, 2023 funding valuation, all major assumptions and methods used were identical to that of the April 1, 2022 funding valuation.

2023: For the April 1, 2022 funding valuation, the mortality improvement assumption was updated to Society of Actuaries' Scale MP-2021, the inflation assumption was increased to 2.9% and the cost-of-living assumption was updated to 1.5%. Further, the recognition of unexpected investment returns will occur in equal installments over 8 years. Finally, active member withdrawal rates for Tiers 5 and 6 were revised to reflect the New York State Legislature's change in benefit terms.

2022: For the April 1, 2021 funding valuation, the mortality improvement assumption was updated to Society of Actuaries' Scale MP-2020, the inflation assumption was increased to 2.7% and the cost-of-living assumption was updated to 1.4%, while the salary scale assumption changed to 4.4% in ERS and 6.2% in PFRS and the discount rate assumption was reduced to 5.9%. Further, a market restart was implemented to immediately recognize the market value of assets in the funding valuation.

2021: For the April 1, 2020 funding valuation, the demographic assumptions (pensioner mortality and active member decrements) were updated based on the System's experience from April 1, 2015 through March 31, 2020 and the mortality improvement assumption was updated to Society of Actuaries' Scale MP-2019.

### Methods and Assumptions Used in Calculations of Actuarially Determined Contributions

The April 1, 2022 actuarial valuation determined the employer rates for contributions payable in fiscal year 2024. The following actuarial methods and assumptions were used:

Actuarial cost method	The System is funded using the Aggregate Cost Method. All unfunded actuarial liabilities are evenly amortized (as a percentage of projected pay) over the remaining worker lifetimes of the valuation cohort.
Asset valuation period	8-year level smoothing of the difference between the actual gain and the expected gain using the assumed investment rate of return.
Inflation	2.9%
Salary scale	4.4% in ERS, 6.2% in PFRS, indexed by service
Investment rate of return	5.9% compounded annually, net of investment expenses, including inflation.
Cost-of-living adjustments	1.5% annually
Active member decrements	Based upon FY 2016-2020 experience
Pensioner mortality	Gender/Collar specific tables based upon FY 2016-2020 experience
Mortality improvement	Society of Actuaries' Scale MP-2021

# OTHER SUPPLEMENTARY INFORMATION (UNAUDITED)

## Schedule of Administrative Expenses (Unaudited)

Year Ended March 31, 2024

(Dollars in Thousands)

<b>Personal services:</b>	
Salaries	\$ 81,340
Overtime salaries	4,195
Fringe benefits	51,834
<b>Total personal services</b>	<b>137,369</b>
<b>Building occupancy expenses:</b>	
Building, lease, and condominium fees	8,048
Utilities and municipal assessments	130
Office supplies and services	47
Telephone	340
<b>Total building occupancy expenses</b>	<b>8,565</b>
<b>Computer expenses:</b>	
IT shared services*	80,386
<b>Total computer expenses</b>	<b>80,386</b>
<b>Personal and operating expenses:</b>	
Training	59
Travel and auto expenses — includes pre-retirement seminars	692
Postage — includes member and retiree communication	3,146
Depreciation expense — Imaging System	1,832
Printing — includes member and retiree communication	88
Subscriptions/memberships	304
<b>Total personal and operating expenses</b>	<b>6,121</b>
<b>Professional expenses:</b>	
Audit services	175
Medical/clinical services	1,994
Miscellaneous consulting services	868
<b>Total professional expenses</b>	<b>3,037</b>
<b>Total</b>	<b>\$ 235,478</b>
* The System has implemented a shared service, information technology (IT) model within the New York State Office of the State Comptroller, wherein all IT costs, including personal services, will be incorporated into the IT shared services and reflected as nonpersonal service expenditures.	

See accompanying independent auditors' report.

# OTHER SUPPLEMENTARY INFORMATION (UNAUDITED)

CONTINUED

## Schedule of Investment Expenses (Unaudited)

Year Ended March 31, 2024

(Dollars in Thousands)

<b>Investment expenses:</b>	
Investment management and incentive fees:	
Private equity	\$ 255,896
Real estate	198,485
Opportunistic/ARS	153,145
International equity	146,743
Domestic equity	122,597
Real assets	94,887
Credit	49,604
Multi-Asset Class	10,434
Fixed income	4,521
<b>Total investment management and incentive fees</b>	<b>1,036,312</b>
<b>Investment-related expenses:</b>	
Miscellaneous expenses	23,373
Data processing expenses/licenses	13,947
Custodial fees	5,802
Legal fees	5,287
Mortgage loan servicing fees	2,981
Compliance/Risk monitoring	1,820
Private equity consulting and monitoring	1,758
Administrative expenses	1,363
General consulting	1,002
Research services	951
Real estate consulting and monitoring	725
Opportunistic consulting and monitoring	600
Real assets consulting and monitoring	470
Audit and audit-related fees	392
Fixed income consulting	273
Domestic equity consulting and monitoring	90
Emerging manager program consulting and monitoring	54
Global equity consulting	35
<b>Total investment-related expenses</b>	<b>60,923</b>
<b>Total investment expenses</b>	<b>\$ 1,097,235</b>

See accompanying independent auditors' report.

# OTHER SUPPLEMENTARY INFORMATION (UNAUDITED)

CONTINUED

## Schedule of Consulting Fees (Unaudited)

Year Ended March 31, 2024

Fees in excess of \$50,000 paid to outside professionals other than investment advisors.

	Amount	Nature
Experis US LLC	\$ 6,873,973	IT Consulting Services
JP Morgan Chase Bank	5,802,291	Custodial Banking Services
Cherryroad Technologies Inc	1,369,619	IT Consulting Services
MSCI BarraOne LLC	781,488	Compliance/Risk Monitoring
Misicom Inc	628,758	IT Consulting Services
KPMG LLP	566,930	Audit Services
K&L Gates LLP	554,492	Legal Services
Foster Garvey PC	545,095	Legal Services
Seyfarth Shaw LLP	536,991	Legal Services
DLA Piper LLP	503,128	Legal Services
Cox, Castle & Nicholson LLP	498,262	Legal Services
Chapman and Cutler LLP	455,000	Legal Services
Reinhart Boerner Van Deuren SC	440,985	Legal Services
Jurisolutions Inc	440,322	Medical/Clinical Services
Ins Regulatory Insurance Services Inc	381,289	Audit Services
National Claim Evaluations Inc	366,314	Medical/Clinical Services
Integral Consulting Services Inc	337,371	Medical/Clinical Services
EFL Associates	255,109	Staff Recruitment Services
Verizon Business Network Services LLC	252,170	IT Consulting Services
Intex Solutions Inc	243,400	Compliance/Risk Monitoring
Strategas Securities, LLC	240,333	Research
D & D Medical Associates PC	235,425	Medical/Clinical Services
Certified Management Consultants	229,658	Medical/Clinical Services
Morgan Lewis & Bockius LLP	225,891	Legal Services
Ernst & Young LLP	214,969	Tax Services
Arthur J Gallagher Risk Management	201,844	Audit Services
CEO Risk Advisory Services	190,950	Compliance/Risk Monitoring
First Choice Evaluations LLC	181,958	Medical/Clinical Services
BDO USA LLP	172,500	Compliance/Risk Monitoring
MSCI ESG Research Inc	150,380	Research
Piper Sandler & Co.	150,000	Research
First Advantage Back Track Reports, LLC	144,375	Compliance/Risk Monitoring
McKinsey & Company, Inc.	133,900	Miscellaneous Consulting Services
Marcum Accountants/Advisors	128,120	Compliance/Risk Monitoring
Nossaman LLP	115,000	Legal Services
CoStar Group Inc	113,560	Research
Groom Law Group	110,385	Legal and Tax Services
Fitch Solutions, Inc	107,120	Research
NPC Inc	99,528	Medical/Clinical Services
Orrick Herrington & Sutcliffe LLP	81,118	Legal Services
Seward & Kissel LLP	64,985	Legal Services
Castine Consulting LLC	63,228	Compliance/Risk Monitoring
The Offset House Inc	60,443	Medical/Clinical Services
Eurasia Group	60,000	Research
Capital Economics	58,350	Research
Reed Smith LLP	57,879	Legal Services
William E McCarthy	57,000	Miscellaneous Consulting Services
Renee D Leguire	56,289	Medical/Clinical Services
Corporate Resolutions, Inc.	55,500	Compliance/Risk Monitoring
William E Storrs	54,600	Medical/Clinical Services
Rose International Inc	53,719	Medical/Clinical Services
Kenneth L Marten	52,200	Medical/Clinical Services
Labaton Sucharow LLP	50,000	Legal Monitoring Services
CEM Benchmarking	50,000	Benchmarking Services

See accompanying independent auditors' report.

# INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL



KPMG LLP  
515 Broadway  
Albany, NY 12207-2974

## **Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With *Government Auditing Standards***

The Trustee  
New York State and Local Retirement System:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the New York State and Local Retirement System (the System), which comprise the combining basic statement of fiduciary net position as of March 31, 2024, and the related combining basic statement of changes in fiduciary net position for the year then ended, and the related notes to the basic financial statements, and have issued our report thereon dated July 24, 2024.

### **Report on Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

### **Report on Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the System's basic financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

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# INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL

CONTINUED



## Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG LLP

Albany, New York  
July 24, 2024

# INVESTMENT



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# OVERVIEW OF INVESTMENTS

## Overall Objectives and Performance

The Division of Pension Investment and Cash Management (PICM) in the Office of the State Comptroller (OSC) is responsible for the management of the assets of the New York State Common Retirement Fund (Fund or CRF). The Fund's primary objective is to provide the means to pay benefits to the participants in the New York State and Local Retirement System (the System or NYSLRS) through an investment program designed to protect and enhance the long-term value of the assets. We are responsible for implementing an asset allocation strategy with an appropriate balance of risk and return. Investments in equities, although historically volatile, provide superior long-term performance and growth characteristics, while fixed income investments provide less volatility and more predictable cash flow to meet the System's funding requirements and pension obligations. Alternative investments provide diversification and incremental returns.

The Fund's investment performance for the fiscal year ended March 31, 2024 was 11.56 percent, gross of certain investment fees. Strong performances across asset classes helped drive the Fund's investment returns higher over the past year, with many companies reporting better than expected earnings and consumer spending remaining strong. While inflation persists and global tensions pose risks to investors, due to its prudent management and long-term approach, the Fund is well positioned to continue to provide retirement security to the public employees it serves.

The Fund closed the year at an audited value of \$267.4 billion. As of the fiscal year end, the Fund had 42.85 percent of its assets invested in publicly traded equities. The equity portfolio returned 24.51 percent; the remaining Fund assets are invested in cash, bonds and mortgages (22.26 percent), private equity (14.60 percent), real estate and real assets (12.77 percent) and credit, absolute return strategies and opportunistic alternatives (7.52 percent). The fixed income portfolio returned 2.65 percent. The opportunistic/absolute return strategies portfolio returned 11.17 percent. The credit portfolio returned 10.65 percent. The real assets returned 8.16 percent. The private equity portfolio returned 6.85 percent, and real estate portfolio returned negative 9.72 percent.

The investment performance information provided in this section of the Annual Comprehensive Financial Report was calculated by the Fund's custodian, J.P. Morgan, using a daily time-weighted rate of return based on the market value of assets.

## Fiscal Year Capital Market Overview

In the first quarter of fiscal year ending March 31, 2024, investors focused on the uncertainty of the future interest rate path and timing of further actions by the U.S. Federal Reserve and other global central banks. At the start of 2023, the combination of rate hikes and quantitative tightening kept expectations for a near-term U.S. recession embedded in many market forecasts. However, the continued strength of certain indicators, such as consumer spending and job growth, altered the expected timing of a potential recession for some market participants. Mid-quarter forecasts and market outlooks were further complicated by the U.S. debt ceiling debate, raising concerns regarding a potential default on the national debt. Ultimately, a deal was struck that suspended the ceiling until 2025. In the June data release, the Consumer Price Index (CPI) slowed to a 3.0 percent year-over-year rate, its lowest since March 2021. Recent job growth reports in the U.S. provided mixed signals with equity markets delivering strong results, primarily driven by the largest growth-oriented companies, and fixed income markets broadly posting negative returns during the quarter, as the yield curve

inverted further. The economic outlook in China, and its impact on global growth, continued to be a significant topic for investors. As concerns about China grew, more investors started to view India and other South-east Asia countries as the drivers of growth in the region. The World Bank released its 2023 Global Economic Prospects report in June, forecasting subdued global Gross Domestic Product (GDP) growth of 2.1 percent in 2023 and 2.4 percent in 2024, caused by tightening financial conditions and decreases in demand due to continued elevated inflation.

During the second quarter of the fiscal year, investors grappled with mixed signals regarding the health of the economy and the direction of corporate profits. Several factors were at play, including an uptick in inflation, a downgrade to the U.S. debt rating, ongoing labor negotiations and strikes, and uncertainty around the funding of the U.S. government; all of which complicated the outlook for investors. As the prospect of a “higher for longer” outlook for interest rates was digested by investors, it led to increased volatility and negative equity market returns in the latter part of the quarter.

In the third quarter, most risk assets rebounded from the subdued conditions of the previous quarter to finish the calendar year with significant positive returns, which was a stark turnaround compared to performance in 2022. For instance, the MSCI All Country World Index, which is a broad measure of the global stock market, returned 22.2 percent in 2023 compared to returns of negative 18.4 percent in 2022. Fixed income markets also ended the calendar year firmly in positive territory. Despite the positive market performance, some indicators of economic activity provided investors with reason for caution. For example, commodity prices and energy stocks broadly declined amidst slowing inflation, and the manufacturing Purchasing Managers’ Index (PMI) remained in contractionary territory. However, other economic indicators were more positive, with the services PMI remaining in expansionary territory and corporate earnings proving more resilient than expected. The labor market remained healthy as the unemployment rate finished the year at 3.7 percent. The December CPI report showed a higher-than-expected uptick in monthly inflation and annual inflation of 3.4 percent. The annual level represented a significant drop compared to the CPI measure of 6.5 percent in December 2022. The Federal Open Markets Committee (FOMC) anticipated further progress in bringing inflation down to target levels, with the forecast for their preferred inflation measure, the U.S. Personal Consumption Expenditures (PCE) Price Index, projecting a decline to 2.4 percent by the end of 2024.

During the fourth quarter of the fiscal year, risk assets built on their impressive performance in 2023 amid a resilient U.S. economy and strong labor market despite rising uncertainty regarding the timing of future monetary policy changes and elevated geopolitical tensions. Both U.S. and developed international equities, across all capitalizations and styles, posted gains. The fixed income market posted mixed results with strong economic data and moderating expectations for future rate cuts, contributing to increasing yields in the first quarter. The broad fixed income market experienced negative returns with shorter duration bonds outperforming longer maturity bonds, representing a trend change from late 2023. The more credit-sensitive sectors, such as bank loans, high yield, and emerging market debt, posted positive returns. Inflation levels above target ranges led investors to carefully monitor comments from the FOMC. In late March, the FOMC communicated its intention to maintain the plan for three rate cuts during the year. Overall, indicators pointed to stable economic activity with purchasing manager indexes for manufacturing and services remaining in expansionary territory during the quarter.

## Public Equity

The role of the public equity asset class is to provide the largest source of nominal returns in the Fund's portfolio over the long term through diversified public equity market exposure. The public equity asset class makes investments in public equity securities through passively managed index portfolios and actively managed external investment manager portfolios to achieve its mandate. These investments cross geographies and market capitalizations to ensure broad, diversified exposure.

The objective of the program is to generate annualized total net returns that exceed the benchmark over a full market cycle. Most of the assets in the portfolio are in internally managed passive indices, which follows the Fund's investment principle of investing passively in relatively efficient markets. The Fund also invests with external active managers in less efficient markets across geographies or in alternative indices that apply research-driven insights to improve returns, diversify the portfolio, and reduce risk. Internally managed passive index funds comprise the bulk of the domestic equity portion of the portfolio. Active allocations in domestic equity are primarily in small capitalization strategies and in a mix of styles. International and global allocations place greater emphasis on externally managed active mandates in a variety of strategies. As needed, the public equity portfolio continues to serve as a source of liquidity for the payment of pension plan benefits, including over the past fiscal year.

Over the last fiscal year, the U.S. stock market was supported by resilient economic growth, better than expected earnings and an apparent end to the Federal Reserve's interest rate hikes. *Growth* stocks materially outperformed *Value*, driven by mega cap Technology stocks that rose on expectations of multiple Federal Reserve rate cuts, along with the emerging boom in artificial intelligence ("AI") technologies. Notably, just ten of the largest companies in the Russell 3000 Index contributed more than half of the Index's return over the last fiscal year. Small cap stocks did well but underperformed large cap stocks on a relative basis. Sector dispersion was high and market breadth was narrow which made it difficult for active managers in the U.S. to realize outperformance against the benchmarks. Non-U.S. equities also had gains but underperformed U.S. stocks primarily due to having a much lower weight to the technology sector in the broad equity benchmarks. Stocks were led upwards by a global recovery in manufacturing and trade, attractive valuations and improved corporate earnings growth. Mild recessions in the United Kingdom and Eurozone ended as growth returned in the first quarter of 2024, which was supportive of stock market gains. Macro and geopolitical risks remain, with elections in Europe and conflicts in Ukraine and Gaza contributing to market volatility.

For the fiscal year, the total public equity portfolio generated a return of 24.51 percent, outperforming the benchmark MSCI All Country World Index (Net) return of 23.22 percent by 129 basis points. The domestic equity portion of the portfolio generated a return of 28.98 percent, underperforming the benchmark Russell 3000 Index return of 29.29 percent by 31 basis points. The non-U.S. portion of the equity portfolio returned 14.21 percent, outperforming the MSCI All Country World Index ex. U.S. IMI (Net) benchmark return of 13.20 percent by 101 basis points. The global equity portion of the portfolio, in which active managers allocate between domestic and non-U.S. equities, returned 24.29 percent, outperforming the MSCI All Country World Index (Net) return of 23.22 percent by 107 basis points.

As of March 31, 2024, the public equity portfolio's target allocation was 47.00 percent while the actual allocation was 42.85 percent. It was anticipated that the target allocation would fall with the formal adoption of the new target allocation beginning with the new fiscal year. Over the five-year period, the public equity portfolio generated a return of 12.04 percent, outperforming the benchmark MSCI All Country World Index (Net) return of 10.92 percent by 112 basis points.

## Fixed Income

The fixed income portfolio is designed to provide a consistent source of funds to help address the cash flow needs of the Fund. Additionally, these assets provide downside protection against the volatility of the overall portfolio's equity-like strategies, while achieving efficiency in the risk/return profile for fixed income. The Fund accomplishes these goals by investing internally in long-term and short-term assets, while external managers focus on increasing returns and diversification, primarily through higher-yielding fixed income investments. The short-term fixed income portfolio offers liquidity to meet monthly pension fund liabilities, as well as providing funding for the other asset classes within the Fund.

At the start of the past fiscal year, it was clear that inflation was still a problem for the U.S. economy. To bring inflation back towards a 2 percent goal, the Federal Reserve hiked short-term interest rates twice during the first half of the fiscal year, raising the Federal Funds target rate from 5 percent to 5.5 percent. As a result, Treasury yields rose by approximately 100 basis points across the yield curve. However, with the pace of rate hikes clearly slowing, most spread products saw some tightening over the first half of the fiscal year. This offset some of the negative impact of the rise in rates. The performance of the aggregate fixed income market was negative for this six-month period, posting a total return of negative 4.05 percent.

The second half of this past fiscal year proved to be a turning point for the fixed income market. With CPI inflation near 3.5 percent, the Federal Reserve paused—and ultimately ended—its rate hike program. In response, Treasury yields declined by about 40 basis points over the second half of the fiscal year (except for short-maturity Treasury bills, which held steady). With Federal Reserve policy now expected to eventually turn to interest rate cuts, spreads tightened noticeably over this time frame. As a result, the bond market generated strong returns over the second half of the fiscal year, with the total return for the broad market benchmark at 5.99 percent.

For the fiscal year, the fixed income portfolio produced a total return of 2.65 percent. In comparison, the benchmark (the Bloomberg U.S. Aggregate Bond Index) returned 1.70 percent. In all, the portfolio outperformed its benchmark by 0.95 percent. The portfolio generated an incremental return largely through sector allocation. Specifically, an overweight to some specific structured products (such as asset-backed securities and collateralized loan obligations) proved to be a benefit as these sectors produced returns that were better than the benchmark. In addition, strong security selection within the corporate bond market led to incremental outperformance despite a modest underweight in both market value and duration within that sector.

Over a longer horizon, the fixed income portfolio has produced positive returns and added incremental return versus the benchmark. As of March 31, 2024, the fixed income portfolio target allocation was 23 percent while the actual allocation was 20.93 percent. Over the five-year period, the fixed income portfolio generated an annualized return of 0.94 percent, in contrast to the benchmark return of 0.36 percent over the same time frame. Going forward, we expect to continue to manage the fixed income portfolio with a focus on adding value through sector rotation and security selection.

## Private Equity

The Fund's private equity portfolio is designed to generate long-term returns that exceed those of public equities through participation in private equity investments. Closed-end funds and co-investments managed by specialized investment managers are the two primary structures utilized to invest in private companies. The Fund seeks to partner with the very best private equity investors, including emerging and diverse managers, across various investment strategies and geographies, international managers who have expertise to source attractive opportunities in global markets, and with local managers that focus their investments within New York State (In-State Investment Program). The Fund also seeks to commit capital to industry sectors, such as technology, that show high potential for economic growth and capital appreciation, and that will further enhance the diversification of the portfolio.

As private equity investments involve long-term contractual commitments to a manager, the Fund seeks to invest with managers who have demonstrated the capacity to consistently deliver superior returns. The Fund can better position itself to achieve such superior returns through active portfolio monitoring, which requires frequent and direct interaction with investment managers to monitor performance and ensure proper alignment of interests between manager and investor.

During fiscal year 2024, the private equity portfolio invested in 21 private equity funds for a total of \$3.11 billion in total commitments. In addition to fund investments, the private equity program seeks to exploit those long-term commitments and alignments of interests by making co-investments alongside select managers on improved economic terms. The Fund made 39 discretionary co-investments totaling over \$563 million in invested capital in portfolio companies alongside Fund managers. The Fund has established private equity co-investment programs focused on opportunities sourced from its core private equity portfolio, the emerging manager program, the In-State Investment Program and its Israel investment program.

For the fiscal year, the private equity program generated a 6.85 percent return as compared to the Cambridge U.S. Private Equity Index benchmark return (one quarter lag) of 9.07 percent. The private equity program is a global investment program which led to reduced performance versus the benchmark as the U.S. outperformed other regions.

As of March 31, 2024, the private equity portfolio's target allocation was 10.00 percent while the actual allocation was 14.60 percent. This over-allocation was partially offset by the under-allocation in public equities. It was further anticipated that the target allocation would increase in the new fiscal year. Over the five-year and ten-year periods, the private equity portfolio generated returns of 14.57 percent and 12.71 percent, respectively, in contrast to the benchmark returns of 16.12 percent and 13.99 percent over the same time frame.



## Real Estate

The objective of the real estate portfolio is to achieve a complementary investment return and diversify the Fund's holdings by investing across different property sectors, geographic locations, and risk profiles, encompassing core and non-core strategies. The real estate allocation within the overall Fund is mandated to deliver the following:

- Long-term net annualized internal rate of return of 7.10 percent, comprising stable income from core investments and enhanced returns from non-core investments.
- Low correlation with other asset classes in the Fund's portfolio.
- Periodic liquidity.
- Protection against inflation.

The real estate sector experienced a slowdown in market fundamentals across all property sectors throughout the year. The industry is believed to be entering a new cycle that will create attractive entry points. Despite the current cycle, the Real Estate Bureau is focused on fulfilling the long-term investment objectives of the asset class.

Real Estate is proxied to the NCREIF NFI ODCE (Net) Index, and Non-Core Real Estate is proxied to the same index with a 100-basis point annual premium. During the recent fiscal year, the portfolio generated a return of negative 9.72 percent, outperforming the real estate custom benchmark, which returned negative 12.14 percent over the same period. The decline in the one-year return is significant compared to the previous fiscal year and is primarily attributed to the challenging real estate environment over the past two years. High interest rates and cap rate expansion have resulted in valuation adjustments across all property sectors.

Notwithstanding the current cycle, the Real Estate Bureau is focused on fulfilling the long-term objectives of the portfolio and is well-positioned to participate in the following market cycle. Although real estate valuations have softened, operating fundamentals remain healthy across most property types, with tailwinds persisting for logistics, housing, retail, and niche sectors. Companies continue to nearshore operations and add distribution facilities to keep up with ongoing e-commerce expansion; demand for last-mile facilities remains a tailwind for the industrial sector. Multifamily properties have benefited from robust demographic trends and lower levels of home ownership due to affordability. Within the retail sector, necessity retail has exhibited the strongest performance, with neighborhood retail also benefiting as retailers have moved to omnichannel retail strategies, bolstering demand for brick-and-mortar retail. Niche sectors continue to garner greater allocation within institutional portfolios based upon the merits and differentiated demand sources driving adoption and recent outperformance.

As of March 31, 2024, the target allocation for the real estate portfolio stands at 9.00 percent, while the actual allocation is slightly higher at 9.33 percent. Over five years, the portfolio has delivered a return of 4.92 percent, outperforming the portfolio benchmark's return of 4.05 percent during the same time frame. The portfolio's over-allocation to industrial and self-storage properties has contributed to this outperformance.

## Real Assets

Real assets are a classification of investment opportunities with unique characteristics that can serve multiple functions in an institutional portfolio. Typically described as tangible assets with strong barriers to entry, inflation participation, GDP sensitivity, and low correlations to traditional markets, they cover a broad spectrum of opportunities ranging from agriculture, capital assets, infrastructure, natural resources, and renewable assets. These opportunities will have duration attributes like that of most pension fund investments. The Fund uses these assets to provide inflation sensitivity, with strong downside protection and low correlations to traditional equity markets, while maintaining a minimum return objective superior to traditional income-generating assets.

Strategy and style selection have been critical to meeting the portfolio's objectives with a tilt towards infrastructure assets and smaller allocations to capital assets and natural resources. Given the stated investment parameters, the Fund has adopted the U.S. CPI plus 500 points as the real assets portfolio's overall policy benchmark.

The real assets portfolio has proven to be a strategic diversifier in the current economic environment as the infrastructure sector continues to be resilient amid recent volatility. For the fiscal year ending March 31, 2024, the real assets portfolio returned 8.16 percent, which underperformed the policy benchmark's return of 8.61 percent by 45 basis points.

Global inflationary pressures have positively impacted the real asset portfolio's performance. The rise in the general basket of goods has increased the value of investments in agriculture and energy. Improvements in global supply chains have positively impacted asset valuations.

As of March 31, 2024, the real asset portfolio's current weight was 3.04 percent, slightly above its target allocation of 3.00 percent. Over the five-year period, the real assets portfolio has generated a return of 10.53 percent, in contrast to the benchmark return of 9.36 percent during the same period. Overall, the portfolio remains diverse and consistent with its strategic goals.

## Credit

The credit portfolio's mandate is to significantly outperform the Fund's actuarial return target while maintaining a relatively low correlation to other asset classes outside the traditional fixed income markets. To accomplish this objective, the team invests through external managers across the non-investment grade fixed income universe and seeks attractive risk-adjusted returns using a diverse set of investments. These investments focus on credit opportunities arising from: a lack of availability of credit due to inefficient markets or market dislocations; structural market changes (for example, those driven by a shifting regulatory landscape); market or industry-specific mispricing; and availability of illiquidity premium relative to liquid market investments. The strategies deployed to accomplish the team's mandate fall into the following categories: direct lending, distressed and special situations, mezzanine finance, specialty finance, structured credit, real assets credit, and real estate credit. In addition, the liquid credit sub-strategy focuses on non-investment grade markets globally and includes high-yield bonds, leveraged loans, structured credit, and emerging market debt.

In stark contrast to fiscal year 2023, this year's performance in the credit asset class is a direct result of the higher interest rate environment. The U.S. Federal Reserve last raised base rates in July 2023, ending this cycle at 5.50 percent. Inflationary pressures, as measured by the PCE, finally eased towards 3 percent, after peaking above 7 percent in mid-2022 due to COVID-related economic imbalances. With the Secured Overnight Financing Rate (SOFR) at 5.30 percent, floating rate senior loans now generate yields above 10 percent, levels not seen in over 15 years. Though lenders were rewarded with higher returns, borrowers had to adjust to significantly higher interest expenses, challenging their business models. Credit defaults were expected to increase, though the surprisingly strong U.S. economy seems to have delayed this belief. While elevated, credit defaults are still significantly below historical highs.

For the fiscal year, the credit portfolio produced a total return of 10.65 percent. In comparison, the benchmark (Credit Suisse Leveraged Loan Index +2.5 percent) returned 15.19 percent. The lag in performance versus the index is largely attributed to the immaturity of the overall portfolio. A significant percentage of the portfolio has been invested in the past 24 months, with limited realizations and markups. We continue to reduce the overallocation to liquid credit, currently at nearly 15 percent, and expect to have it completely liquidated by March 2025. Over the fiscal year, the liquid credit exposure generated a robust 14.1 percent, though the three-year return is still a disappointing 0.3 percent, compared to 9.4 percent for the rest of the credit portfolio. The best performing private credit sub-strategies for the fiscal year were led by real estate credit, specialty finance, and distressed and special situations.

As of March 31, 2024, the credit portfolio's target allocation was 4.00 percent while the actual allocation was 4.50 percent. Over the five-year period, the credit portfolio has generated a return of 6.14 percent, in contrast to the benchmark return of 7.93 percent over the same time frame. A significant portion of the underperformance was due to the over-allocation to high yield strategies as the rest of the portfolio returned 10.6 percent over the same period. The team continues to source private credit investments as opportunities arise, as well as the reduction of the liquid credit exposure, to meet the 4.00 percent allocation to this strategy.

## Opportunistic and Absolute Return Strategies

The Opportunistic and Absolute Return Strategies (OARS) portfolio's mandate is to add alpha to the Fund's overall portfolio while maintaining a relatively low correlation to other asset classes and enhancing the Fund's overall portfolio diversification. The portfolio invests across the capital structures of public and private companies and other strategies that may be distinguished from the mandates of other asset classes by their history, investment structures, terms, duration, risk/return profiles, portfolio construction requirements, or other relevant characteristics. OARS investments may not fit other asset classes' mandates or portfolio construction needs. The portfolio may invest with managers in various formats, including Funds of One, Separately Managed Accounts, Commingled Funds, Co-investments, and Fund of Funds. OARS consists of two sub-portfolios: the Opportunistic portfolio and a legacy Hedge Fund portfolio titled Absolute Return Strategies (ARS). All investments since 2015 have been in the Opportunistic sub-portfolio, with no new ARS investments since 2015. The portfolio targets an absolute return of at least 8.80 percent. For the fiscal year, the OARS portfolio returned 11.17 percent versus the absolute return benchmark of 8.80 percent.

Higher base rates benefiting credit-based strategies on the one hand, and the Fed ending its tightening cycle (with the prospect of eventual easing) benefiting equities on the other, created a positive tailwind mix for multiple asset classes. With both equity and credit markets displaying robust performance in the past 12 months, the ARS portion of the portfolio performed meaningfully better than last year with a much narrower dispersion. While five of the last year's biggest laggards, mostly event-driven strategies being redeemed by the Fund, underperformed slightly again, the rest of the portfolio all delivered positive returns, with the total ARS internal rate of return for the fiscal year exceeding 11 percent.

The Opportunistic portion of the portfolio consists of strategies including Buyouts, Growth Equity, Multi-Asset Managers, Venture Capital (VC), and others. This portion of the portfolio also returned over 11 percent for the fiscal year, though with a more pronounced dispersion than the ARS bucket. The most significant positive attribution came from the strategies with VC exposures, while those exposed to Real Estate lagged the rest of the portfolio.

As of March 31, 2024, the OARS portfolio's target and actual allocation was 3 percent. The ARS portion of the overall portfolio makes up 51 percent, while the Opportunistic portion is 49 percent. Over the five-year period, the OARS portfolio has generated a return of 7.5 percent, versus the benchmark return of 8.80 percent, over the same time frame. This underperformance was mainly driven by legacy investments in hedge funds that have been redeemed. The team continues to source investments as opportunities arise to achieve the allocation to this strategy.

## Other Programs

### Pursuit

The Fund seeks to diversify its investments and achieve a risk-adjusted rate of return through a commitment to Pursuit, formerly known as the New York Business Development Corporation (NYBDC). Pursuit underwrites loans to small businesses in New York, often with guarantees from the U.S. Small Business Administration, for working capital, equipment, the acquisition of real property, capital improvements and the refinancing of existing loans. Pursuit has successfully completed loans to a wide range of business enterprises, including retailers, restaurants, small manufacturers, and a variety of other service businesses across the state. By focusing exclusively on small business lending, Pursuit frequently offers more favorable terms than other lenders. Pursuit has an active Veteran's Loan Program where New York business owners who serve in the National Guard or Reserve, along with honorably discharged former active-duty members, can access small business loans.

Pursuit also has a goal of making at least 25 percent of its loans to Minority- and Women-Owned Business Enterprises (MWBE). As of March 31, 2024, 35 percent of Pursuit loans that were due to Fund investments were made to MWBE.

Since 1987, the Fund has been an investor in the program with commitments totaling \$500 million. In 2018, the Fund approved a fifth \$100 million commitment to support the small business loan program. Since this program began in 1987, Pursuit has made 1,227 loans totaling \$462 million to businesses that employ over 25,000 New Yorkers. During the fiscal year ended March 31, 2024, there were no new loans.

### Financing for Businesses in New York State

In 2000, the Fund initiated the New York Private Equity Investment (In-State) Program. The In-State Program is designed to generate a market rate of return consistent with the risk of private equity while increasing the diversification of the Fund's investment portfolio and expanding the availability of capital for New York state businesses. By making sound strategic investments in new and expanding New York companies and making equity and debt capital available to small businesses often overlooked by investment professionals in this asset class, the program is also proving to be an important contributor to the state's economy. The In-State Program provides a model for how the pension fund can identify profitable investment opportunities and generate market rate returns, while supporting business development and job growth in New York state.

On March 31, 2024, the Fund's private equity portfolio included investments in over 584 New York businesses with a total value of \$3.1 billion. This figure reflects only the Fund's share of these investments; the total value of New York companies held by the Fund's partnerships was more than \$47.1 billion.

Included in the Fund's In-State portfolio are: LeverPoint in Clifton Park, UCM Digital Health in Troy, Delorios in Utica, Ingredients Plus in Lakeville, SavATree in Bedford Hills, Movable Ink in New York City, Greenlight Fiber in Rochester, and New Era in Buffalo.

As of March 31, 2024, the Fund had over \$700 million of remaining commitments available for investment in the In-State Program. Commitments to this program totaled \$2.56 billion. These commitments are devoted exclusively to New York State investment opportunities. The 18 managers in the program are:

- *Armory Square Ventures*, an early-stage venture capital fund located in Syracuse.
- *Ascent Biomedical Ventures NY*, a New York City-based venture capital fund focusing on life sciences.
- *Grosvenor Capital Management*, a fund that makes investments alongside other private equity funds investing in New York State.
- *Contour Venture Partners*, an early-stage venture fund based in New York City.
- *DeltaPoint Capital*, a growth equity fund located in Rochester.
- *Gotham Ventures (fka DFJ Gotham)*, a New York City-based fund focused on early-stage venture capital investments.
- *Easton Hunt Capital Partners*, a New York City-based fund that pursues a broad strategy of investing in companies in a wide range of industries and stages of development.
- *Founders Equity*, a New York City-based fund that makes growth equity investments.
- *Graycliff Partners*, a New York City-based fund that targets buyout and growth equity investments.
- *Tribeca Venture Partners*, a New York City-based early-stage applied technology venture firm focused on investing in business information and technology-enabled services companies.
- *Primary Venture Partners (fka High Peaks Ventures)*, an early-stage venture capital fund based in New York City and Albany.
- *Hamilton Lane*, equity and credit co-investments alongside other private equity managers investing in New York state.
- *Activate Venture Partners (fka Milestone Venture Partners)*, a New York City-based fund that focuses on companies providing technology-enhanced businesses services.
- *Paladin Homeland Security Fund (NY)*, a Washington, D.C.-based fund that opened a New York office to invest in companies that address a broad range of government and commercial security needs.
- *SoftBank Capital NY*, a New York City and Buffalo-based fund that invests in digital media and technologies that leverage broadband.
- *Summer Street Capital Partners*, a growth equity investment fund located in Buffalo.
- *Trillium Lakefront Partners NY*, a Rochester-based fund that focuses on investing in technology companies in upstate New York.
- *Wheatley Partners*, a technology venture fund with a focus on information and medical technology located in New York City and Long Island.

## Emerging Manager Program

The goal of the Emerging Manager Program is to identify newer and smaller investment managers that have the potential to add value to the Fund's investment portfolio across all asset classes. Due to the size of assets under management, these managers would not typically be identified as an investment opportunity in the Fund's standard institutional investment manager search process. The Emerging Manager Program also provides the Fund with opportunities to invest with qualified business enterprises that are either majority owned or substantially owned and/or operated by MWBE.

Smaller investment management funds may generate superior performance returns because of their entrepreneurial nature and increased investment flexibility. Historically, several Fund emerging managers have outperformed their more established peers, a trend the Fund staff expects to continue. Graduates of the Emerging Manager Program are a natural source of new relationships for the Fund's investment portfolio, allowing the program to organically structure and form new relationships that can evolve to meet institutional investment mandates.

The Fund has established a policy framework for the Emerging Manager Program's operational guidelines and procedures to achieve the following objectives:

- Increase the Fund's utilization of emerging managers, including MWBE managers, consistent with applicable investment and fiduciary standards;
- Proactively identify best-in-class emerging managers who demonstrate the capacity and return profile to become viable long-term partners of the Fund;
- Employ prudent selection processes and practices consistent with the high fiduciary standards for all the Fund's investment management decisions and processes;
- Maintain guidelines and funding strategies that will encourage inclusion and ongoing support for the development of emerging managers;
- Generate appropriate risk-adjusted investment returns by identifying new investment opportunities with the potential for strong performance and by further diversifying the portfolio; and
- Cultivate, develop and incubate the next generation of external portfolio managers that would be candidates for transition into the Fund's core pool of investment managers.

As of March 31, 2024, the Fund has approximately \$36.8 billion invested with or committed to minority-owned or women-owned firms. MWBEs now represent approximately 24 percent of our externally managed active mandates.

Sustainable Investments and Climate Solutions Program

The Sustainable Investments and Climate Solutions (SICS) Program is a thematic, multi-asset class investment program designed to strengthen the Fund’s portfolio by capitalizing on opportunities and mitigating risks through investments that advance one or more of nine themes, split equally into three categories: *Resources & Environment*, *Human Rights & Social Inclusion*, and *Economic Development*. The SICS Program works across asset classes to source, identify, and collaboratively adjudicate prospective investments with Fund asset class teams. Fund investments classified in the SICS Program are subject to the same fiduciary and risk and return requirements applicable to investments in the subject asset classes. The SICS Program improves the diversification of the Fund’s portfolio and is intended to enhance risk-adjusted returns by capturing secular investment trends containing institutional investment heft.

CRF SICS CATEGORIES AND THEMES

Resources & Environment	Human Rights & Social Inclusion	Economic Development
Climate and environment	Education	Financial inclusion
Resource efficiency	Demographic empowerment	Sustainable infrastructure
Pollution and waste management	Health and wellbeing	Affordable housing

In its November 2020 Financial Stability Report, the Federal Reserve Board illustrates financial system vulnerabilities caused by climate change. Awareness of various risks (disclosure, physical, and transition risks) has become an increasing expectation of modern fiduciaries. For example, inadequate disclosures can lead to regulatory investigations, shareholder claims, and impair fully informed investment decision making; assets can become damaged by weather and climate-related events; and resource-based assets can become devalued due to low-carbon norms.

SICS is a key component of the Fund’s plan to position its portfolio to address climate-related risks and opportunities. SICS provides the Fund with a systematic platform to opportunistically expand investment opportunities across assets that are consistent with the goals of the Climate Action Plan.

As of March 31, 2024, the Fund has committed over \$22 billion to sustainable investments and climate solutions. Investments in the SICS portfolio include climate indices and green bonds as well as investments that target renewable energy sources, pollution control, waste management, energy efficient buildings, and low-carbon sources among other sustainability themes.



# COMPLIANCE AND PENSION RISK MANAGEMENT

## Compliance

The primary purpose of the Compliance Office is to monitor the PICM staff and external managers' compliance with applicable statutes, policies and procedures, conflicts of interest and other ethical standards governing the Fund.

To meet this objective, the activities of Compliance primarily include the reporting, development and/or monitoring of:

- The Fund's investment-related policies and procedures;
- Statutory and policy mandates for trading by both internal staff and external equity managers;
- Staff certifications to ensure adherence to regulatory requirements, internal policies, and industry standards;
- Personal trading activities pursuant to the Comptroller's policies on Insider Trading and the Misuse of Confidential Information, Personal Trading, and Conflicts of Interest;
- The Annual Compliance Questionnaire and investigative due diligence for external managers, broker-dealers and consultants; and
- Regulatory filings required under Section 13 of the Securities and Exchange Act of 1934.

It is the policy of the Fund to conduct a periodic application process for new broker-dealer applicants, a follow-up review every five years for previously approved broker-dealers and an annual update to adjust available broker pools, as deemed necessary by staff. The Fund conducted the most recent application process in 2022, requiring newly applying broker-dealers to submit a questionnaire which was evaluated by Compliance and other PICM staff. As a result of the Fund's ongoing approval and review processes, the Fund is currently approved to execute trades with 22 fixed income and 18 equity broker-dealer firms for the internally managed portfolios. Six of these trading partners are MWBEs or owned by Disabled American Veterans firms. For the fiscal year, these MWBE and Disabled Veteran firms accounted for 35 percent of the internally managed public equity commissions, while executing approximately 10 percent of all long-term and 12 percent of all short-term fixed income broker trades.

## Pension Risk Management

### Risk Oversight

Prudent risk-taking in line with strategic priorities is fundamental to providing adequate returns and affordable pension plan funding. The primary objective of Pension Risk Management (PRM) is to provide an investment risk framework across asset classes, and to help maintain the economic viability of the Fund. PRM also works to monitor liquidity and other non-investment risks, to the extent that these risks may affect the overall objectives of the Fund. The Fund's risk management framework is based on transparency, management accountability and independent oversight. The Fund's approach to risk taking is supported by the following principles:

- Establish a clear risk appetite based on the approved asset allocation targets and levels of risk we are prepared to take;
- Have in place risk management and compliance policies that set out authorities and responsibilities for taking and managing risk across the Fund and its asset classes;
- Seek to establish resilient risk constraints that promote multiple perspectives on risk; and
- Actively identify and monitor risks and work to ensure they remain within acceptable levels.

PRM instituted a comprehensive risk review framework to continually identify risks, controls, and monitoring capabilities. An emerging events risk framework was also established to highlight newly arising risks and determine the most appropriate ways to navigate macroeconomic and geopolitical turmoil.

## Risk Appetite Statement

The CRF provides a secure pension for generations of NYSLRS members, retirees, and beneficiaries. In the pursuit of this mission, the CRF is committed to the highest standards of ethics and prudent investment management. In their decision making, the Trustee and staff of the CRF may take prudent investment risks when compensated by higher expected returns to generate stronger long-term performance. Regardless of potential returns, the CRF endeavors to avoid the risk of a loss of asset value that could compromise the economic viability of the current plan structure or call into question the integrity and responsibility of the CRF or its staff. Therefore, the CRF diligently seeks to identify and avoid such risk.

## Risk Governance

Effective governance sets a solid foundation for comprehensive risk management discipline. The Fund's risk governance is based on the "Three Lines of Defense" model, where each line has a specific role within defined responsibilities and works in close collaboration to identify, assess, and mitigate risks.

- **First Line of Defense:** the hands-on, active risk management that portfolio management teams practice during day-to-day management of a portfolio or trading position. Examples of first-line risk activities include analyzing risks in support of investment decisions, adjusting portfolio positions in anticipation of developing risks, or analyzing all aspects of risks in support of written investment proposals. First-line activities are generally restricted to one portfolio or to one asset class and are put into practice by personnel whose collective, routine function is to make investment decisions.
- **Second Line of Defense:** includes functions such as Risk Management and Compliance which are a step removed from active asset management. The functions within the second line articulate standards and expectations for the effective management of risk and controls, including providing institutional leadership on Fund-wide risk issues, and advising on, establishing, and maintaining related policies. They are responsible for producing an independent risk assessment and risk reporting for senior management and regulatory authorities. Risk Management and Compliance is also responsible for articulating and designing the risk appetite framework across the Fund.
- **Third Line of Defense:** an independent and objective audit function. This function monitors the effectiveness of risk management, compliance, and governance practices.

The Fund's operations, financial information and internal controls are subject to examination by the New York State Department of Financial Services. Additionally, an independent, certified public accountant (currently KPMG LLP) audits the System's financial statements annually. The Comptroller's Office of Internal Audit also regularly reviews various aspects of the PICM operations, investment procedures, and internal controls.

The Fund's governance includes a committee structure and a comprehensive set of policies which are reviewed and approved by the Comptroller and the respective committees in accordance with their responsibilities and level of authority.

## The Fund's Trustee

The Comptroller, as the Fund's sole Trustee, is responsible for strategic direction, supervision, and control, and for defining overall tolerance for risk. In particular, the Comptroller approves the risk management framework and sets the overall risk appetite among other responsibilities.

## Investment Advisory Committee

The Investment Advisory Committee advises the Comptroller on general investment issues. The Investment Advisory Committee periodically reviews the strategic plan and monitors the Fund's risk profile. The Director of Risk is a participant at each Investment Advisory Committee meeting and provides a formal presentation to the Investment Advisory Committee on liquidity and market risk on an annual basis. Committee members also receive quarterly risk updates in conjunction with the Investment Advisory Committee meeting.

## Risk Committee

The Director of Risk has responsibilities for advising the Chief Investment Officer (CIO), the Executive Deputy Comptroller for Retirement Services (EDCRS) and the Comptroller on risk issues and making formal recommendations to the CIO, the EDCRS and the Comptroller on investment risk and investment-related risk issues. In addition, recognizing that risk is multi-dimensional, and that risk cannot be reduced to a single measure or be fully encompassed by any one professional discipline, the Director of Risk seeks advice from the Risk Committee. The purpose of the Committee is (1) to provide support and advice to the Director of Risk and (2) to provide multidisciplinary advice on risk and risk management programs for PICM. The Committee meets at least quarterly and has established an emerging-events sub-group which meets as needed to review and discuss evolving situations deemed to have significant importance for the markets.

## Rebalance Committee

The Rebalance Committee, chaired by the Director of Risk, ensures the Fund's invested exposure is aligned with the approved asset allocation targets. The Rebalance Committee meets at least monthly to review and analyze the Fund's current asset allocation and cash flow projections, including benefit payments, capital calls and current capital markets conditions and outlook. In addition, the Rebalance Committee monitors short-term liquidity and the position of the "basket clause," as necessary, for the purpose of examining the overall allocation per statutory guidelines.

# CORPORATE GOVERNANCE

## Corporate Governance Program and Environmental, Social and Governance Strategy

The Fund's investment philosophy requires the consideration of Environmental, Social and Governance (ESG) factors in the investment process because they can influence both risks and returns. Assessing company and external manager performance with respect to ESG factors, and encouraging both to embrace ESG best practices, can help protect the long-term value of the Fund's investments.

The Fund has publicly released its ESG Strategy which delineates its ESG beliefs, practices, and key factors, and outlines expectations for asset managers and public equity portfolio companies. The Fund's ESG Strategy can be accessed on the Comptroller's website at: [www.osc.ny.gov/files/common-retirement-fund/2020/pdf/ESG-strategy-report-2020.pdf](http://www.osc.ny.gov/files/common-retirement-fund/2020/pdf/ESG-strategy-report-2020.pdf).

The Fund's Corporate Governance Program is tasked with executing the Fund's ESG Strategy, with a focus on the following key ESG factors:

- **Environment (E):** climate risks and opportunities, natural resource and raw material usage, and pollution and waste management.
- **Social (S):** human capital management, labor relations, human rights, health and safety, supply chain labor standards, privacy and data security, product safety and quality, and community impact.
- **Governance (G):** risk oversight, board and governance practices, corporate strategy and capital allocation, executive compensation, inclusion and diversity, and lobbying and political spending.

Implementation of the Fund's ESG Strategy includes promoting sound ESG practices through active ownership—using the CRF's voice and votes to address investment risks. The Fund's active ownership work takes many forms, including voting on nearly 30,000 proxy ballot items annually, engaging directly with portfolio companies, conducting external manager ESG due diligence and risk assessments, and supporting public policies that will help protect the long-term value of our investments.

**Proxy voting** at public equity portfolio companies' meetings is an effective means of engaging and communicating with boards of directors and management about the Fund's priorities and can be a powerful tool for enhancing long-term value. The Fund's independent proxy voting is an important fiduciary obligation that is executed pursuant to its Proxy Voting Guidelines, which are updated biennially. Not only do these guidelines provide direction for the Fund's voting decisions, but they also guide other corporate engagements and policy initiatives, articulating to the capital markets the Fund's view of what constitutes good corporate governance and ESG best practices. Guidelines can be accessed on the Comptroller's website at: [www.osc.ny.gov/files/common-retirement-fund/corporate-governance/pdf/proxy-voting-guidelines-2024.pdf](http://www.osc.ny.gov/files/common-retirement-fund/corporate-governance/pdf/proxy-voting-guidelines-2024.pdf).

**Stewardship**, in its many forms, can serve to protect and enhance the value of the Fund's investments. The Fund's stewardship work utilizes various engagement strategies, including shareholder proposals, written correspondence, investor statements, press strategies and meetings with companies' directors and executives. The Fund's engagements result in companies providing improved disclosures and taking important actions to address ESG risks and opportunities. Further background on the Fund's stewardship work and priorities can be accessed on the Comptroller's website at: [www.osc.ny.gov/files/common-retirement-fund/corporate-governance/pdf/2024-stewardship-priorities-and-proxy-voting-guideline-updates.pdf](http://www.osc.ny.gov/files/common-retirement-fund/corporate-governance/pdf/2024-stewardship-priorities-and-proxy-voting-guideline-updates.pdf).

**ESG Integration** incorporates ESG factors into the Fund's analysis of investment risk and manager performance. Risk assessments that evaluate material ESG factors are systematically applied across all asset classes. Due diligence of external managers includes an assessment of their ESG policies, which are customized for each asset class. In addition, annual surveys of and engagements with the Fund's managers can provide updated information about their ESG policies and practices.

**Public Policy and Advocacy** are a focus of the Corporate Governance Program's strategy, employed when they may improve the long-term value of the Fund's investments. The Fund actively supports public policy that promotes the overall stability, transparency, and efficient functioning of financial markets and the economy. Advocacy can take many forms including meetings and correspondence with elected representatives, regulators, and other public officials, testimony at hearings and forums, submitting comments on regulatory and legislative proposals, and participation in state, national, and international forums and initiatives.

## Climate-Related Financial Disclosures

The purpose of this section is to report on the Fund's efforts to address climate risk in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), an organization established by the Financial Stability Board of the G20 (a forum convened by 19 leading industrial nations and the European Union) to guide the financial community in its understanding and reporting of climate risks. The Fund supports the TCFD recommendations.

## Governance

As Trustee, the Comptroller is responsible for the prudent investment of the Fund. The Comptroller believes that climate change presents significant risks to the Fund's investments, as well as unique investment opportunities. With leadership and direction from the Comptroller, the Fund has established a team to implement its 2019 Climate Action Plan. This team includes the CIO, investment professionals representing all asset classes, the Director of the SICS Program, the Bureau of Corporate Governance, legal, risk, and operations staff. The team is tasked with developing action plans and executing strategies to address climate risks and identify investment opportunities for the Fund. In addition, the Fund has contracted consultants and data providers to provide unique research and analysis services.

## Strategy

The Fund recognizes that there are different short-, medium-, and long-term risks posed by climate change. Because the Fund expects to exist in perpetuity, it must consider all these time horizons. The transition to a low-carbon economy is already underway and accelerating globally; it is likely to affect virtually every investment in the Fund's broadly diversified portfolio.

The Fund has identified significant short- and medium-term transition risks in developed markets due to implementation of the Paris Agreement, technological advances and changing market demand. However, changes resulting from efforts to mitigate climate change will also create investment opportunities in a lower carbon economy. Across all asset classes, the Fund actively seeks to expand its investments in climate solutions that meet the CRF's requirements for risk, return and scale. In February 2024, the Fund announced new measures to address climate risks and opportunities. These include: a new goal of investing \$40 billion in the SICS Program by 2035, a prohibition on new private market investments in funds focused on the extraction or production of oil, gas and coal, and the updating of proxy voting guidelines to support increased disclosure of climate transition plans, risks and opportunities by public companies.

The Fund also believes physical risks are significant in all time frames. Extreme weather events are already affecting businesses around the world and pose a growing threat to the Fund's investments. Measuring these risks is challenging due to difficulties in accurately projecting weather events at the local level, but the Fund expects that better climate, weather, and financial modeling will allow for improved assessments in the near term. The Fund expects to see greater physical risks in the long run if the world fails to limit temperature rise.

## Managing Risk

The 2019 Climate Action Plan provides a framework for the Fund to formally integrate climate considerations into risk assessments, investment decision making, engagements, and public policy advocacy. The Fund's staff reviews studies to stay informed about the science associated with climate change, and actively seeks to identify advanced climate risk assessments to inform investment strategies.

Pursuant to the Climate Action Plan, the Fund committed to establishing a series of assessment frameworks and minimum standards to review the transition-readiness of companies in high impact sectors. Beginning in 2019, the Fund commenced assessments of thermal coal mining companies, and then reviewed oil sands companies in 2020, followed by shale oil and gas companies in 2021 and integrated oil and gas companies in 2024. Since 2019, the Fund has assessed more than 100 such energy companies, with investment restrictions resulting in a total of 58 companies that could not demonstrate readiness for the transition to the low-carbon economy.

The Fund reviews all such divestment policies biennially and reassesses individual companies annually, engaging with each one to garner any new or additional information about their transition strategies. Next, the Fund will assess the transition readiness of major utilities in the U.S.—companies that are among the highest emitters of greenhouse gases—but also potential leaders in developing climate solutions.

The SICS Program is a key component of the Fund's plan to position its portfolio to address climate risks and opportunities across asset classes. By the end of fiscal year 2023-24, the Fund had committed more than \$22 billion. In February 2024, the Fund announced it had set a goal of doubling its SICS Program to \$40 billion by 2035 across all asset classes, including actively and passively managed public equity strategies, green bonds, clean and green infrastructure funds, and private equity, as well as green building real estate funds.

The Fund has undertaken significant corporate engagement as described in its annual Corporate Governance Stewardship Report and its Climate Action Plan Progress Report. This includes filing over 175 climate-change-related shareholder resolutions since 2008 and reaching more than 95 agreements with portfolio companies on climate issues such as setting greenhouse gas (GHG) emissions reduction targets and disclosing climate transition action plans. The Fund continues to engage with high-risk companies directly and in collaboration with other investors through the global Climate Action 100+ initiative. The Fund's proxy voting guidelines also incorporate criteria to evaluate each company's climate performance, including climate transition targets, strategies, capital allocation alignment, and TCFD disclosures, which inform the Fund's director votes. In 2023, the Fund withheld support from or voted against over 370 individual directors at over 45 portfolio companies that lacked robust climate risk management.

Finally, the Fund continues to provide public policy leadership at the international, federal, and state levels on climate change issues that may impact its returns on a variety of issues, including implementation of the Paris Agreement, the Inflation Reduction Act and the Infrastructure Investment and Jobs Act, and support for the SEC's Climate Disclosure Rule and the EPA's rules on power plant, vehicle and methane emissions. Moving forward the Fund will continue to work on key legislative and regulatory issues including corporate climate disclosures, emissions standards, meaningful carbon pricing, clean energy infrastructure funding, and financial incentives that drive climate solution investments.

## Metrics and Targets

In December 2020, the Fund announced its goal to reduce GHG emissions from the Fund's entire portfolio to net-zero by 2040. The Fund is pursuing its ambitious goal through a combination of sustainable investments, engagements with portfolio companies and managers, public policy advocacy and, in limited instances where it is consistent with fiduciary duty, divestment. To measure the Fund's progress towards net zero, the Fund set an interim goal of attaining 50 percent alignment with a 1.5-degree scenario by 2030. Currently, 22 percent of the Fund's public equity and corporate fixed income holdings are aligned with a 1.5-degree future. The Fund adopted other interim engagement and investment goals for 2030 that include actively engaging with 50 percent of the Fund's publicly traded assets in high-impact sectors on achieving net-zero emissions by 2040 and allocating at least 75 percent of the \$40 billion committed to the SICS Program to investments in climate solutions.

In addition, the Fund currently uses the following metrics to assess climate risks and opportunities:

- Carbon emissions metrics.
  - Annual average weighted emissions intensity assessment of public equity holdings (including Scope 1 and 2 GHG emissions). In 2023, the global equity portfolio emissions intensity was 20 percent lower than its benchmark (a composite comprising 72 percent Russell 3000 and 28 percent MSCI ACWI ex-U.S.). Emissions intensity is calculated as a weighted average of companies' carbon footprints (Scope 1 and 2) divided by the total portfolio market value. Global equity, however, saw a 4.7 percent increase in year-over-year emissions intensity from 2022, in large part due to changes in existing positions' portfolio weights, but also from other changes such as actual increases in portfolio companies' emission intensity, newly invested and sold positions, and companies' market cap changes. The benchmark's total emissions intensity also increased by 6.96 percent largely due to both changes in existing positions' portfolio weights and actual increases in individual benchmark companies' emissions intensity.
  - Although the corporate fixed income portfolio's emissions intensity, as of June 30, 2023, decreased by 17 percent from 2022, the portfolio emissions intensity was 3.8 percent higher than its benchmark (Bloomberg U.S. Aggregate Bond Index). The emissions underperformance relative to its benchmark was mainly due to higher investments in high emitting companies in the industrial sector. It should be noted that some of the top emitting companies' emissions reporting is of little value due to problems such as non-reporting and inconsistent data.
  - The Fund believes that carbon emissions metrics can be useful in assessing transition risks, especially regulatory risks, and can inform the Fund's prioritized engagements. But these metrics, which are by their very nature backward-looking, are not an effective measure of the future direction of companies. The Fund also recognizes that the significant time lag between when emissions occur and when emissions data is verified and reported, makes it even more difficult to derive actionable information from the measurement of portfolio emissions. There are also challenges in assessing Scope 3 emissions due to limited availability of accurate data.
- Portfolio exposure to assets that are significantly affected by climate change and the low-carbon transition as recommended by the TCFD.
- Transition assessment and minimum standards to evaluate companies in the high impact sectors recommended by the TCFD, with assessments of thermal coal mining, oil sands production, shale oil and gas, and integrated oil and gas companies completed to date.



# INVESTMENT RESULTS

Based on Fair Market Values as of March 31, 2024.

	Annualized Rate of Return <sup>(1)</sup>			
	1 Year	3 Years	5 Years	10 Years
<b>Total Fund</b>	<b>11.55%</b>	<b>5.40%</b>	<b>8.76%</b>	<b>7.88%</b>
Public Equity	24.51	7.14	12.04	10.10
MSCI All Country World Index	23.22	6.96	10.92	8.66
Private Equity <sup>(2)</sup>	6.85	12.60	14.57	12.71
Cambridge U.S. Private Equity Index (1Q Lag) <sup>(3)</sup>	9.07	14.58	16.12	13.99
Real Estate <sup>(2)</sup>	(9.72)	6.71	4.92	7.47
Real Estate Benchmark <sup>(4)</sup>	(12.14)	4.66	4.05	6.65
Credit <sup>(2)</sup>	10.65	5.71	6.14	–
Credit Suisse Leveraged Loan Index + 2.5%	15.19	8.45	7.93	–
Opportunistic/Absolute Return Strategy Funds (O/ARS) <sup>(2)</sup>	11.17	7.89	7.54	5.55
CRF Actuarial Return + 2%	7.90	7.90	8.08	8.59
Real Assets <sup>(2)</sup>	8.16	12.79	10.53	–
U.S. CPI + 5%	8.61	10.80	9.36	–
Fixed Income <sup>(2)</sup>	2.65	(1.58)	0.94	1.96
Bloomberg U.S. Aggregate Bond Index	1.70	(2.46)	0.36	1.54
Short-Term Investments	5.50	2.87	2.30	1.79

(1) Investment return calculations were prepared by the Custodian using a time-weighted rate of return. These figures are for investment management purposes and may not agree with audited statements. Due to reporting timing differences, actual results may differ from reported results.

(2) Private Equity, Real Estate and Real Assets are reported on a three-month lag (adjusted by cash flows); Credit and O/ARS are reported on a one-month lag (adjusted by cash flows). Alternative asset classes and non-core fixed income are generally reported net of fees.

(3) The vendor's official results are presented as annualized Internal Rate of Returns (IRRs). However, the Custodian reports the vendor's index as quarterly delinked returns on a three-month lag. This time-weighted and lagged methodology is most comparable to the Custodian returns for the Private Equity composite.

(4) Effective April 1, 2019, the Real Estate benchmark is an asset-weighted blend of quarter lagged benchmarks. Core Real Estate is proxied to the NCREIF NFI ODCE (Net) Index. Non-Core Real Estate is proxied to the same index with a 100 basis point annual premium. The Real Estate benchmark returns prior to April 1, 2019 follow the NCREIF Property (Gross) Index on a one-quarter lag.

# INVESTMENT SUMMARY

The following table summarizes the fair values of Fund investments by asset type for March 31, 2024 and 2023.  
(Dollars In Thousands)

Asset Type	Fair Value March 31, 2024	Percentage of Total Fair Value	Fair Value March 31, 2023	Percentage of Total Fair Value
Domestic Equity	\$ 76,125,183	28.4%	\$ 75,054,447	30.2%
Global Fixed Income	52,574,780	19.6	48,479,229	19.5
International Equity	37,944,432	14.1	33,944,147	13.7
Private Equity	39,570,276	14.8	36,976,567	14.9
Real Estate	24,864,472	9.3	25,054,357	10.1
Short-Term Investments	5,844,462	2.2	4,018,739	1.6
Real Assets	9,335,274	3.5	7,811,998	3.1
Opportunistic/ARS	8,139,099	3.0	6,463,357	2.6
Mortgage Loans	1,383,474	0.5	1,310,637	0.5
Credit	12,307,252	4.6	9,411,439	3.8
<b>Total Investments</b>	<b>\$ 268,088,704</b>	<b>100.0%</b>	<b>\$ 248,524,917</b>	<b>100.0%</b>

**Note:** This table reflects percentages derived from financial statement figures and may differ slightly from the asset allocation figures because certain investments have been reclassified.

## ASSET ALLOCATION — MARCH 31, 2024

The Fund diversifies its assets among various classes including domestic and international equity, fixed income, private equity, real estate, opportunistic and absolute return strategy funds, credit and real assets.

Asset liability studies, conducted periodically with help from an investment consultant, identify the optimal mix of assets to meet the growth requirements of pension obligations while controlling risk as measured by return volatility. In the fiscal year ended March 31, 2020, the Fund conducted an asset liability analysis and adopted a Long-Term Policy Allocation which was implemented on April 1, 2020.

The Fund has formal rebalancing guidelines which ensure a disciplined process for meeting asset allocation goals, as well as allocation ranges for individual asset classes which minimize unnecessary turnover.

Asset Type	Allocation as of March 31, 2024	Long-Term Policy Allocation
<b>Equity</b>		
Domestic Equity	29.56%	32.0%
International Equity	13.29	15.0
<b>Alternative Assets</b>		
Private Equity	14.60%	10.0%
Real Estate	9.33	9.0
Opportunistic/Absolute Return Strategy	3.02	3.0
Credit	4.50	4.0
Real Assets	3.44	3.0
<b>Fixed Income</b>	<b>20.93%</b>	<b>23.0%</b>
<b>Cash</b>	<b>1.33%</b>	<b>1.0%</b>

**Note:** A detailed listing of the New York State and Local Retirement System's assets as of March 31, 2024, is on our website at [www.osc.ny.gov](http://www.osc.ny.gov).

# PUBLIC EQUITY PERFORMANCE

For the Fiscal Year Ending March 31, 2024.

	Total Assets (Dollars in Millions)	Annualized Rate of Return				Portfolio Since Inception	Benchmark Since Inception*	Inception Date
		1 Year	3 Years	5 Years	10 Years			
<b>Total Public Equity</b>	<b>\$ 112,627.8</b>	<b>24.51%</b>	<b>7.14%</b>	<b>12.04%</b>	<b>10.10%</b>			
MSCI All Country World Index		23.22%	6.96%	10.92%	8.66%			
Total Domestic Equity Composite	\$ 71,737.4	28.98%	9.63%	14.17%	12.13%	10.93%	10.93%	1/1/91
Russell 3000 Index		29.29%	9.78%	14.34%	12.33%			
Total Passive Domestic Equity	\$ 57,284.6	30.29%	10.55%	14.82%	12.66%	11.13%	10.79%	11/1/86
CRF Large Cap Index Fund	42,724.1	32.40	12.00	16.03	13.64	12.14	12.11	8/1/78
CRF Midcap Index Fund	6,286.7	22.17	6.03	11.03	9.77	11.63	11.65	11/1/91
CRF Small Cap Index Fund	1,058.7	19.03	(0.01)	8.17	7.76	8.46	8.36	10/1/05
CRF Low Emission Index Fund	5,048.2	29.67	10.22	14.77	–	13.94	13.99	1/1/16
CRF TPI Climate Transition Index	2,166.8	27.72	–	–	–	5.69	5.78	1/18/22
Russell Top 200 (S&P 500 To 1/1/16)		32.44%	12.00%	16.07%	13.64%			
Russell Midcap (S&P 400 Mid Cap To 1/1/16)		22.35%	6.07%	11.10%	9.79%			
Russell 2000 Index		19.71%	(0.10)%	8.10%	7.58%			
Russell 1000 Index		29.87%	10.46%	14.76%	12.68%			
Total Multi Factor Composite	\$ 7,162.6	29.84%	12.43%	14.68%	–	14.11%	13.47%	1/1/16
CRF High Efficiency Defensive Index Fund	2,959.0	24.12	10.66	13.88	–	14.15	13.99	1/1/16
AQR Capital Management	4,203.6	34.20	13.76	15.08	–	13.31	13.69	6/1/18
Russell 1000 Index		29.87%	10.46%	14.76%	12.68%	–	–	
Total Active SMID Cap Composite	\$ 3,210.8	24.80%	3.51%	12.96%	10.88%	12.06%	9.69%	3/1/08
Brown Capital Management	1,104.7	13.69	(6.10)%	4.39	9.85	13.52	8.91	9/1/94
EARNEST Partners	1,142.2	20.22	5.59	12.22	10.18	10.56	8.37	6/1/01
Fiera Capital	963.9	30.14	6.07	15.47	11.94	12.72	10.24	3/1/08
Russell 2500 Index		21.43%	2.98%	9.91%	8.84%	–	–	
Total Active Small Cap Composite	\$ 3,351.5	18.51%	0.88%	9.76%	9.45%	10.10%	9.58%	8/1/91
Artisan Partners	644.8	14.08	(5.00)%	8.93	10.62	11.42	8.69	8/26/13
Channing Capital Management	703.6	27.31	5.10	11.39	–	8.52	7.15	4/1/15
Leading Edge Investment Advisors	703.8	21.10	2.43	11.69	–	9.63	7.51	4/1/15
Palisade Capital Management	693.0	15.33	3.16	9.57	–	8.04	6.05	6/1/18
PENN Capital Management	606.3	15.10	2.33	10.88	7.66	7.96	8.07	9/27/13
Russell 2000 Index		19.71%	(0.10)%	8.10%	7.58%	–	–	
Total Long-Only Alpha Composite	\$ 709.7	16.72%	6.95%	10.79%	8.94%	11.69%	14.50%	9/1/11
Triant Partners Strategic Investment Fund-N, L.P.	709.7	16.72	6.07	10.14	–	8.70	9.20	2/1/15
S&P 500 Index		29.88%	11.49%	15.05%	12.96%	–	–	
Total Domestic Transition Accounts	\$ 18.3							
* Benchmarks for all accounts will vary according to mandate.								

# PUBLIC EQUITY PERFORMANCE

CONTINUED

For the Fiscal Year Ending March 31, 2024.

	Total Assets (Dollars in Millions)	Annualized Rate of Return				Portfolio Since Inception	Benchmark Since Inception*	Inception Date
		1 Year	3 Years	5 Years	10 Years			
<b>Total Non U.S. Equity Composite</b>	<b>\$ 31,680.6</b>	<b>14.21%</b>	<b>1.50%</b>	<b>6.88%</b>	<b>5.03%</b>	<b>6.07%</b>	<b>5.25%</b>	<b>10/1/89</b>
MSCI ACWI Ex U.S. IMI (MSCI ACWI Ex U.S. to 1/1/17)		13.20%	1.72%	6.00%	4.38%			
Total Non U.S. Passive Composite	\$ 12,438.0	13.29%	2.07%	6.33%	4.49%	5.92%	5.66%	11/1/04
BlackRock ACWI Ex U.S. IMI	11,289.5	13.15	1.97	6.27	4.52	5.94	5.66	11/1/04
BlackRock MSCI Climate Change Index	1,148.5	15.02	—	—	—	12.39	11.97	1/31/23
Total Active ACWI Ex U.S. Composite	\$ 8,128.6	15.83%	0.97%	8.42%	6.30%	7.08%	5.66%	11/1/04
Acadian Asset Management	2,358.7	18.94	3.58	7.90	6.40	7.27	5.66	11/1/04
Baillie Gifford	1,955.6	4.60	(6.49)	5.40	4.79	5.77	3.91	2/1/99
GQG Partners	993.4	32.29	12.83	15.02	—	13.16	4.20	4/1/18
LSV Asset Management	819.7	19.40	7.22	—	—	16.13	12.90	10/1/20
Wellington Management	2,001.1	15.70	(0.36)	7.51	—	9.77	7.95	3/1/16
<b>MSCI ACWI Ex U.S.</b>		<b>13.26%</b>	<b>1.94%</b>	<b>5.97%</b>	<b>4.25%</b>			
Total EAFE Composite	\$ 7,182.0	12.35%	2.96%	7.18%	5.29%	6.16%	4.82%	10/1/89
Capital Group	2,306.5	12.81	2.28	8.68	6.58	7.59	4.94	9/1/89
Mondrian Investment Partners	2,201.4	13.60	5.19	5.62	4.07	6.42	5.17	1/1/98
Xponance	1,240.7	13.09	3.24	—	—	4.90	6.02	2/1/21
Total EAFE Small Cap Composite	\$ 1,432.0	9.21%	(0.09)%	5.77%	—	3.92%	2.79%	7/1/18
Acadian Asset Management	429.7	17.35	4.08	9.33	—	7.14	2.79	7/1/18
Artisan International SMID	298.9	8.60	—	—	—	0.61	1.13	4/1/22
Barings International	318.0	7.62	(4.43)	2.66	—	0.85	2.72	8/1/18
Global Alpha Capital Management	385.4	2.95	(0.22)	5.63	7.54	8.65	5.38	10/1/13
<b>MSCI EAFE Index</b>		<b>15.32%</b>	<b>4.78%</b>	<b>7.33%</b>	<b>4.80%</b>			
Total Emerging Markets Composite	\$ 2,072.5	12.09%	(4.59)%	3.18%	3.18%	7.37%	6.47%	1/1/92
ARGA Investment Management	500.6	—	—	—	—	0.14	(0.34)	3/13/24
Martin Currie	556.0	3.27	(8.12)	—	—	2.85	3.47	10/8/19
PGIM Quantitative Solutions	1,011.2	19.29	(0.16)	4.95	4.27	4.12	2.93	2/1/12
<b>MSCI Emerging Markets Index</b>		<b>8.15%</b>	<b>(5.05)%</b>	<b>2.22%</b>	<b>2.95%</b>			
Cevian Capital II, LP	\$ 1,859.5	24.47%	12.50%	14.70%	8.55%	10.97%	6.49%	9/1/11
<b>MSCI Europe Index</b>		<b>14.11%</b>	<b>6.19%</b>	<b>7.96%</b>	<b>4.44%</b>			
Total Global Equity Composite	\$ 9,195.9	24.29%	6.47%	11.83%	9.56%	8.94%	7.44%	9/1/94
ARGA Investment Management	355.3	18.02	6.64	12.51	—	10.65	10.12	5/1/17
Bell Asset Management	133.9	14.71	6.82	11.01	—	11.26	11.00	5/1/17
Brandes Investment Partners	2,288.2	27.02	11.49	12.39	8.02	7.65	5.88	11/1/99
Generation Investment Management	1,903.1	26.88	5.00	12.19	13.91	16.05	12.02	4/8/09
Goldman Sachs Asset Management	2,102.1	22.00	6.67	11.67	—	10.44	9.77	1/1/15
Pictet Asset Management	687.6	20.07	—	—	—	20.77	18.82	7/1/22
QTRON Investments	145.3	25.57	10.14	—	—	13.34	11.61	5/22/19
T. Rowe Price	1,580.5	30.55	3.43	14.76	13.95	13.24	9.14	3/1/11
<b>MSCI All Country World Index</b>		<b>23.22%</b>	<b>6.96%</b>	<b>10.92%</b>	<b>8.66%</b>			
Global Transition Account	\$ 13.9							

\* Benchmarks for all accounts will vary according to mandate. Composite market values include transition accounts and accrued management fees.

# PUBLIC EQUITY FUND OF FUND PERFORMANCE

For the Fiscal Year Ending March 31, 2024.

	Total Assets (Dollars in Millions)	Annualized Rate of Return				Portfolio Since Inception	Benchmark Since Inception*	Inception Date
		1 Year	3 Years	5 Years	10 Years			
Total Xponance EAFE Composite	\$ 1,240.7	13.09%	3.24%	—	—	4.90%	6.02%	2/1/21
ARGA Investment Management	127.5	16.08	6.57	—	—	14.31	7.74	8/5/19
Centerstone	104.1	—	—	—	—	2.75	11.69	6/22/23
Foresight Global	180.3	5.97	3.10	—	—	4.54	6.02	2/1/21
Frontier Global Partners	158.5	9.72	0.49	—	—	8.28	8.15	8/5/19
Haven	139.0	—	—	—	—	12.79	11.69	6/22/23
Martin Investment Management	152.1	18.36	6.97	—	—	7.85	6.02	2/1/21
Osmosis Investment Management	172.7	12.15	5.98	7.98	—	6.99	6.18	11/1/15
Redwood Investment Management	208.5	19.24	—	—	—	4.84	6.64	4/1/22
MSCI EAFE Index		15.32%	4.78%	7.33%	—			
Total Leading Edge Investment Advisors Composite	\$ 703.8	21.10%	2.43%	11.69%	—	9.63%	7.51%	4/1/15
Altravue Capital	92.7	20.86	14.57	—	—	23.55	15.90	7/29/20
Bridge City Capital	77.7	14.18	0.27	—	—	10.27	8.43	2/28/20
Denali Advisors	101.1	31.78	9.63	—	—	15.23	9.74	8/28/19
Granahan Investment Management	82.8	7.29	(9.89)	7.85	—	12.80	7.32	9/29/17
Granite Investment Partners	98.6	12.82	(1.78)	9.88	—	9.42	7.51	4/1/15
Nicholas Investment Partners	83.1	36.52	1.25	15.52	—	11.50	7.44	4/1/15
Palisades Investment Partners	81.3	26.66	3.92	17.12	—	12.47	7.51	4/1/15
Phocas Financial Corporation	89.2	23.17	6.40	11.11	—	8.20	7.15	4/1/15
Russell 2000 Index		19.71%	(0.10)%	8.10%	—			
Total GSAM Composite	\$ 2,102.1	22.00%	6.67%	11.67%	—	10.44%	9.77%	1/1/15
GSAM AIMS Global Account Cayuga	352.3	26.49	4.49	13.30	—	12.69	8.88	12/23/14
GSAM AIMS Global Account Iroquois	176.3	20.98	(0.89)	9.84	—	9.99	8.76	11/20/14
GSAM AIMS Global Account Mohawk	228.5	21.34	8.12	10.42	—	7.57	8.82	11/26/14
GSAM AIMS Global Account Mohican	288.2	16.61	7.16	9.78	—	10.05	10.58	7/22/16
GSAM AIMS Global Account Onondaga	292.5	21.12	9.09	12.43	—	12.10	10.06	12/17/14
GSAM AIMS Global Account Panther	205.0	—	—	—	—	2.59	4.85	2/20/24
GSAM AIMS Global Account Shinnecock	317.1	27.89	11.35	—	—	17.09	11.09	10/21/19
GSAM AIMS Global Account Tuscarora	243.5	19.70	5.56	9.78	—	8.49	9.63	12/22/14
MSCI World Index		25.11%	8.60%	12.07%	—			
* Benchmarks for all accounts will vary according to mandate. Composite market values include transition accounts and accrued management fees.								

# DOMESTIC EQUITY PORTFOLIO — TEN LARGEST HOLDINGS

For the Fiscal Year Ending March 31, 2024.

Company	Shares	Fair Value	Percentage of Domestic Equity
Microsoft Corp.	11,321,989	\$ 4,763,387,212	6.3%
Apple, Inc.	21,117,505	3,621,229,757	4.8
NVIDIA Corp.	3,436,112	3,104,733,359	4.1
Amazon.com, Inc.	14,095,867	2,542,612,489	3.3
Meta Platforms, Inc.	3,179,239	1,543,774,874	2.0
Alphabet, Inc. – Class A	8,908,396	1,344,544,208	1.8
Alphabet, Inc. – Class C	7,540,481	1,148,113,637	1.5
Berkshire Hathaway, Inc. – Class B	2,425,678	1,020,046,113	1.3
Eli Lilly & Company	1,241,510	965,845,120	1.3
J.P. Morgan Chase & Company	4,095,087	820,245,926	1.1

**Note:** A detailed listing of the New York State and Local Retirement System’s assets as of March 31, 2024 is on our website at [www.osc.ny.gov](http://www.osc.ny.gov).

# FIXED INCOME PORTFOLIO AND COMPARISON

As of March 31, 2024.

Sector	Fair Value (Dollars in Millions)	Fair Value Percentage	Effective Duration	Current Yield
Treasury	\$ 21,391.5	41.9%	7.78	2.54%
Treasury Inflation-Protected Securities (TIPS)	250.9	0.5	12.29	0.87
Federal Agency	408.1	0.8	2.64	5.50
Corporate	12,487.6	24.5	5.30	3.98
Asset-Backed	2,135.0	4.2	2.71	4.10
Commercial Mortgage-Backed	1,093.0	2.1	2.54	3.89
Mortgage-Backed	8,409.4	16.5	5.14	4.27
Berkadia Mortgages	1,015.2	2.0	4.54	4.35
CPC Mortgages	368.2	0.7	12.18	5.23
Collateralized Loan Obligations	2,915.4	5.7	0.12	6.72
Municipal Bonds	594.1	1.2	9.25	3.97
<b>Total Core Portfolio</b>	<b>\$ 51,068.4</b>	<b>100.0%</b>	<b>5.93</b>	<b>3.65%</b>
<b>Externally Managed Funds</b>				
Advent Capital	\$ 474.0		2.96	1.70%
Calvert Research and Management	261.0		5.97	4.27
DoubleLine Capital	217.5		14.14	3.91
Morgan Stanley Investment Management	232.0		7.70	3.39
New Century Advisors	538.4		5.40	1.69
Ramirez Asset Management	345.7		7.72	5.39
Schroder Investment Management	244.9		1.97	4.06
Teachers Advisors (Nuveen)	241.6		6.22	4.40
Wellington Management Company	334.9		6.88	5.30



# FIXED INCOME PERFORMANCE

As of March 31, 2024.

	Annualized Rate of Return		
	1 Year	3 Years	5 Years
<b>Common Retirement Fund — Internal Core</b>	<b>2.65%</b>	<b>(1.56)%</b>	<b>0.92%</b>
Treasuries	(1.10)	(3.62)	(0.80)
Treasury Inflation-Protected Securities (TIPS)	(0.82)	(5.27)	N/A
Agencies	4.44	(1.16)	0.10
Corporate Bonds	4.89	(0.72)	2.23
Municipal Bonds	3.86	(4.40)	(0.34)
Asset-Backed	6.96	0.74	1.74
Commercial Mortgage-Backed	4.46	(0.85)	1.43
Mortgage-Backed	2.95	(1.13)	0.69
Collateralized Loan Obligations	11.24	4.76	4.18
<b>Bloomberg U.S. Aggregate Bond Index</b>	<b>1.70%</b>	<b>(2.46)%</b>	<b>0.36%</b>

## FIXED INCOME PORTFOLIO — TEN LARGEST HOLDINGS

As of March 31, 2024.

Issue	Fair Value (Dollars in Millions)	Percentage of Fixed Income
Treasury Bonds Due 5/15/2032	\$ 605.6	1.22%
Treasury Bonds Due 2/28/2026	546.2	1.10
Treasury Bonds Due 11/15/2044	428.4	0.86
Treasury Bonds Due 5/15/2030	428.0	0.86
Treasury Bonds Due 10/31/2025	397.7	0.80
Treasury Bonds Due 8/15/2030	380.4	0.77
Treasury Bonds Due 2/15/2045	376.6	0.76
Treasury Bonds Due 7/31/2028	365.1	0.73
Treasury Bonds Due 11/15/2031	363.5	0.73
Treasury Bonds Due 11/15/2040	344.0	0.69
<b>Total</b>	<b>\$ 4,235.6</b>	<b>8.52%</b>

**Note:** A detailed listing of the New York State and Local Retirement System's assets as of March 31, 2024 is on our website at [www.osc.ny.gov](http://www.osc.ny.gov).

# REAL ESTATE PORTFOLIO

As of March 31, 2024.

	Equity Amount	Percentage	Mortgage Amount	Percentage
<b>Property Diversification</b>				
Industrial/R&D	\$ 9,073,174,921	36.5%	\$ –	0.0%
Land for Development	56,594,599	0.2	–	0.0
Lodging	594,307,751	2.4	–	0.0
Office	3,417,554,378	13.7	626,498,104	45.3
Other*	3,912,995,907	15.7	–	0.0
Residential	4,661,610,118	18.7	368,248,014	26.6
Retail	3,154,177,202	12.7	388,727,501	28.1
<b>Total</b>	<b>\$ 24,870,414,876</b>	<b>100.0%</b>	<b>\$ 1,383,473,619</b>	<b>100.0%</b>
<b>Regional Diversification</b>				
Northeast	\$ 3,430,113,887	13.8%	\$ 1,383,473,619	100.0%
Mideast	1,850,206,124	7.4	–	0.0
Southeast	2,780,145,448	11.2	–	0.0
Southwest	2,412,853,381	9.7	–	0.0
Midwest	1,261,717,373	5.1	–	0.0
Mountain	915,316,769	3.7	–	0.0
Pacific	7,388,004,036	29.7	–	0.0
Non-U.S.	4,832,057,858	19.4	–	0.0
<b>Total</b>	<b>\$ 24,870,414,876</b>	<b>100.0%</b>	<b>\$ 1,383,473,619</b>	<b>100.0%</b>
<b>Note:</b> Equity and mortgage amounts are based on the fair value of the Fund's full real estate portfolio.				
* Other includes alternative property types (i.e. self storage, medical office, data centers, student housing).				
These figures may not agree with the audited statements due to timing and classification differences made for investment management purposes.				

## Opportunistic Real Estate

Number of Active Partnerships	Capital Committed (Dollars in Millions)	Capital Contributed (Dollars in Millions)	Current Market Value (Dollars in Millions)	Cumulative Distributions (Dollars in Millions)	Total Value / Exposure (Dollars in Millions)
102	\$ 26,875.5	\$ 18,880.6	\$ 12,942.7	\$ 11,152.8	\$ 24,095.5
These figures may not agree with the audited statements due to timing and classification differences made for investment management purposes.					

# ALTERNATIVE INVESTMENTS SUMMARY

As of March 31, 2024.

	Number of Partnerships	Capital Committed	Capital Contributed	Fair Value	Cumulative Distributions	Total Value
<b>Private Equity Funds</b>						
Corporate Finance/Buyout	168	\$ 35,315,920,730	\$ 32,950,117,423	\$ 22,318,192,441	\$ 31,463,113,140	\$ 53,781,305,581
Co-Investment	32	7,221,339,478	5,609,869,790	4,788,319,599	3,374,997,226	8,163,316,825
Distressed/Turnaround	12	1,805,729,587	1,799,756,055	820,546,285	1,868,278,348	2,688,824,633
Fund of Funds	37	7,735,829,809	7,551,507,834	2,814,864,332	8,391,195,330	11,206,059,662
Growth Equity	47	8,275,578,570	6,987,517,044	5,403,186,293	5,824,873,876	11,228,060,169
Special Situations	N/A	N/A	25,402,942	25,402,942	N/A	25,402,942
Venture Capital	26	5,165,573,455	5,388,161,319	2,810,643,558	4,362,902,487	7,173,546,045
Other	37	945,000,000	844,211,758	589,120,905	988,642,820	1,577,763,725
<b>Total Private Equity*</b>	<b>359</b>	<b>\$ 66,464,971,628</b>	<b>\$ 61,156,544,165</b>	<b>\$ 39,570,276,355</b>	<b>\$ 56,274,003,227</b>	<b>\$ 95,844,279,581</b>
<b>Opportunistic/Absolute Return Strategy Funds (ARS)</b>						
Opportunistic Funds	43	\$ 8,837,773,678	\$ 4,770,617,941	\$ 4,041,964,035	\$ 1,887,160,389	\$ 5,929,124,424
ARS Funds						
Equity Long-Short	1	N/A	N/A	558,899,777	N/A	493,536,850
Event and Merger	1	N/A	N/A	69,182,673	N/A	65,133,029
Event Driven	11	N/A	N/A	1,172,073,654	N/A	1,065,579,389
Fund of Funds	1	N/A	N/A	59,487	N/A	59,487
Relative Value	1	N/A	N/A	373,900,191	N/A	358,197,449
Structured Credit	2	N/A	N/A	606,170,487	N/A	568,970,997
Tactical Trading	4	N/A	N/A	1,316,848,327	N/A	1,168,694,641
Total ARS Funds	21	N/A	N/A	\$ 4,097,134,597	N/A	\$ 3,720,171,841
<b>Total Opportunistic/Absolute Return Strategy</b>	<b>64</b>	<b>\$ 8,837,773,678</b>	<b>\$ 4,770,617,941</b>	<b>\$ 8,139,098,632</b>	<b>\$ 1,887,160,389</b>	<b>\$ 9,649,296,265</b>
<b>Real Assets</b>	<b>45</b>	<b>\$ 14,243,244,145</b>	<b>\$ 9,148,750,056</b>	<b>\$ 9,335,273,552</b>	<b>\$ 2,970,754,800</b>	<b>\$ 12,306,028,353</b>
<b>Credit</b>	<b>60</b>	<b>\$ 22,876,135,179</b>	<b>\$ 16,172,434,070</b>	<b>\$ 12,307,251,832</b>	<b>\$ 7,958,630,050</b>	<b>\$ 20,265,881,882</b>
*The total figures include the Fund's private equity investments and other investments through Pursuit.						

# PUBLIC EQUITY MANAGEMENT FEES

For the Fiscal Year Ended March 31, 2024.

Manager	Management Fees	Incentive Fees	Total
Acadian Asset Management, LLC	\$ 8,923,726	\$ —	\$ 8,923,726
AQR Capital Management, LLC	3,621,822	—	3,621,822
ARGA Investment Management, LP	1,847,522	—	1,847,522
Ariel Investments, LLC	764,296	—	764,296
Artisan Partners, LP	7,105,046	—	7,105,046
Baillie Gifford Overseas, Ltd.	5,053,395	—	5,053,395
Baring International Investment, Ltd.	1,794,519	—	1,794,519
Bell Asset Management, Ltd.	500,094	—	500,094
BlackRock Institutional Trust Company, NA	3,540,296	—	3,540,296
Brandes Investment Partners, LP	4,171,885	—	4,171,885
Brown Capital Management, Inc.	4,360,013	—	4,360,013
Capital International, Inc.	2,757,155	—	2,757,155
Cevian Capital, LLP	15,721,639	—	15,721,639
Channing Capital Management, LLC	2,991,674	—	2,991,674
EARNEST Partners, LLC	3,854,565	—	3,854,565
Fiera Capital, Inc.	4,338,850	—	4,338,850
Generation Investment Management, LLP	10,829,512	22,491,973	33,321,485
Global Alpha Capital Management, Ltd.	2,298,401	—	2,298,401
Goldman Sachs Asset Management	849,936	—	849,936
Goldman Sachs Asset Management*	20,593,331	—	20,593,331
GQG Partners, LLC	3,631,645	—	3,631,645
Leading Edge Investment Advisors, LP*	4,617,818	—	4,617,818
Lisanti Capital Growth, LLC	390,531	—	390,531
LSV Asset Management	3,401,186	—	3,401,186
Martin Currie, Inc.	2,438,650	—	2,438,650
Mondrian Investment Partners, Inc.	5,826,978	—	5,826,978
Morgan Stanley Emerging Markets Fund, Inc.	1,002,256	—	1,002,256
Palisade Capital Management, LLC	2,990,777	—	2,990,777
Penn Capital Management Company, Inc.	2,581,995	—	2,581,995
PGIM Quantitative Solutions, LLC	931,467	962,320	1,893,788
Pictet Asset Management	3,053,219	—	3,053,219
QTRON Investments, LLC	483,172	—	483,172
Rock Creek Group, LP	1,285,717	—	1,285,717
Strategic Global Advisors, LLC	544,462	—	544,462
T. Rowe Price Associates, Inc.	4,997,197	—	4,997,197
Templeton Investment Counsel, LLC	304,881	—	304,881
Triam Fund Management, LP	87,198,841	—	87,198,841
Wellington Management Company, LLP	9,568,183	—	9,568,183
Xponance, Inc.*	4,719,326	—	4,719,326
<b>Total</b>	<b>\$ 245,885,979</b>	<b>\$ 23,454,293</b>	<b>\$ 269,340,272</b>
* Represents Fund of Funds relationship and includes sub-manager fee payments.			

## PUBLIC EQUITY COMMISSIONS — INTERNALLY MANAGED

For the Fiscal Year Ended March 31, 2024.

Broker	Shares	Commission \$ U.S.
Bank of America	17,084,776	\$ 170,848
Barclays Capital	92,977,772	406,868
BTIG	16,614,211	166,142
Citigroup Global Markets	13,650,737	136,507
Cowen and Company	16,410,844	164,108
Goldman Sachs	16,750,495	167,505
Great Pacific Securities	23,334,798	233,348
Guzman & Company	24,512,575	245,126
Instinet	16,507,548	165,075
J.P. Morgan Chase	54,260,223	386,020
Jefferies	15,869,781	158,698
Loop Capital Markets	23,537,710	235,377
Penserra Securities	23,662,226	236,622
Piper Sandler & Co.	13,285,165	132,852
Sanford C. Bernstein & Co.	1,293,800	12,938
Siebert Williams Shank & Co.	25,594,471	255,945
Virtu	17,999,464	178,629
<b>Total</b>	<b>413,346,596</b>	<b>\$ 3,452,608</b>

# PUBLIC EQUITY COMMISSIONS — EXTERNALLY MANAGED

For the Fiscal Year Ended March 31, 2024.

Broker	Shares	Commission \$ U.S.
Allen & Company	855,555	\$ 17,118
ANOS Capital	920,778	35,513
Auerbach Grayson & Company	545,553	10,223
B. Riley Securities	475,957	16,055
Baader Bank	968,030	43,085
Banco Bradesco	3,893,664	7,058
Banco BTG Pactual	2,460,670	11,891
Bank of America	90,543,481	657,405
Barclays Capital	19,652,505	295,234
Berenberg	8,324,451	116,102
BMO Capital Markets	3,004,204	59,776
BNP Paribas Securities Corp.	6,112,460	74,046
BTIG	2,299,794	54,628
C.L. King & Associates	2,251,854	80,334
Cabrera Capital Markets	11,226,281	188,102
Canaccord Genuity Group	1,124,136	40,377
Cantor Fitzgerald & Co.	1,819,787	58,963
Capital Institutional Services	5,605,726	192,158
Carnegie Investment Bank	446,671	15,453
CastleOak Securities	1,974,797	32,584
China International Capital Corp.	14,941,600	31,633
Citibank	1,201,897	5,505
Citigroup Global Markets	387,941,720	955,022
Citizens JMP Securities	823,084	20,992
CJS Securities	434,162	10,758
CLSA	5,783,810	37,718
CM-CIC Market Solutions	107,932	7,707
Compass Point Research & Trading	180,590	6,593
Cowen and Company	18,610,556	254,132
Craig-Hallum Capital Group	744,137	29,627
Credit Agricole	135,353,755	199,921
D.A. Davidson & Company	380,404	14,283
Daiwa Capital Markets	8,007,828	89,794
Danske Bank	590,318	9,225
DNB	505,231	13,502
Evercore Group	3,143,231	88,922
Exane	2,810,315	49,123

Broker	Shares	Commission \$ U.S.
Financial Brokerage Group	944,299	\$ 6,052
Goldman Sachs	231,576,721	686,393
Guggenheim Securities	631,531	19,354
Haitong International Securities Company	309,430	7,675
HSBC	367,079,938	483,327
ICICI Brokerage Services Mumbai	6,663,573	11,991
Instinet	143,629,720	408,305
Itau Unibanco	629,083	6,729
J.P. Morgan Chase	485,349,201	1,173,393
Jefferies	126,310,627	841,884
Johnson Rice & Company	291,897	7,114
JonesTrading Institutional Services	23,464,931	733,436
Keefe, Bruyette & Woods	2,866,243	69,188
Kepler Capital Markets	7,793,394	175,994
KeyBanc Capital Markets	2,242,309	78,900
Kezar Trading	722,252	6,282
Kotak Securities	1,035,089	13,472
Leerink Partners	869,735	30,161
Liquidnet	58,366,477	502,919
Loop Capital Markets	14,732,951	311,834
Macquarie Group	78,047,070	204,350
Mischler Financial Group	12,988,367	113,357
Mitsubishi UFJ Securities	1,538,551	10,720
Mizuho Securities	3,324,896	64,710
Montrose Securities International	4,432,228	47,830
Morgan Stanley	660,512,299	1,375,862
Needham & Company	4,147,150	156,799
Nomura Securities	1,499,412	17,190
Nordea Bank	853,160	10,505
North South Capital	1,044,706	40,941
Northcoast Research Partners	187,029	7,481
Numis Securities	1,199,531	7,774
Oddo BHF Group	563,939	17,169
Olivetree Financial	418,386	16,529
Oppenheimer & Co.	1,953,276	71,701
Penserra Securities	8,089,882	104,787
Pershing	5,203,024	97,998

## PUBLIC EQUITY COMMISSIONS — EXTERNALLY MANAGED

CONTINUED

Broker	Shares	Commission \$ U.S.
PGM Global	29,827,317	\$ 154,540
Piper Sandler & Co.	12,196,192	216,145
Raymond James & Associates	10,535,173	194,058
RBC Capital Markets	28,744,987	314,972
Redburn Atlantic	4,189,343	50,079
Robert W. Baird & Company	5,865,779	206,394
Roth Capital Partners	1,201,296	43,913
Sanford C. Bernstein & Co.	32,022,792	239,773
Santander Investment Securities	1,287,448	16,461
Seaport Global Securities	159,124	5,098
Siebert Williams Shank & Co.	5,577,044	120,915
Skandinaviska Enskilda Banken	434,876	11,995
SMBC Nikko Securities	3,251,252	50,247
Societe Generale	16,406,191	41,215
Stephens	2,589,827	88,292
Stifel	6,420,462	153,711
StoneX Financial	314,179	15,384
Strategas Securities	264,786	10,573
Telsey Advisory Group	4,506,941	169,674
The Benchmark Company	664,150	25,297
Truist Securities	3,093,259	111,578
UBS	201,479,823	760,746
Virtu	30,212,722	235,679
Wedbush Securities	958,126	33,236
Wells Fargo Securities	3,914,972	109,351
William Blair	3,893,664	127,930
Various <sup>1</sup>	9,720,793	106,068
<b>Total</b>	<b>3,427,311,749</b>	<b>\$ 15,383,992</b>

<sup>1</sup>Commissions paid to brokers that totaled less than \$5,000 for the year are reported under the "Various" line item.



# GLOBAL FIXED INCOME MANAGEMENT FEES

For the Fiscal Year Ended March 31, 2024.

Manager	Management Fees	Incentive Fees	Total
Advent Capital Management, LLC	\$ 2,328,933	\$ –	\$ 2,328,933
Calvert Research and Management	358,825	–	358,825
DoubleLine Capital, LP	539,193	–	539,193
New Century Advisors, LLC	332,986	–	332,986
Teachers Advisors, LLC (Nuveen)	356,726	–	356,726
Ramirez Asset Management, Inc.	604,256	–	604,256
<b>Total</b>	<b>\$ 4,520,919</b>	<b>\$ –</b>	<b>\$ 4,520,919</b>

# LONG-TERM DOMESTIC BOND TRANSACTIONS — INTERNALLY MANAGED

For the Fiscal Year Ended March 31, 2024.

Summarized by Broker or Direct Issuer.

Long-Term Broker	Par \$ U.S.
Barclays Capital	\$ 698,728,000
BMO Capital Markets	1,045,785,936
BNY Mellon Capital Markets	26,000,000
BofA Securities	1,341,276,661
Citigroup Global Markets	1,847,759,107
Daiwa Capital Markets	694,322,608
Deutsche Bank	805,599,000
Development Corp for Israel	120,000,000
Goldman Sachs	1,584,911,940
Great Pacific Securities	1,698,160,000
HSBC	521,260,000
J.P. Morgan Chase	972,988,592
Jefferies	363,000,000
Mischler Financial Group	35,750,000
Morgan Stanley	4,704,128,576
RBC Capital Markets	614,812,000
Samuel A. Ramirez & Company	16,000,000
Scotia Capital	672,750,000
Siebert Williams Shank & Company	328,250,000
TD Securities	1,085,219,000
Truist Securities	276,823,000
UBS	46,000,000
Wells Fargo Securities	2,041,819,449
<b>Total</b>	<b>\$ 21,541,343,868</b>

# LONG-TERM DOMESTIC BOND TRANSACTIONS — EXTERNALLY MANAGED

For the Fiscal Year Ended March 31, 2024.

Summarized by Broker or Direct Issuer.

Long-Term Broker	Par \$ U.S.
Academy Securities	\$ 5,845,000
American Veterans Group	3,219,850
Barclays Capital	360,047,095
BCP Securities	571,000
BMO Capital Markets	459,429,701
BNP Paribas Securities Corp.	192,537,176
BofA Securities	527,928,688
BTIG	38,438,000
Cabrera Capital Markets	41,475,000
Cantor Fitzgerald & Co.	669,000
CIBC World Markets Corp.	16,061,000
Citadel Securities	297,853,700
Citigroup Global Markets	364,049,333
Cowen and Company	381,000
Credit Agricole	4,063,000
Credit Suisse	2,125,000
Crews & Associates	5,000,000
Daiwa Capital Markets	23,000
Deutsche Bank	48,354,498
Evercore Group	16,062,281
FHN Financial Securities Corp.	23,097,159
Goldman Sachs	196,707,658
Hilltop Securities	2,080,584
HSBC	26,952,000
InspereX	125,000
J.P. Morgan Chase	679,658,110
Jane Street Execution Services	1,584,000
Jefferies	101,925,000
KeyBanc Capital Markets	4,985,000
Loop Capital Markets	1,225,000
MarketAxess Corp.	20,613,306
Mesirow Financial	1,235,000
Millennium Advisors	1,129,000
Mischler Financial Group	7,500,000

Long-Term Broker	Par \$ U.S.
Mitsubishi UFJ Securities	\$ 14,206,000
Mizuho Securities	42,579,263
Morgan Stanley	107,559,296
NatWest Markets	94,323,000
Nomura Securities	215,480,883
Old Mission Markets	33,000
Oppenheimer & Company	6,417,000
Piper Sandler & Company	205,000
PNC Capital Markets	1,549,000
R.W. Pressprich & Co.	1,960,000
Raymond James & Associates	44,663,000
RBC Capital Markets	20,528,000
Santander Investment Securities	8,471,000
Seaport Global Securities	2,651,000
SG Americas Securities	2,375,000
Siebert Williams Shank & Company	7,000,000
SMBC Nikko Securities	4,294,000
Societe Generale	41,310,000
State Street Global Markets	1,434,000
Stifel	7,647,000
StoneX Financial	200,000
SumRidge Partners	245,000
Susquehanna Financial Group	525,000
SWBC Investment Services	1,610,000
TD Securities	54,531,020
TradeWeb	3,240,000
Truist Securities	29,848,217
U.S. Bancorp	9,654,000
UBS	33,561,000
UMB Financial Services	150,000
Virtu	5,142,800
Wells Fargo Securities	410,821,480
<b>Total</b>	<b>\$ 4,627,164,098</b>

## SHORT-TERM DOMESTIC BOND TRANSACTIONS — INTERNALLY MANAGED

For the Fiscal Year Ended March 31, 2024.

Summarized by Broker or Direct Issuer.

Short-Term Broker	Par \$ U.S.
Barclays Capital	\$ 6,651,666,000
BMO Capital Markets	50,000,000
BNY Mellon Capital Markets	20,980,735,000
BofA Securities	16,305,190,000
Citigroup Global Markets	15,613,355,000
Daiwa Capital Markets	100,000,000
Deutsche Bank	328,723,000
Goldman Sachs	69,000,000
Great Pacific Securities	14,057,576,000
J.P. Morgan Chase	23,610,424,000
Mischler Financial Group	1,059,238,000
Morgan Stanley	150,000,000
RBC Capital Markets	16,132,565,000
TD Securities	33,800,000
Wells Fargo Securities	143,901,000
<b>Total</b>	<b>\$ 115,286,173,000</b>

## MULTI-ASSET CLASS MANAGEMENT FEES

For the Fiscal Year Ended March 31, 2024.

Manager	Management Fees	Incentive Fees	Total
Morgan Stanley Investment Management	\$ 3,407,339	\$ –	\$ 3,407,339
Schroder Investment Management	3,598,219	–	3,598,219
Wellington Management Company	3,428,138	–	3,428,138
<b>Total</b>	<b>\$ 10,433,696</b>	<b>\$ –</b>	<b>\$ 10,433,696</b>

## MULTI-ASSET CLASS — PUBLIC EQUITY COMMISSIONS — EXTERNALLY MANAGED

For the Fiscal Year Ended March 31, 2024.

Broker	Shares	Commission \$ U.S.
Bank of America	30,206,421	\$ 67,065
Barclays Capital	1,581,619	24,370
Bernstein Institutional Services	994,311	5,063
BMO Capital Markets	810,401	11,417
BNP Paribas Securities Corp.	365,716	5,573
Citigroup Global Markets	14,035,976	32,422
CLSA	15,725,486	9,946
Cowen and Company	701,237	5,765
Goldman Sachs	34,696,348	106,476
HSBC	34,188,850	153,265
Instinet	2,453,518	13,699
J.P. Morgan Chase	24,187,340	187,620
Jane Street Execution Services	2,101,338	9,337
Jefferies	14,310,435	50,230
Liquidnet	2,337,903	20,316
Macquarie Group	2,978,849	8,570
Morgan Stanley	11,130,624	48,437
Optiver VOF	331,072	10,013
Penserra Securities	939,625	5,159
RBC Capital Markets	1,344,554	20,670
Sanford C. Bernstein & Co.	3,392,944	16,768
UBS	19,567,309	87,104
Virtu	21,571,899	288,004
Various <sup>1</sup>	23,986,343	85,405
<b>Total</b>	<b>263,940,118</b>	<b>\$ 1,272,694</b>
<sup>1</sup> Commissions paid to brokers that totaled less than \$5,000 for the year are reported under the "Various" line item.		

# MULTI-ASSET CLASS – LONG-TERM DOMESTIC BOND TRANSACTIONS – EXTERNALLY MANAGED

For the Fiscal Year Ended March 31, 2024.

Summarized by Broker or Direct Issuer.

Long-Term Broker	Par \$ U.S
Academy Securities	\$ 70,000
AllianceBernstein	3,392,944
Bank of America	549,150,149
Bank of Montreal	146,701,702
Barclays Capital	218,599,261
BBVA Securities	137,262
BMO Capital Markets	2,720,636
BNP Paribas Securities Corp.	116,002,884
BNY Mellon Capital Markets	170,500
Brean Capital	6,985,819
Cantor Fitzgerald & Co.	3,486,858
CastleOak Securities	1,878,000
CIBC World Markets Corp.	697,111
Citadel Securities	187,184,961
Citigroup Global Markets	455,370,912
CLSA	13,000
Commerzbank Capital Markets	13,000
Commonwealth Bank of Australia	440,000
Credit Agricole	720,833
Credit Suisse	71,611
Daiwa Capital Markets	215,000
Deutsche Bank	84,995,217
FHN Financial Securities Corp.	151,000
Fifth Third Securities	485,417
Flow Traders US Institutional Trading	65,844
Goldman Sachs	911,423,115
HSBC	81,294,481
Huntington Securities	18,750
J.P. Morgan Chase	420,757,043
Jane Street Execution Services	5,397,963
Jefferies	20,805,889
KeyBanc Capital Markets	525,000
KeyCorp	25,000
Loop Capital Markets	150,000
M&T Securities	38,750
MarketAxess Corp.	1,407,000
Millennium Advisors	4,790,000

Long-Term Broker	Par \$ U.S
Mitsubishi UFJ Securities	\$ 1,690,182
Mizuho Securities	124,810,946
Morgan Stanley	604,080,515
MUFG Securities Americas	695,000
NatWest Markets	250,000
Nomura Securities	71,909,961
Nordea Securities	37,778
Old Mission Markets	50,000
PNC Capital Markets	2,439,123
Rabobank	75,000
Raymond James & Associates	61,000
RBC Capital Markets	27,531,823
Samuel A. Ramirez & Company	458,000
Santander Investment Securities	2,314,679
Scotiabank	2,710,302
Seaport Global Securities	25,000
SEB Securities	37,778
Siebert Williams Shank & Co.	133,750
SMBC Nikko Securities	1,660,611
Societe Generale	2,981,500
State Street Global Markets	390,000
Stifel	626,000
StoneX Financial	5,938,654
Sumitomo Mitsui Financial Group	3,800,000
SumRidge Partners	455,000
Susquehanna Financial Group	1,392,000
TD Securities	21,917,311
Tigress Financial Partners	1,015,000
TP ICAP	5,775,000
TradeWeb	1,350,000
Truist Securities	9,924,873
U.S. Bancorp	8,572,667
UBS	13,873,602
Virtu	22,493,632
Wells Fargo Securities	281,781,882
<b>Total</b>	<b>\$ 4,449,611,481</b>

# REAL ESTATE MANAGEMENT FEES (EXPENSED)

For the Fiscal Year Ended March 31, 2024.

Manager	Management Fees	Incentive Fees	Total
ARA Fund Management, Ltd.	\$ 1,645,563	\$ –	\$ 1,645,563
ARES Management	5,297,627	1,393,009	6,690,636
Artemis Real Estate Partners, LLC	11,049,092	–	11,049,092
Asana Partners, LP	–	25,884,995	25,884,995
Avanath Capital Management, LLC, Series C	546,038	–	546,038
Bell Partners	1,800,000	–	1,800,000
BlackRock Realty Advisors	514,196	–	514,196
Blackstone Real Estate Advisors	26,499,115	–	26,499,115
Bridge Investment Group	2,908,860	–	2,908,860
Brookfield Asset Management Inc.	11,010,983	–	11,010,983
CIM Group, LP	3,009,417	–	3,009,417
Clarion Partners	5,112,246	–	5,112,246
Fairfield	759,213	–	759,213
Franklin Templeton Institutional, LLC (Lake Montauk)	604,021	–	604,021
GCM Grosvenor	3,716,854	–	3,716,854
GID Investment Advisers LLC	1,467,570	–	1,467,570
GreenOak Real Estate Advisors	498,149	–	498,149
Heitman Capital Management, LLC	2,908,419	–	2,908,419
J.P. Morgan Investment Management, Inc.	11,124,756	6,743,856	17,868,612
Jamestown Premier GP, LP	855,857	–	855,857
Kayne Anderson Capital Advisors	1,312,500	–	1,312,500
KKR & Company	2,415,262	–	2,415,262
LaSalle Investment Management, Inc.	4,816,357	–	4,816,357
MetLife Investment Management, LLC	857	–	857
NIAM AB	409,367	–	409,367
Noble Investment Management, LLC	1,561,553	–	1,561,553
Prologis, LP	11,319,060	44,183,925	55,502,985
Rockpoint Real Estate Funds	15,097	–	15,097
UBS Realty Investors LLC	1,512,745	–	1,512,745
Waterton Venture	2,217,561	–	2,217,561
Westbrook Realty Management	3,370,899	–	3,370,899
<b>Total</b>	<b>\$ 120,279,233</b>	<b>\$ 78,205,785</b>	<b>\$ 198,485,018</b>



# REAL ESTATE MANAGEMENT FEES (CAPITALIZED)

For the Fiscal Year Ended March 31, 2024.

Manager	Management Fees
ACA Advisors (Aetos)	\$ 28,043
ARES Management	2,255,911
Artemis Real Estate Partners, LLC	2,201,449
Asana Partners, LP	7,421,546
Avanath Capital Management, LLC, Series C	69,644
Basis Management Group	1,253,425
Bell Partners	(600,000)
Blackstone Real Estate Advisors	9,289,038
Cherokee Advisers, LLC	8,841
Clarion Partners	3,555,718
Cortland Partners, LLC	5,630,866
Exeter	8,537,424
Fairfield	604,905
Franklin Templeton Institutional, LLC (Lake Montauk)	(633,380)
GreenOak Real Estate Advisors	833,553
Heitman Capital Management, LLC	1,091,656
J.P. Morgan Investment Management, Inc.	(182,946)
Kayne Anderson Capital Advisors	656,250
Landmark	308,568
LaSalle Investment Management, Inc.	3,489,185
Mesa West Capital	1,417,304
MetLife Investment Advisors, LLC	6,651,038
NIAM AB	1,496,223
NREP	1,890,082
Oaktree Capital Management	1,959,342
PGIM Fund Management Ltd.	8,763,349
Stockbridge Real Estate Funds	465,344
Ventas, Inc.	477,937
<b>Total</b>	<b>\$ 68,940,315</b>

# REAL ESTATE — FEE, EXPENSE AND CARRIED INTEREST ANALYSIS

For the Fiscal Year Ended March 31, 2024.

<b>Total Expenses</b>	
Net Management Fees <sup>2</sup>	\$ 189,219,549
Partnership Expenses <sup>2</sup>	104,287,717
<b>Total Expenses</b>	<b>\$ 293,507,266</b>
<b>Ratio — Total Expenses/Total Real Estate Allocation</b>	<b>0.93%</b>
<b>Total Profit Sharing (Carried Interest)</b>	
Profit Sharing (Carried Interest) <sup>2,3</sup>	\$ 97,415,388
<b>Total Profit Sharing</b>	<b>\$ 97,415,388</b>
<b>Ratio — Total Profit Sharing/Total Actively Invested Real Estate Allocation</b>	<b>0.39%</b>
<b>Total Expenses + Profit Sharing (Carried Interest)</b>	
Total Expenses	\$ 293,507,266
Total Profit Sharing	97,415,388
<b>Total Expenses and Profit Sharing (Carried Interest)</b>	<b>\$ 390,922,654</b>
<b>Total Real Estate Allocation</b>	
Unfunded Capital Commitments <sup>1</sup>	\$ 7,921,004,433
Net Asset Value (NAV) as of 3/31/2024 <sup>1</sup>	24,864,472,350
Distributions for FY 2024	—
<b>Total Real Estate Allocation</b>	<b>\$ 31,597,940,189</b>
<b>Ratio — Total Expenses + Profit Sharing/Total Real Estate Allocation</b>	<b>1.24%</b>
<b>Total Actively Invested Real Estate Allocation</b>	
Net Asset Value (NAV) as of 3/31/2024	\$ 24,864,472,350
Distributions for FY 2024	—
<b>Total Actively Invested Real Estate Allocation</b>	<b>\$ 24,864,472,350</b>
<b>Ratio — Total Expenses + Profit Sharing/Total Actively Invested Real Estate Allocation</b>	<b>1.57%</b>
<sup>1</sup> The Townsend Group, on behalf of its client base, collects quarterly limited partner/client level performance data based upon inputs from the underlying investment managers. Data collection is for purposes of calculating investment level performance as well as aggregating and reporting client level total portfolio performance. Quarterly limited partner/client level performance data is collected directly from the investment managers via a secure data collection site. In select instances where underlying investment managers have ceased reporting limited partner/client level performance data directly to The Townsend Group via a secure data collection site, The Townsend Group may choose to input performance data on behalf of its client based upon the investment managers' quarterly capital account statements which are supplied to The Townsend Group and the client alike.	
<sup>2</sup> Data provided by the investment managers.	
<sup>3</sup> Based on paid but not accrued promote during the fiscal year.	

# PRIVATE EQUITY MANAGEMENT FEES (EXPENSED)

For the Fiscal Year Ended March 31, 2024.

Manager	Management Fees
57 Stars, LLC	\$ 1,744,143
Access Capital Advisors, LLC	96,964
Affinity Equity Partners	6,102,532
African Capital Alliance Ltd.	1,401,854
Apollo Management, LP	9,883,544
Ares Management, LP	587,800
Armory Square Ventures, LP	422,390
Asia Alternatives Management, LLC	4,754,213
Blackstone Group, LP	12,166,774
Blue Owl Capital, Inc.	3,543,730
Bridgepoint Capital Ltd.	4,111,820
Brookfield Asset Management	6,797,319
CCMP Capital Advisors	134,496
Centerbridge Partners, LP	1,515,858
Cinven Capital Management	4,210,260
Clearlake Capital Group, LP	4,577,657
Contour Venture Partners	709,350
CVC Capital Partners	19,676,746
EagleTree Capital, LP	682,834
EQT Partners	10,889,526
Fairview Capital Partners, Inc.	38,318
Farol Asset Management, LP	1,492,820
FIMI Opportunity Funds	1,599,760
Francisco Partners, LP	1,944,233
Freeman, Spogli & Company	2,685,643
GCM Grosvenor	281,565
GenNx360 Capital Partners	367,110
Hamilton Lane Advisors, LLC	6,599,044
HarbourVest Partners, LLC	1,330,444
Helios Investment Partners	1,128,271
Hellman & Friedman Investors, Inc.	5,843,999
High Peaks Venture Partners	1,723,172
Hony Capital	880,925

Manager	Management Fees
Icon Ventures	\$ 615,655
ICV Partners, LLC	1,222,298
IK Investment Partners	1,621,453
Insight Partners, LLC	7,576,400
J.P. Morgan Partners, LLC	447,989
KKR & Company, LP	21,017,113
KSL Capital Partners, LLC	5,348,247
Leonard Green & Partners, LP	3,727,606
Lindsay Goldberg & Company, LLC	5,630,933
Milestone Venture Group, Inc	(26,135)
Muller & Monroe Asset Management, LLC	3,284,582
Neuberger Berman Group, LLC	6,754,886
Nordic Capital	649,523
Paladin Capital Group	34,135
Palladium Equity Partners	2,471,451
Performance Equity Management, LLC	305,453
Pine Brook Road Partners, LLC	243,708
Providence Equity Partners, LLC	6,701,702
Roark Capital Group Inc.	3,500,000
RRJ Capital	1,103,448
Searchlight Capital Partners	5,559,173
Siris Capital Group, LLC	2,848,302
Snow Phipps Group, LLC	1,129,226
TA Associates Management, LP	9,153,742
Towerbrook Capital Partners	3,018,617
TPG Capital, LP	3,865,780
Tribeca Venture Partners	203,513
Vertu Capital	1,399,457
Vista Equity Partners, LLC	33,887,675
Vistria Group LLC	3,125,000
Warburg Pincus, LLC	(449,752)
<b>Total</b>	<b>\$ 255,896,294</b>

## PRIVATE EQUITY MANAGEMENT FEES (CAPITALIZED)

For the Fiscal Year Ended March 31, 2024.

Manager	Management Fees
Bridgepoint Capital Ltd.	\$ 232,446
Crestview Partners, LP	1,386,632
Francisco Partners, LP	499,269
Hamilton Lane Advisors, LLC	716,959
HarbourVest Partners, LLC	2,321,176
IK Investment Partners	1,631,598
NCH Capital Inc.	44,272
Oaktree Capital Management, LP	5,345,305
RRJ Capital	1,195,403
SAIF Partners	170,712
Softbank Capital Partners	300,000
Tribeca Venture Partners, LLC	205,722
Warburg Pincus, LLC	122,399
<b>Total</b>	<b>\$ 14,171,893</b>

# PRIVATE EQUITY — FEE, EXPENSE AND CARRIED INTEREST ANALYSIS

For the Fiscal Year Ended March 31, 2024.

<b>Total Expenses</b>	
Net Management Fees	\$ 270,068,187
Partnership Expenses	151,530,481
<b>Total Expenses</b>	<b>\$ 421,598,668</b>
<b>Ratio — Total Expenses/Total Private Equity Allocation</b>	<b>0.73%</b>
<b>Total Profit Sharing (Carried Interest)</b>	
Profit Sharing (Carried Interest)	\$ 340,889,264
<b>Total Profit Sharing</b>	<b>\$ 340,889,264</b>
<b>Ratio — Total Profit Sharing/Total Actively Invested Private Equity Allocation</b>	<b>0.79%</b>
<b>Total Expenses + Profit Sharing (Carried Interest)</b>	
Total Expenses	\$ 421,598,668
Total Profit Sharing	340,889,264
<b>Total Expenses and Profit Sharing (Carried Interest)</b>	<b>\$ 762,487,932</b>
<b>Total Private Equity Allocation</b>	
Unfunded Capital Commitments	\$ 14,973,690,977
Net Asset Value (NAV) as of 3/31/2024	39,570,276,355
Distributions for FY 2024	3,573,501,218
<b>Total Private Equity Allocation</b>	<b>\$ 58,117,468,550</b>
<b>Ratio — Total Expenses + Profit Sharing/Total Private Equity Allocation</b>	<b>1.31%</b>
<b>Total Actively Invested Private Equity Allocation</b>	
Net Asset Value (NAV) as of 3/31/2024	\$ 39,570,276,355
Distributions for FY 2024	3,573,501,218
<b>Total Actively Invested Private Equity Allocation</b>	<b>\$ 43,143,777,573</b>
<b>Ratio — Total Expenses + Profit Sharing/Total Actively Invested Private Equity Allocation</b>	<b>1.77%</b>

**Note:** The profit sharing and partnership expenses were compiled based on information provided directly by the General Partner or calculated by the Fund's consultant applying the Fund's pro-rata ownership to carried interest and/or distribution and expense information provided in the Audited Financial Statements and Quarterly Financial Statements. Materials provided by General Partners consist of partners' capital statements, Institutional Limited Partners Association (ILPA) templates, and/or templates the consultant provided for the purposes of this analysis.

# OPPORTUNISTIC/ABSOLUTE RETURN STRATEGIES FUNDS MANAGEMENT AND INCENTIVE FEES (EXPENSED)

For the Fiscal Year Ended March 31, 2024.

Manager	Management Fees	Incentive Fees	Total
ADV Partners Capital Management, Ltd.	\$ 3,937,726	\$ –	\$ 3,937,726
Altura Capital Group, LLC	231,250	–	231,250
Anthelion Capital Partners, LLC	3,223,081	–	3,223,081
B Capital Group, LLC	6,709,014	–	6,709,014
Bain Capital Public Equity, LP	216	3,212	3,428
BCK Capital Management, LP	1,018,702	486,633	1,505,335
Bridgewater Associates, LP	1,583,691	–	1,583,691
Carlyle Aviation Partners	1,190,012	–	1,190,012
Caspian Capital, LP	4,698,727	4,589,581	9,288,308
Constellation Capital Management Inc.	2,923,994	–	2,923,994
D.E. Shaw and Company, LP	24,235,743	32,053,890	56,289,633
Fortress Investment Group, LLC	88,421	76,205	164,626
Frazier Healthcare Partners	1,896,979	–	1,896,979
Fundamental Advisors, LP	175,000	–	175,000
Growthcurve Capital	2,794,192	–	2,794,192
HIG Capital, LLC	3,886,333	–	3,886,333
Highland Capital Management, LP	32	–	32
Insight Venture Management, LLC	945,000	–	945,000
Khosla Ventures, LLC	2,668,876	–	2,668,876
King Street Capital Management, LP	3,214,971	1,655,819	4,870,790
Knighthood Capital Management, LLC	3,325,814	–	3,325,814
KSL Capital Partners, LLC	5,588,822	–	5,588,822
Mariner Investment Group, LLC	1,325,453	1,206,538	2,531,991
Marshall Wace, LLP	6,951,628	3,543,110	10,494,738
Morgan Stanley Investment Management, Ltd.	3,127,446	–	3,127,446
NGP Energy Capital Management	1,584,039	–	1,584,039
Patient Square Capital, LP	5,624,565	–	5,624,565
Pharo Management, LLC	3,517,003	–	3,517,003
Schultze Asset Management, LLC	101,298	274,875	376,173
Stellex Capital Management, LP	4,932,826	–	4,932,826
Systematica Investments, Ltd.	1,758,471	–	1,758,471
Tilden Park Capital Management, LP	5,092,488	903,455	5,995,943
<b>Total</b>	<b>\$ 108,351,813</b>	<b>\$ 44,793,318</b>	<b>\$ 153,145,131</b>

# OPPORTUNISTIC/ABSOLUTE RETURN STRATEGIES FUNDS MANAGEMENT FEES (CAPITALIZED)

For the Fiscal Year Ended March 31, 2024.

Manager	Management Fees
Altura Capital Group LLC	\$ 327,569
B Capital Group, LLC	1,175,157
Fundamental Advisors, LP	392,356
Insight Venture Management, LLC	611,131
Landmark Partners, LLC	4,810,906
Neuberger Berman Group, LLC	1,751,393
Paamco Prisma, LLP	45,341
Stellex Capital Management, LP	313,689
Varde Management, LP	724,122
Vivo Capital, LLC	859,605
<b>Total</b>	<b>\$ 11,011,269</b>

# OPPORTUNISTIC – FEE, EXPENSE AND CARRIED INTEREST ANALYSIS

For the Fiscal Year Ended March 31, 2024.

<b>Total Expenses</b>	
Net Management Fees	\$ 62,450,424.00
Partnership Expenses	<u>23,416,467.25</u>
<b>Total Expenses</b>	<b>\$ 85,866,891.25</b>
<b>Ratio — Total Expenses/Total Opportunistic Allocation</b>	<b>0.99%</b>
<b>Total Profit Sharing (Carried Interest)</b>	
Profit Sharing (Carried Interest)	<u>\$ 9,264,791</u>
<b>Total Profit Sharing</b>	<b>\$ 9,264,791</b>
<b>Ratio — Total Profit Sharing/Total Actively Invested Opportunistic Allocation</b>	<b>0.22%</b>
<b>Total Expenses + Profit Sharing (Carried Interest)</b>	
Total FY Expenses	\$ 85,866,891.25
FY Profit Sharing (Carried Interest)	<u>9,264,791.00</u>
<b>Total Expenses and Profit Sharing</b>	<b>\$ 95,131,682.25</b>
<b>Total Opportunistic Allocation</b>	
Unfunded Capital Commitments	\$ 4,442,089,988.33
Net Asset Value (NAV) as of 3/31/2024	4,041,964,035.00
Distributions for FY 2024	<u>217,830,390.93</u>
<b>Total Opportunistic Allocation</b>	<b>\$ 8,701,884,414.26</b>
<b>Ratio — Total Expenses + Profit Sharing/Total Opportunistic Allocation</b>	<b>1.09%</b>
<b>Total Actively Invested Opportunistic Allocation</b>	
Net Asset Value (NAV) as of 3/31/2024	\$ 4,041,964,035.00
Distributions for FY 2024	<u>217,830,390.93</u>
<b>Total Actively Invested Opportunistic Allocation</b>	<b>\$ 4,259,794,425.93</b>
<b>Ratio — Total Expenses + Profit Sharing/Total Actively Invested Opportunistic Allocation</b>	<b>2.23%</b>



## REAL ASSETS MANAGEMENT FEES (EXPENSED)

For the Fiscal Year Ended March 31, 2024.

Manager	Management Fees
Antin Infrastructure Partners	\$ 5,013,914
Brookfield Asset Management	19,127,846
Carlyle Aviation Partners	2,086,240
Copenhagen Infrastructure Partners	1,653,864
DIF Capital Partners, Ltd.	8,887,234
Digital Bridge Partners, Ltd.	580,890
EQT Fund Management S.a.r.l.	10,824,852
Global Infrastructure Management, LLC	5,141,676
Grain Management, LLC	3,322,811
GSO Capital Partners	1,558,266
Hull Street Energy, LLC	1,333,839
I Squared Capital	10,386,389
KKR & Company, LP	8,625,063
Morgan Stanley Investment Management, Ltd.	2,131,404
Northleaf Capital Partners	572,986
Oaktree Capital Management, LP	3,937,500
Stonepeak Partners, LP	9,701,658
<b>Total</b>	<b>\$ 94,886,432</b>

## REAL ASSETS MANAGEMENT FEES (CAPITALIZED)

For the Fiscal Year Ended March 31, 2024.

Manager	Management Fees
Blackstone Group, LP	\$ 4,346,004
Carlyle Aviation Partners	983,955
Carlyle Group, Inc.	1,666,685
Castlelake, LP	836,192
IFM Investors, Ltd.	6,155,232
ITE Management, LP	2,011,192
Kayne Anderson Capital Advisors, LP	633,125
Northleaf Capital Partners	628,329
Nuveen	2,155,177
Patria Investments, Ltd.	1,168,997
<b>Total</b>	<b>\$ 20,584,888</b>

# REAL ASSETS — FEE, EXPENSE AND CARRIED INTEREST ANALYSIS

For the Fiscal Year Ended March 31, 2024.

<b>Total Expenses</b>	
Net Management Fees	\$ 115,471,320
Partnership Expenses	44,763,897
<b>Total Expenses</b>	<b>\$ 160,235,217</b>
<b>Ratio — Total Expenses/Total Real Assets Allocation</b>	<b>0.99%</b>
<b>Total Profit Sharing (Carried Interest)</b>	
Profit Sharing (Carried Interest)	\$ 39,219,484
<b>Total Profit Sharing</b>	<b>\$ 39,219,484</b>
<b>Ratio — Total Profit Sharing/Total Actively Invested Real Assets Allocation</b>	<b>0.39%</b>
<b>Total Expenses + Profit Sharing (Carried Interest)</b>	
Total Expenses	\$ 160,235,217
Total Profit Sharing	39,219,484
<b>Total Expenses and Profit Sharing (Carried Interest)</b>	<b>\$ 199,454,701</b>
<b>Total Real Assets Allocation</b>	
Unfunded Capital Commitments	\$ 6,187,678,559
Net Asset Value (NAV) as of 3/31/2024	9,335,273,552
Distributions for FY 2024	677,426,630
<b>Total Real Assets Allocation</b>	<b>\$ 16,200,378,741</b>
<b>Ratio — Total Expenses + Profit Sharing/Total Real Assets Allocation</b>	<b>1.23%</b>
<b>Total Actively Invested Real Assets Allocation</b>	
Net Asset Value (NAV) as of 3/31/2024	\$ 9,335,273,552
Distributions for FY 2024	677,426,630
<b>Total Actively Invested Private Equity Allocation</b>	<b>\$ 10,012,700,182</b>
<b>Ratio — Total Expenses + Profit Sharing/Total Actively Invested Real Assets Allocation</b>	<b>1.99%</b>

## CREDIT MANAGEMENT FEES (EXPENSED)

For the Fiscal Year Ended March 31, 2024.

Manager	Management Fees
Apollo Capital Management, LP	\$ 341,302
Ares Management, LP	12,257,104
Blackrock Institutional Trust Company	201,443
Blackstone Group, LP	7,666,845
Brookfield Asset Management, Ltd.	1,337,060
Clearlake Capital Group, LP	3,678,089
Domain Capital Group, LLC	691,194
Kennedy Lewis Investment Management, LLC	6,497,283
KSL Capital Partners, LLC	3,172,845
L2 Point Management, LLC	3,092,126
Neuberger Berman Group, LLC	5,037,059
Silver Rock Group	170,000
Sixth Street Partners, LLC	5,461,592
<b>Total</b>	<b>\$ 49,603,942</b>

# CREDIT MANAGEMENT FEES (CAPITALIZED)

For the Fiscal Year Ended March 31, 2024.

Manager	Management Fees
AB Car Val Investors, LP	\$ 1,047,221
Avenue Capital Group	2,141,647
Blackstone Group, LP	26,995
Blantyre Capital, Ltd.	3,626,661
Bridgepoint Capital Ltd.	1,218,463
Brightwood Capital Advisors, LLC	3,568,266
Ellington Management Group, LLC	1,175,251
Golub Capital, LLC	649,504
Hollis Park Partners, LP	2,164,467
Intermediate Capital Group	3,890,377
KSL Capital Partners LLC	65,753
LCM Partners, Ltd.	622,138
MSD Partners, LP	136,523
Oak Hill Advisors, LP	1,474,952
Orchard Global Asset Management	2,008,225
Pacific Investment Management Company, LLC	258,722
Silver Rock Group	1,732,156
Sixth Street Partners, LLC	6,379,127
Strategic Value Partners, LLC	4,434,598
<b>Total</b>	<b>\$ 36,621,046</b>

# CREDIT — FEE, EXPENSE AND CARRIED INTEREST ANALYSIS

For the Fiscal Year Ended March 31, 2024.

<b>Total Expenses</b>	
Net Management Fees	\$ 86,224,988.00
Partnership Expenses	<u>69,358,005.54</u>
<b>Total Expenses</b>	<b>\$ 155,582,993.54</b>
<b>Ratio — Total Expenses/Total Credit Allocation</b>	<b>0.67%</b>
<b>Total Profit Sharing (Carried Interest)</b>	
Profit Sharing (Carried Interest)	\$ <u>16,597,122</u>
<b>Total Profit Sharing</b>	<b>\$ 16,597,122</b>
<b>Ratio — Total Profit Sharing/Total Actively Invested Credit Allocation</b>	<b>0.12%</b>
<b>Total Expenses + Profit Sharing (Carried Interest)</b>	
Total FY Expenses	\$ 155,582,993.54
FY Profit Sharing (Carried Interest)	<u>16,597,122.00</u>
<b>Total Expenses and Profit Sharing</b>	<b>\$ 172,180,115.54</b>
<b>Total Credit Allocation</b>	
Unfunded Capital Commitments	\$ 9,300,828,178.28
Net Asset Value (NAV) as of 3/31/2024	12,307,251,832.00
Distributions for FY 2024	<u>1,693,550,592.61</u>
<b>Total Credit Allocation</b>	<b>\$ 23,301,630,602.89</b>
<b>Ratio — Total Expenses + Profit Sharing/Total Credit Allocation</b>	<b>0.74%</b>
<b>Total Actively Invested Credit Allocation</b>	
Net Asset Value (NAV) as of 3/31/2024	\$ 12,307,251,832.00
Distributions for FY 2024	<u>1,693,550,592.61</u>
<b>Total Actively Invested Credit Allocation</b>	<b>\$ 14,000,802,424.61</b>
<b>Ratio — Total Expenses + Profit Sharing/Total Actively Invested Credit Allocation</b>	<b>1.23%</b>

## CONSULTANT AND ADVISOR FEES

For the Fiscal Year Ended March 31, 2024.

Aksia, LLC	\$	600,000
Albourne America, LLC		469,800
Bard Consulting, LLC		20,000
Callan, LLC		355,000
Hamilton Lane Advisors, LLC		1,406,250
McKinsey & Company, Inc.		133,900
Mercer Investments		486,331
RV Kuhns & Associates, Inc.		786,420
Stockbridge Risk Management, Inc.		13,025
The Townsend Group		611,997
<b>Total</b>	<b>\$</b>	<b>4,882,722</b>

# ACTUARIAL





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# STATEMENT OF THE ACTUARY

September 30, 2024

As the Actuary for the New York State and Local Employees' Retirement System (ERS) and the New York State and Local Police and Fire Retirement System (PFRS), it is my duty to ensure that the New York State and Local Retirement Systems (the Systems) properly fund the benefits of members, retirees, and beneficiaries. The Systems' funding policy is established by the New York State Retirement and Social Security Law. The Systems have a funding objective of employer contributions that, over time, are a level percentage of payroll and accumulate assets over employees' working lifetimes sufficient to pay benefits as they become due. A discussion of the plan provisions can be found at the beginning of the Notes to Basic Financial Statements.

Each year, the Actuarial Bureau generates actuarial valuations that determine the annual contributions required of participating employers. The most recent valuation was dated April 1, 2023 and determined the employer contribution rates for fiscal year ending 2025, which are paid by local participating employers by February 1, 2025, and paid by the State by March 1, 2025. Fundamentally, employer contribution rates are calculated by comparing assets to liabilities.

Instead of using the market value of assets, which can be found in the Systems' financial statements, the valuation smooths unexpected investment gains and losses. The smoothing procedure is discussed in the schedule, Elements of the Actuarial Valuation. The smoothed value of assets, called the actuarial value of assets, is used to establish the employer contribution rates.

The development of the Systems' liabilities begins with a snapshot of participant data as of the valuation date. For active members, the data includes date of birth, credited service, salary, tier, and plan. For retired members and beneficiaries, the data includes date of birth, benefit type, monthly benefit amount, and the form of the pension payment (for example, single life allowance or joint and survivor, possibly with a pop-up feature or with a period certain). In preparation for the valuation, the participant data is validated by running reasonableness tests and reconciling every individual on a year-over-year basis.

To develop a liability for a payee (that is, a retiree or beneficiary), the valuation determines the present value of payments expected to be made for the payee's lifetime or joint lifetimes.

To develop a liability for an active member, the valuation considers the four ways a member may leave active status: withdrawal, disablement, death, or retirement. These are called *decrements*. For each decrement, the valuation projects the expected benefit, based on estimated pay and service under the member's plan benefit formula. Then, the liability is determined consistent with any other payee; when the benefit is not a lump sum, the liability equals the present value of the expected benefit payments to be made for the payee's lifetime.

The exact timing of an active member becoming a payee, or the exact timing of a payee's death, cannot be determined precisely. Therefore, valuations include assumptions about these uncertainties. Actuarial assumptions are grouped into two broad categories: demographic assumptions (rates of employee turnover, disability, mortality, and retirement) and economic assumptions (interest rates, inflation, and salary growth).

Proper funding requires that the liabilities are developed using reasonable actuarial assumptions and methods. The Actuary reviews information contained in the financial statements and performs annual experience studies, ascertaining how closely the Systems' demographic experience is conforming to the assumptions. If significant deviations occur that the Actuary believes may indicate permanent shifts, the Actuary may recommend assumption changes to the Comptroller of the State of New York.

# STATEMENT OF THE ACTUARY

CONTINUED

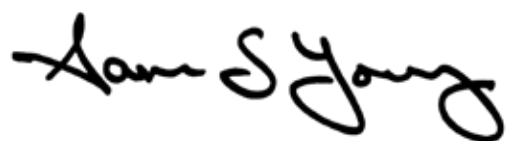
In addition to internal analysis, external parties will review various elements and inputs of the actuarial valuation. The Systems retain an external auditor to independently review its financial records every year. An Actuarial Advisory Committee meets annually to review the actuarial assumptions and the results of the actuarial valuation. The Systems also engage the services of an outside actuarial consultant to perform a review every five years. Similarly, every five years, the Systems are examined by the New York State Department of Financial Services. Lastly, the Comptroller of the State of New York, in their role as trustee of the Systems, established an Office of Internal Audit to help fulfill their fiduciary objectives.

The April 1, 2022 valuation, which determined the February 1, 2024 employer contribution rates found in this report, was performed under the direction and supervision of former Retirement Systems' Chief Actuary, Michael Dutcher, using the assumptions adopted by the Comptroller, a summary of which is included later in this section. The assumptions and methods used for funding purposes were certified by the former Chief Actuary as meeting the parameters set by Actuarial Standards of Practice. The former Chief Actuary is responsible for all the valuation results and other actuarial calculations contained in this report.

In the Notes to Basic Financial Statements, I prepared the Net Pension Liability (Asset) of Participating Employers, but all other notes were prepared by others. Additionally, within the Actuarial Section of the Annual Comprehensive Financial Report, I prepared the following schedules: Actuarial Cost Method and Valuation, Elements of the Actuarial Valuation, Actuarial Valuation Balance Sheets, Local Government Employers' Final Contribution Rates for Select Plans, Contribution Rate Trends for Local Governments, Employer Contributions, Historical Trends, Changes in Contributions, Assets and Accrued Liabilities, Solvency Test, Schedule of Active Member Data, and Schedule of Retired Members and Beneficiaries.

In addition to the annual valuation report for the ERS and the PFRS, separate reports are issued to provide financial reporting for the Systems in accordance with Governmental Accounting Standards Board (GASB) Statement No. 67. Reports containing the actuarial results of the financial reporting valuations are based upon the measurement date of March 31, 2024. Additional publications issued by the Actuary annually include the Annual Report to the Comptroller on Actuarial Assumptions and the Report of the Actuary.

On the basis of the foregoing, I hereby certify that, to the best of my knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial practices that are consistent with the principles prescribed by the Actuarial Standards Board as well as the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries, of which I am a member.



Aaron Schottin Young, MA, FSA, EA, MAAA

Retirement Systems Chief Actuary  
New York State and Local Employees' Retirement System  
New York State and Local Police and Fire Retirement System

# ACTUARIAL COST METHOD AND VALUATION

## Actuarial Cost Method

An actuarial cost method is a procedure for allocating the costs of a retirement system to particular time periods. It does not determine how much a system will ultimately cost; rather, it determines the portion of the estimated total cost that is to be allocated to a particular year.

For 70 years, by virtue of applying the definition of normal cost found in New York State Retirement and Social Security Law, the actuarial funding method used by the System was the aggregate method (AGG). Chapter 210 of the Laws of 1990 changed the funding method to a modified projected unit credit (PUC) method beginning in the fiscal year ending March 31, 1991 (referred to as fiscal year 1991). This law was challenged and the challenge was upheld by the New York State Supreme Court. On appeal, both the Appellate Division and the New York State Court of Appeals unanimously agreed with the New York State Supreme Court. These decisions allowed the Comptroller to return to the aggregate funding method beginning with the 1995 fiscal year. To ease the transition in the Employees' Retirement System (ERS) and to help prevent budget crises among participating employers, the Comptroller devised a plan to phase-in non-GLIP (New York State Public Employees' Group Life Insurance Plan) rates beginning in the 1995 fiscal year when the rates were zero. The rates increased by 1.5 percent per year until 1999, when the transition would cease. However, due to excellent investment gains and favorable experience, almost all ERS employer bills were below the transition rates in 1997, and in 1998 all were below the transition rates, so the transition ceased in 1998.

The aggregate method is ultimately an amortization policy. All valuation gains and losses are amortized evenly over the remaining working lifetimes of the active membership. The fact that the method does not allow arbitrary amortization periods or increasing payments is useful in a public setting as budgetary pressures can inspire a temptation to fund benefits over time frames that extend beyond the working lifetimes of the benefit recipients, and/or with back-loaded payments, which is not prudent and compromises intergenerational equity.

The "drawback" of the aggregate cost method is that it defines the accrued liability to be the actuarial value of assets. Thus, the unfunded accrued liability is always zero, and the system's funded ratio is always 100 percent. This "drawback" is overcome by using the entry age normal cost method for purposes of financial disclosures. In this report, the reader should assume that any funding data provided is under the aggregate cost method unless otherwise noted as under the entry age normal method. The actuarial assumptions used are the same under either method.

## Actuarial Valuation

At the beginning of the fiscal year, the Actuary, by law, determines the System's actuarial assets and liabilities. The actuarial valuation is important since it determines the rates of employer contributions. Chapter 49 of the Laws of 2003 mandates that the actuarial valuation undertaken on the first day of a fiscal year be used to determine contribution rates for the next succeeding fiscal year, to be applied to salaries as of the end of that fiscal year. Chapter 94 of the Laws of 2015 changed the billable salary to compensation earned during the previous fiscal year.

Each valuation differs markedly from the March 31, point-in-time snapshot of the System provided by the Financial Statements. The two measurements serve different purposes and use different techniques.

Two examples help make this clear:

- The actuarial assets for valuation purposes include the current value of all the future contributions employers and employees will make on behalf of current members. The Financial Statement balance sheet asset figure includes only contributions previously received and invested.
- The actuarial assets smooth out the investment performance by using a multi-year smoothing procedure. Techniques like this are widely practiced and professionally recommended to protect employers from volatile contribution rates. The Financial Statements, on the other hand, simply present fair values of assets on the last day of the fiscal year.

## Aggregate Actuarial Funding Method

Actuarial liabilities are the valuation date values (called the actuarial present values) of the benefits the Retirement System expects to pay to current members, retirees, and beneficiaries. The actuarial present value of benefits is calculated by projecting the amount of future service retirement, death, and disability benefits (based on past and future service, salary, and plan) to be paid, and then discounting for assumed investment earnings, employee turnover, and other contingencies.

The actuarial present value of the contributions that employers must make to the System to fund the projected benefit payment is equal to the actuarial liabilities, minus the sum of the actuarial value of present assets and the present value of employee contributions.

Under the aggregate funding method, the actuarial present value of the contributions that employers must make to the System is funded as a level percentage of salary over the projected future working lifetimes of current members.

# ELEMENTS OF THE ACTUARIAL VALUATION

## Actuarial Assumptions

The April 1, 2022 actuarial valuation determined employer contribution rates for the fiscal year ended 2024. The table below shows a summary of the assumptions (excluding retiree mortality improvements) used in the actuarial valuation when determining employer contribution rates for a given fiscal year. All assumptions presume ongoing Systems.

Contribution Rates Billed in FYE 3/31	Salary Scale*			Interest Rate	Multiple-Decrement Tables based on Systems' Experience
1987 – 88	Inflation Productivity & Merit	5.00% 2.30% <u>7.30%</u>		8.00%	April 1, 1981 to March 31, 1986 experience
1989 – 92	Inflation Productivity & Merit	5.00% 2.00% <u>7.00%</u>		8.75%	April 1, 1981 to March 31, 1986 experience
1993 – 96	Inflation Productivity & Merit	5.00% 2.00% <u>7.00%</u>		8.75%	April 1, 1986 to March 31, 1991 experience
		ERS	PFRS		
1997 – 98	Inflation Productivity & Merit	4.75% 1.25% <u>6.00%</u>	4.75% 1.75% <u>6.50%</u>	8.50%	April 1, 1990 to March 31, 1995 experience
1999 – 2000	Inflation Productivity & Merit	3.50% 2.50% <u>6.00%</u>	3.50% 3.00% <u>6.50%</u>	8.50%	April 1, 1990 to March 31, 1995 experience
2001	Inflation Productivity & Merit	3.00% 2.50% <u>5.50%</u>	3.00% 3.00% <u>6.00%</u>	8.00%	April 1, 1990 to March 31, 1995 experience
2002 – 04	Inflation Productivity & Merit	3.00% 2.90% <u>5.90%</u>	3.00% 3.90% <u>6.90%</u>	8.00%	April 1, 1995 to March 31, 2000 experience
2005	Inflation Productivity & Merit	3.00% 2.40% <u>5.40%</u>	3.00% 3.90% <u>6.90%</u>	8.00%	April 1, 1995 to March 31, 2000 experience
2006	Inflation Productivity & Merit	3.00% 2.40% <u>5.40%</u>	3.00% 3.90% <u>6.90%</u>	8.00%	April 1, 1995 to March 31, 2000 experience (with subsequent adjustments)
2007 – 11	Inflation Productivity & Merit	3.00% 2.40% <u>5.40%</u>	3.00% 3.70% <u>6.70%</u>	8.00%	April 1, 2000 to March 31, 2005 experience (with subsequent adjustments)
2012 – 16	Inflation Productivity & Merit	2.70% 2.20% <u>4.90%</u>	2.70% 3.30% <u>6.00%</u>	7.50%	April 1, 2005 to March 31, 2010 experience
2017 – 19	Inflation Productivity & Merit	2.50% 1.30% <u>3.80%</u>	2.50% 2.00% <u>4.50%</u>	7.00%	April 1, 2010 to March 31, 2015 experience
2020	Inflation Productivity & Merit	2.50% 1.70% <u>4.20%</u>	2.50% 2.50% <u>5.00%</u>	7.00%	April 1, 2010 to March 31, 2015 experience
2021	Inflation Productivity & Merit	2.50% 1.70% <u>4.20%</u>	2.50% 2.50% <u>5.00%</u>	6.80%	April 1, 2010 to March 31, 2015 experience
2022	Inflation Productivity & Merit	2.50% 2.00% <u>4.50%</u>	2.50% 3.20% <u>5.70%</u>	6.80%	April 1, 2015 to March 31, 2020 experience
2023	Inflation Productivity & Merit	2.70% 1.70% <u>4.40%</u>	2.70% 3.50% <u>6.20%</u>	5.90%	April 1, 2015 to March 31, 2020 experience
2024	Inflation Productivity & Merit	2.90% 1.50% <u>4.40%</u>	2.90% 3.30% <u>6.20%</u>	5.90%	April 1, 2015 to March 31, 2020 experience

\* This is an approximate value. The salary scale assumption is defined by plan coverage (age-based retirement versus service-based retirement) and varies by service credit. Changes in the active member demographics can result in a new system-based average salary scale expectation, even when the base salary scale assumptions remain unchanged.

# ELEMENTS OF THE ACTUARIAL VALUATION

CONTINUED

## Selected Actuarial Assumptions used in the April 1, 2022 Valuation

These illustrations show the number of people expected to decrement during the year (that is: decease, service retire, disability retire, or withdraw) per 10,000 members and the salary scale assumption. Demographic assumptions are computed by the Actuary and adopted by the Comptroller. They are based on recent member experience.

### Service Retirement — ERS

Age	Service (in years)		
	< 20	20 – 29.99	≥ 30
Tiers 2 – 4			
55	573	824	3,812
60	472	708	1,766
65	1,539	2,517	2,182
Tiers 5 – 6			
55	461	664	824
60	379	571	708
65	1,539	2,517	2,182

### Service Retirement — PFRS

Service	20-year (All Tiers)	20-year with additional 60ths (All Tiers)
20	2,721	1,007
25	955	885
30	728	1,630

### Service Retirees — Mortality

Age	ERS Male Clerk	ERS Female Clerk	PFRS
55	42	41	26
62	72	49	42
65	88	63	60
70	132	104	123
80	418	323	463
90	1,506	1,129	1,513

### Disability Retirees — Mortality

Age	ERS Male	ERS Female	PFRS
55	198	225	56
62	248	232	85
65	274	249	103
70	345	302	161
80	787	568	530
90	1,918	1,497	1,513

# ELEMENTS OF THE ACTUARIAL VALUATION

CONTINUED

## Disability Retirement — Ordinary and Accidental

Age	ERS Ordinary	ERS Accidental	PFRS Ordinary*	PFRS Accidental
35	5	0	3	2
40	8	0	19	17
45	14	0	35	32
50	23	0	37	32
* Includes performance of duty.				

## Ordinary Death

Age	ERS	PFRS
35	6	3
40	8	4
45	10	5
50	13	7

## Withdrawal — ERS (Ten-year ultimate rates)

Age	ERS Tier 4	ERS Tier 6
35	203	173
40	194	165
45	188	160
50	142	121

## Withdrawal — PFRS

Service	PFRS Tier 2	PFRS Tier 6
5	113	90
10	67	67
15	27	27

## Salary Scale — Annual Percentage Increase

Service (in years)	5	10	15	20	25
ERS					
	4.95	4.18	3.63	3.30	3.30
PFRS					
	8.00	4.00	4.00	4.00	4.00



Actuarial Value of Assets

For the April 1, 2021 valuation, the actuarial value of assets (AVA) was set equal to the fair value of assets. Subsequently, the AVA was determined by applying the assumed return on investments (equal to 5.9 percent from April 1, 2021 through present) to the financial statement plan net position with adjustments for cash flow (contributions and deductions). This smoothing method expects and immediately recognizes the assumed return on assets while phasing in unexpected gains/losses over an eight-year period. Realized and unrealized gains are treated in the same manner. The Group Term Life Insurance Plan assets appreciate at the same rate as our short-term investment pool.

In the April 1, 2022 valuation of the two systems and the Group Life Insurance Plan (GLIP), establishing billing rates for the fiscal year ended 2024, the difference between accounting invested assets and actuarial invested assets was:

	Invested Assets (Dollars in Millions)	
Actuarial Value	\$	267,250
Accounting Value	\$	273,719
Difference	\$	(6,469)

Administrative Expenses

The cost of administering the System is borne by the State and local participating employers on a current disbursement basis.

Group Life Insurance Plan (GLIP)

GLIP provides for up to \$50,000 of member and certain post-retirement death benefits to be paid as life insurance. All benefits provided are on a one-year term insurance basis. Participating employers are billed each year based on the aggregate of anticipated claims for the plan year. Premiums are set so that the reserve will, at its lowest amount during any year, be approximately equal to payables. Payables is an estimate of the amount payable for claims currently being processed, plus claims incurred but not yet reported.

Deficiency Costs

An employer may also have a deficiency contribution. When a new employer joins a System, any past service liability is paid for by separate annual payments over a period of up to 25 years. These payments are not affected by the funding method, but the 25-year amortization does use the assumed return on investments from the most recent valuation.

Rate and Contribution Comparability

Unless stated otherwise, rates and contributions assume a payment date of February 1 before the fiscal year end to provide for comparability of State and local government rates and costs.

# ACTUARIAL VALUATION BALANCE SHEETS

Actuarial assets and liabilities are used to determine employer contributions for the fiscal year ending March 31. Values are in millions of dollars, as calculated in the April 1, 2021 valuation for fiscal year end (FYE) 2023 billing and the April 1, 2022 valuation for fiscal year end 2024 billing.

	FYE 2023 Billing*	FYE 2024 Billing*
	(Dollars in Millions)	
ERS		
Actuarial Assets		
Actuarial Value of Present Assets:		
Held for Current Retirees & Beneficiaries	\$ 131,389	\$ 138,626
Held for Members	80,155	79,181
Members' Contributions	8,805	8,528
Total	\$ 220,349	\$ 226,336
Actuarial Present Value of Prospective Contributions:		
From Employers	\$ 30,133	\$ 32,567
From Members	7,033	7,613
Total	\$ 37,166	\$ 40,179
Total Actuarial Assets	\$ 257,515	\$ 266,515
Actuarial Liabilities		
Actuarial Present Value of Benefits for Current Retirees & Beneficiaries:		
Service Retirement Benefits	\$ 126,238	\$ 133,413
Disability Retirement Benefits	5,048	5,109
Death Benefits	104	105
Total	\$ 131,389	\$ 138,626
Actuarial Present Value of Benefits for Members:		
Service Retirement Benefits	\$ 122,262	\$ 124,129
Disability Retirement Benefits	1,696	1,766
Death Benefits	1,179	1,230
Other	989	763
Total	\$ 126,125	\$ 127,888
Total Actuarial Liabilities	\$ 257,515	\$ 266,515
* Numbers may not add up due to rounding.		

# ACTUARIAL VALUATION BALANCE SHEETS

CONTINUED

	FYE 2023 Billing*	FYE 2024 Billing*
	(Dollars in Millions)	
PFRS		
Actuarial Assets		
Actuarial Value of Present Assets:		
Held for Current Retirees & Beneficiaries	\$ 26,477	\$ 28,015
Held for Members	12,764	12,353
Members' Contributions	183	251
Total	\$ 39,424	\$ 40,619
Actuarial Present Value of Prospective Contributions:		
From Employers	\$ 10,680	\$ 11,607
From Members	1,137	1,344
Total	\$ 11,817	\$ 12,951
Total Actuarial Assets	\$ 51,242	\$ 53,570
Actuarial Liabilities		
Actuarial Present Value of Benefits for Current Retirees & Beneficiaries:		
Service Retirement Benefits	\$ 22,060	\$ 23,455
Disability Retirement Benefits	4,169	4,314
Death Benefits	248	246
Total	\$ 26,477	\$ 28,015
Actuarial Present Value of Benefits for Members:		
Service Retirement Benefits	\$ 22,930	\$ 23,634
Disability Retirement Benefits	1,656	1,739
Death Benefits	159	168
Other	20	14
Total	\$ 24,765	\$ 25,555
Total Actuarial Liabilities	\$ 51,242	\$ 53,570
* Numbers may not add up due to rounding.		

## New York Public Employees' Group Life Insurance Plan

Actuarial Assets	2023	2024
	(Dollars in Millions)	
<b>Assets</b>		
Investments	\$ 98	\$ 166
Premiums Receivable	—	—
<b>Total Assets</b>	<b>\$ 98</b>	<b>\$ 166</b>
<b>Liabilities</b>		
Managed Overdraft (cash)	1	1
Claims Being Processed	55	58
Claims Unreported	24	24
Reserve for Mortality Fluctuations	18	83
<b>Total Liabilities</b>	<b>\$ 98</b>	<b>\$ 166</b>

# LOCAL GOVERNMENT EMPLOYERS' FINAL CONTRIBUTION RATES FOR SELECT PLANS

The following contribution rates are for the fiscal year ending March 31, 2024 and assume a February 1, 2024 payment date.

All rates exclude any contribution rates due to amortization payments, prior years' adjustments, deficiency costs, retirement incentive programs and certain benefits electable by local governments, such as credit for unused sick leave or one-year final average salary. All rates include Group Life Insurance.

	Plan ID	Percentage of Payroll				
		Tier 1	Tier 2	Tiers 3 & 4	Tier 5	Tier 6
ERS						
Age-based plans						
Basic, Age 55, Age 60 Contributory	71-a	9.8	9.1	n/a	n/a	n/a
Article 14	A14	n/a	n/a	14.8	n/a	n/a
Article 15	A15	n/a	n/a	14.8	12.8	9.4
Guaranteed Benefits	75-e	17.7	16.1	n/a	n/a	n/a
Career	75-g	18.9	17.3	n/a	n/a	n/a
New Career	75-h/75-i	19.7	18.0	n/a	n/a	n/a
25-year plans						
Sheriffs and Deputies	89-a	21.9	20.7	n/a	n/a	n/a
Article 14B Sheriffs — 25-year	551	20.7	20.5	19.4	17.2	13.5
Article 14B Sheriffs — 25-year + 1/60th	551-e	21.6	21.5	20.4	18.5	14.8
full service for 1/60th	551-ee	22.5	22.4	21.2	19.3	15.4
County Law Enforcement	89-e, etc.	22.8	22.7	18.3	16.1	12.5
20-year plans						
Sheriffs and Deputies	89-b	24.9	19.6	n/a	n/a	n/a
additional 1/60th	89-b(m)	25.0	21.0	n/a	n/a	n/a
Article 14B Sheriffs — 20-year	552	25.1	25.1	23.6	21.6	17.7
Article 14B Sheriffs — 20-year + 1/60th	553	25.1	25.1	24.0	22.3	18.7
full service for 1/60th	553b	26.1	26.0	25.0	23.2	19.4
Detective Investigators	89-d	24.4	24.3	n/a	n/a	n/a
additional 1/60th	89-d(m)	24.6	24.4	n/a	n/a	n/a

# LOCAL GOVERNMENT EMPLOYERS' FINAL CONTRIBUTION RATES FOR SELECT PLANS CONTINUED

	Plan ID	Percentage of Payroll				
		Tier 1	Tier 2	Tier 3	Tier 5*	Tier 6*
PFRS						
Age-based plans						
Basic, Age 55, Age 60 Contributory	371-a	13.6	11.4	11.4	7.8	4.1
Guaranteed Benefits	375-e	22.7	18.0	18.0	14.0	9.9
Career	375-g	25.1	19.9	19.9	15.9	11.7
New Career	375-i	26.0	20.5	20.5	16.4	12.2
Improved Career	375-j	26.0	20.5	20.5	16.4	12.2
25-year plans						
Contributory	384	n/a	n/a	n/a	21.4	16.5
additional 1/60th	384(f)	n/a	n/a	n/a	22.5	17.2
Non-Contributory	384	26.5	25.6	25.6	24.5	22.4
additional 1/60th	384(f)	27.4	27.1	27.1	25.9	23.7
20-year plans						
Contributory	384-d	n/a	n/a	n/a	26.2	21.1
additional 1/60th	384-e	n/a	n/a	n/a	26.5	21.4
Non-Contributory	384-d	31.2	30.4	31.0	29.0	26.5
additional 1/60th	384-e	31.6	31.4	31.0	29.9	27.4
* Age-based plans in Tier 5 and Tier 6 are contributory.						
There is no Tier 4 in PFRS.						

# CONTRIBUTION RATE TRENDS FOR LOCAL GOVERNMENTS

Contribution rates are based on a February 1 payment date. Each rate is applied to the salary of members covered by that particular plan. Rates were calculated under the aggregate method. All rates include Group Life Insurance and administrative rates.

Actual costs borne by employers are shown in the Statistical Section.

Plan Name (Section)	Percentage of Payroll									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>ERS</b>										
<b>Guaranteed Benefits (75-e)</b>										
Tier 1	24.8	22.6	19.6	19.5	19.4	19.2	19.4	22.5	15.5	17.7
Tier 2	22.5	20.5	17.6	17.5	17.4	17.3	17.5	20.3	14.0	16.1
<b>Career (75-g)</b>										
Tier 1	26.3	24.0	20.7	20.7	20.5	20.4	20.6	24.0	16.6	18.9
Tier 2	24.0	21.9	18.7	18.7	18.6	18.5	18.7	21.9	15.2	17.3
<b>New Career (75-i)</b>										
Tier 1	27.4	25.0	21.6	21.5	21.4	21.2	21.4	25.0	17.3	19.7
Tier 2	25.1	22.9	19.6	19.5	19.4	19.3	19.5	22.8	15.8	18.0
<b>Article 14/15</b>										
Tier 3	20.1	18.6	15.8	15.8	15.7	15.7	16.0	18.0	12.9	14.8
<b>Article 15</b>										
Tier 4	20.1	18.6	15.8	15.8	15.7	15.7	16.0	18.0	12.9	14.8
Tier 5	16.4	15.3	13.0	13.0	12.9	13.1	13.3	15.0	11.0	12.8
Tier 6	10.8	10.4	9.2	9.2	9.2	9.2	9.5	10.5	8.1	9.4

# CONTRIBUTION RATE TRENDS FOR LOCAL GOVERNMENTS

CONTINUED

Plan Name (Section)										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>PFRS</b>										
<b>Guaranteed Benefits (375-e)</b>										
Tier 1	21.4	19.4	18.6	19.0	18.5	18.9	20.0	22.4	21.7	22.7
Tiers 2 & 3	17.8	16.1	15.4	15.7	15.3	15.6	16.5	17.9	17.3	18.0
Tier 5*	12.7	12.1	11.4	11.7	11.3	11.8	12.6	13.2	13.5	14.0
Tier 6*	7.2	6.4	7.1	7.3	7.0	7.3	8.0	8.4	9.6	9.9
<b>Career (375-g)</b>										
Tier 1	23.4	21.2	20.3	20.8	20.3	20.7	21.9	24.8	24.0	25.1
Tiers 2 & 3	19.4	17.6	16.8	17.2	16.7	17.1	18.1	19.8	19.1	19.9
Tier 5*	14.2	13.5	12.8	13.0	12.6	13.2	14.0	15.0	15.2	15.9
Tier 6*	8.5	7.6	8.4	8.5	8.2	8.6	9.3	10.1	11.3	11.7
<b>New Career (375-i)</b>										
Tier 1	24.2	21.9	21.0	21.5	21.0	21.4	22.6	25.7	24.9	26.0
Tiers 2 & 3	19.9	18.1	17.3	17.7	17.2	17.6	18.6	20.4	19.6	20.5
Tier 5*	14.7	14.0	13.2	13.5	13.1	13.6	14.5	15.6	15.8	16.4
Tier 6*	8.7	7.9	8.6	8.8	8.5	8.8	9.6	10.6	11.8	12.2
<b>25-Year (384) — Contributory</b>										
Tiers 1, 2 & 3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Tier 5	18.1	16.6	15.9	16.2	15.8	16.2	17.3	20.2	20.4	21.4
Tier 6	12.0	11.2	11.2	11.4	11.0	11.3	12.2	14.7	15.8	16.5
<b>25-Year + 1/60ths (384(f)) — Contributory</b>										
Tiers 1, 2 & 3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Tier 5	19.7	17.9	17.3	17.7	17.2	17.7	18.8	21.3	21.5	22.5
Tier 6	13.3	12.4	12.4	12.7	12.3	12.6	13.6	15.3	16.5	17.2
<b>25-Year (384) — Non-Contributory</b>										
Tier 1	23.2	21.2	20.9	21.4	20.8	21.2	22.5	26.0	25.3	26.5
Tiers 2 & 3	23.1	21.0	20.2	20.6	20.1	20.5	21.6	25.2	24.5	25.6
Tier 5	22.1	20.1	19.3	19.7	19.2	19.5	20.7	24.0	23.3	24.5
Tier 6	19.6	17.9	17.7	18.1	17.6	17.7	18.7	21.9	21.4	22.4
<b>25-Year + 1/60ths (384(f)) — Non-Contributory</b>										
Tier 1	25.1	22.7	22.0	22.5	21.9	22.3	23.6	26.9	26.2	27.4
Tiers 2 & 3	24.8	22.5	21.8	22.3	21.7	22.1	23.4	26.6	25.9	27.1
Tier 5	23.7	21.5	20.8	21.2	20.7	21.1	22.3	25.3	24.6	25.9
Tier 6	21.1	19.2	19.0	19.4	18.9	19.1	20.2	23.1	22.6	23.7
* Age-based plans in Tier 5 and Tier 6 are contributory.										
There is no Tier 4 in PFRS.										

# CONTRIBUTION RATE TRENDS FOR LOCAL GOVERNMENTS

CONTINUED

Plan Name (Section)										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>20-Year (384-d) — Contributory</b>										
Tiers 1, 2 & 3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Tier 5	22.0	20.1	19.5	19.9	19.4	19.8	21.0	25.5	25.0	26.2
Tier 6	15.4	14.3	14.5	14.8	14.4	14.6	15.7	19.8	20.2	21.1
<b>20-Year + 1/60ths (384-e) — Contributory</b>										
Tiers 1, 2 & 3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Tier 5	22.3	20.4	20.2	20.6	20.1	20.6	21.9	25.9	25.3	26.5
Tier 6	15.6	14.5	15.1	15.4	15.0	15.3	16.4	20.2	20.5	21.4
<b>20-Year (384-d) — Non-Contributory</b>										
Tier 1	28.0	25.4	24.7	25.2	24.6	25.0	26.4	31.2	29.8	31.2
Tier 2	27.3	24.7	24.1	24.6	24.0	24.3	25.6	30.4	29.0	30.4
Tier 3	26.1	24.4	23.8	24.3	23.7	24.2	25.7	29.9	29.7	31.0
Tier 5	26.1	23.6	22.9	23.4	22.9	23.2	24.5	28.9	27.6	29.0
Tier 6	23.1	21.0	21.0	21.5	20.9	21.0	22.2	26.4	25.2	26.5
<b>20-Year + 1/60ths (384-e) — Non-Contributory</b>										
Tier 1										
1990-1998 elections (avg.)	28.4	25.8	25.0	25.6	25.0	25.3	26.7	31.6	30.2	31.6
all other years	28.4	25.8	25.0	25.6	25.0	25.3	26.7	31.6	30.2	31.6
Tier 2										
1990-1998 elections (avg.)	27.6	25.1	24.8	25.3	24.7	25.1	26.6	31.1	29.9	31.4
all other years	27.6	25.1	24.8	25.3	24.7	25.1	26.6	31.1	29.9	31.4
Tier 3	26.1	24.4	23.8	24.3	23.7	24.2	25.7	29.9	29.7	31.0
Tier 5	26.3	23.9	23.7	24.2	23.6	24.0	25.3	29.6	28.5	29.9
Tier 6	23.3	21.3	21.7	22.1	21.6	21.7	23.0	27.0	26.1	27.4
There is no Tier 4 in PFRS.										



# EMPLOYER CONTRIBUTIONS

Contributions here may differ from those appearing elsewhere in the Actuarial Section because these tables deal only with the contributions attributable to the fiscal year shown. Actual contributions may include adjustments due to previous years, such as amortization payments/credits and reconciliation of other years' bills. Employers who opted into either of the Contribution Stabilization Programs (Ch. 57 Laws of 2010 and Laws of 2013) are allowed to amortize a portion of their contribution. The following amounts show their total obligation. The average rates below are for normal, administrative and Group Life Insurance contributions.

## Comparison of Employer Contributions\*

For fiscal years ending 2023 and 2024. (Dollars in Millions)

	2024 Contribution			2023 Contribution		
	Salary	Contribution	Average Rate	Salary	Contribution	Average Rate
<b>ERS</b>						
Tier 1	\$ 34	\$ 7	19.9%	\$ 41	\$ 7	17.5%
Tier 2	36	7	18.1	46	7	15.9
Tiers 3 & 4	15,419	2,372	15.4	16,127	2,173	13.5
Tier 5	1,638	220	13.4	1,615	188	11.6
Tier 6	14,340	1,418	9.9	12,104	1,045	8.6
<b>Total</b>	<b>\$ 31,467</b>	<b>\$ 4,023</b>	<b>12.8%</b>	<b>\$ 29,934</b>	<b>\$ 3,421</b>	<b>11.4%</b>
<b>PFRS</b>						
Tier 1	\$ –	\$ –	35.4%	\$ 1	\$ –	34.7%
Tier 2	2,351	749	31.9	2,460	746	30.3
Tier 3	10	3	30.0	12	3	28.7
Tier 5	229	62	27.0	214	55	25.8
Tier 6	1,808	388	21.5	1,500	308	20.5
<b>Total</b>	<b>\$ 4,399</b>	<b>\$ 1,203</b>	<b>27.3%</b>	<b>\$ 4,185</b>	<b>\$ 1,112</b>	<b>26.6%</b>
There is no Tier 4 in PFRS.						

Deficiency contributions for fiscal year 2024 (as of February 1, 2024) totaled \$1,259,712.

\*Numbers may not add up due to rounding.

# EMPLOYER CONTRIBUTIONS

CONTINUED

## Final Employer Contributions by Employer Type\*

Attributable to fiscal year 2024 costs only. (Dollars in Millions)

Employer	Normal	Administrative	GLIP	Total
<b>ERS</b>				
State	\$ 1,515	\$ 50	\$ 78	\$ 1,643
Counties	681	22	31	733
Cities	99	4	6	109
Towns	212	7	13	232
Villages	68	2	4	74
Miscellaneous	627	23	40	690
Schools	493	18	31	542
<b>Total</b>	<b>\$ 3,694</b>	<b>\$ 126</b>	<b>\$ 203</b>	<b>\$ 4,023</b>
<b>PFRS</b>				
State	\$ 226	\$ 3	\$ 1	\$ 231
Counties	265	4	1	270
Cities	343	5	1	350
Towns	122	2	–	125
Villages	99	2	–	101
Miscellaneous	125	2	–	127
<b>Total</b>	<b>\$ 1,181</b>	<b>\$ 18</b>	<b>\$ 4</b>	<b>\$ 1,203</b>

\*Numbers may not add up due to rounding.

## Employer Contributions by Tier\*

(Dollars in Millions)

	2024 (as of February 1, 2024)		2023 (as of February 1, 2023)	
	Employer Contributions Attributable to Year	Percentage	Employer Contributions Attributable to Year	Percentage
<b>ERS</b>				
Tier 1	\$ 7	0.2%	\$ 7	0.2%
Tier 2	7	0.2	7	0.2
Tiers 3 & 4	2,372	59.0	2,173	63.5
Tier 5	220	5.5	188	5.5
Tier 6	1,418	35.2	1,045	30.6
<b>Total</b>	<b>\$ 4,023</b>	<b>100.0%</b>	<b>\$ 3,421</b>	<b>100.0%</b>
<b>PFRS</b>				
Tier 1	\$ 0	0.0%	\$ 0	0.0%
Tier 2	749	62.3	746	67.1
Tier 3	3	0.3	3	0.3
Tier 5	62	5.2	55	5.0
Tier 6	388	32.3	308	27.7
<b>Total</b>	<b>\$ 1,203</b>	<b>100.0%</b>	<b>\$ 1,112</b>	<b>100.0%</b>
There is no Tier 4 in PFRS.				

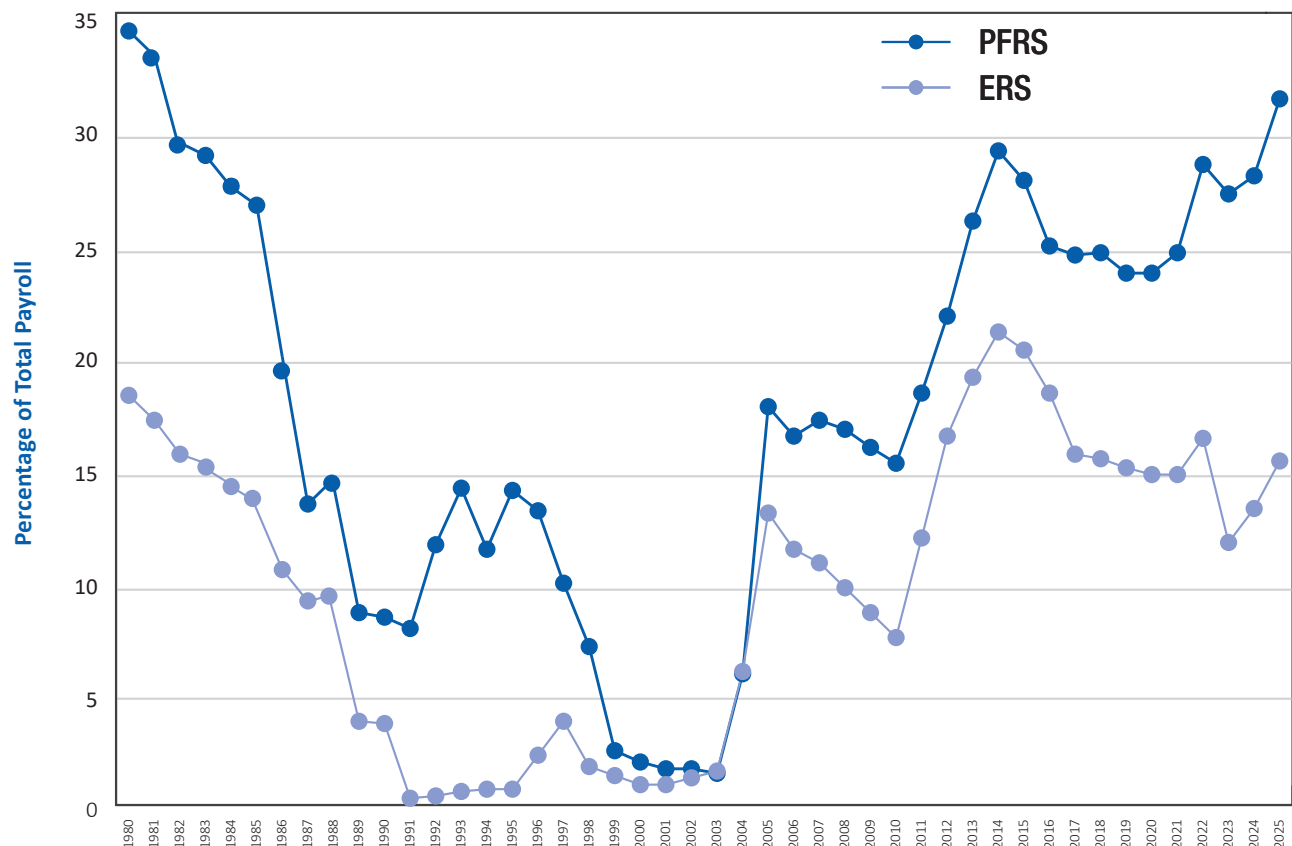
\*Numbers may not add up due to rounding.

# HISTORICAL TRENDS

## (RATES AS A PERCENTAGE OF SALARY, 1980–2025)

The State is obligated to pay its annual bill to NYSLRS on March 1, one month before the end of the fiscal year. Through 2004, local employers paid their bills by December 15, three and one-half months before the end of the fiscal year. Beginning in 2005, the payment date for local employers was changed to February 1; however, employers can choose to pay a discounted prepayment amount by December 15 of the previous year.

### Trends in Employer Contribution Rates



# CHANGES IN CONTRIBUTIONS

The System's experience in many areas (employee salary growth or decrease, investment return, actuarial assumption changes, legislative enactments of benefits, difference between expected and actual experience) is assessed and quantified yearly. Each element exerts an increasing, decreasing or neutral pressure on contributions to be charged for that year.

## Analysis of Changes (By Source)

Experience during one fiscal year produces the increase or decrease in contributions for the following year.

(Dollars in Millions)

Fiscal Year Valuation Date	Fiscal Year Bill Date	Contributions for Preceding Fiscal Year Bill	Salary Growth	Return on Investments	Assumption Changes	Changes in Benefits	Experience Gains and Losses*	Other Adjustments	Projected Contributions for Fiscal Year Shown**
ERS									
2014	2016	\$ 5,143	\$ (24)	\$ (937)	\$ 887	n/a	\$ (457)	\$ 16	\$ 4,628
2015	2017	4,515	35	(396)	273	n/a	(173)	(260)	3,994
2016	2018	3,995	85	120	–	n/a	(157)	(16)	4,027
2017	2019	4,005	108	(123)	–	n/a	(48)	68	4,010
2018	2020	3,977	39	(210)	232	n/a	(107)	50	3,981
2019	2021	3,998	128	50	(11)	n/a	(54)	4	4,115
2020	2022	4,113	120	511	319	n/a	(347)	(34)	4,682
2021	2023	4,544	(19)	(3,997)	3,058	n/a	(298)	43	3,331
2022	2024	3,356	129	(91)	95	59	346	(16)	3,879
2023	2025	3,921	235	267	–	n/a	194	186	4,803
PFRS									
2014	2016	\$ 917	\$ 23	\$ (143)	\$ 87	n/a	\$ (73)	\$ 31	\$ 842
2015	2017	809	1	(70)	161	n/a	(33)	(40)	828
2016	2018	857	60	17	–	n/a	8	(47)	895
2017	2019	888	31	(21)	–	n/a	(22)	15	891
2018	2020	866	(3)	(34)	40	n/a	(23)	40	886
2019	2021	875	12	6	37	n/a	(16)	17	931
2020	2022	981	136	85	92	n/a	(4)	(70)	1,220
2021	2023	1,093	(70)	(646)	634	n/a	(54)	137	1,094
2022	2024	1,094	69	(14)	9	4	148	(117)	1,193
2023	2025	1,166	55	42	–	5	31	105	1,403

\* This measures the change in employer contributions stemming from member and retiree behavior (timing of retirement, withdrawal, disability, or death) when the observed experience differs from expectations that were developed based on actuarial assumptions.

\*\* This is an estimated figure. Minor adjustments, mostly salary-related, result in the final contribution figure for the year as shown in the Contributions for Preceding Fiscal Year Bill column.

**Note:** Chapter 94 of the Laws of 2015 changed the definition of billing salary beginning with fiscal year 2016. The billing rates are applied to salaries as of the end of the previous fiscal year, rather than the end of the fiscal year when the contributions are made.

The Projected Contributions for Fiscal Year Shown is based on one year of salary projection (previously a two-year projection) and the Contributions for Preceding Fiscal Year Bill is based on known salaries from the previous fiscal year (previously a one-year projection). This explains the large decrease in contributions from the projected to the actual amount for fiscal year 2016.

# ASSETS AND ACCRUED LIABILITIES

Plan assets can be expressed as the fair value or the actuarial value of assets. The fair value of assets represents the fair value of investments as of the last day of the fiscal year. The actuarial value of assets smooths the volatility in the fair value by phasing in unexpected gains and losses over a period of eight years. The actuarial accrued liability is the portion of the actuarial present value of future benefits that is attributed to service rendered as of the valuation date. Note that the asset values do not include the following dedicated assets: Group Life Insurance Plan, Non-Member Contributions, Administrative Overbill Account, Loan Insurance Reserve and Annuity Savings Fund.

(Dollars in Millions)

Valuation Date	Fair Value of Assets (FVA)	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AL)	Ratio of Assets to AL based on	
				FVA	AVA
ERS					
4/1/14	\$ 154,119	\$ 145,985	\$ 158,638	97.2%	92.0%
4/1/15	161,065	156,648	167,065	96.4	93.8
4/1/16	156,088	162,119	172,246	90.6	94.1
4/1/17	167,820	168,246	178,216	94.2	94.4
4/1/18	179,995	175,430	184,504	97.6	95.1
4/1/19	182,541	180,723	189,751	96.2	95.2
4/1/20	167,933	181,509	195,734	85.8	92.7
4/1/21	220,349	220,349	219,298	100.5	100.5
4/1/22	231,828	226,336	227,975	101.7	99.3
4/1/23	211,019	228,037	236,101	89.4	96.6
PFRS					
4/1/14	\$ 26,961	\$ 25,474	\$ 27,377	98.5%	93.0%
4/1/15	28,154	27,330	29,336	96.0	93.2
4/1/16	27,337	28,362	30,620	89.3	92.6
4/1/17	29,539	29,586	31,776	93.0	93.1
4/1/18	31,838	31,009	32,989	96.5	94.0
4/1/19	32,386	32,050	34,260	94.5	93.5
4/1/20	29,896	32,303	36,170	82.7	89.3
4/1/21	39,424	39,424	41,083	96.0	96.0
4/1/22	41,596	40,619	42,785	97.2	94.9
4/1/23	38,250	41,319	44,971	85.1	91.9

# SOLVENCY TEST

The System is funded in accordance with the aggregate method. The following solvency test is one means of checking the System's funding progress. In this test, the System's actuarial value of assets is compared to:

- (1) the required member contributions on deposit;
- (2) the liabilities for future benefits to persons who have retired; and
- (3) the employer-financed liabilities for service already rendered by active members.

The accrued liabilities in this chart are calculated in accordance with the entry age normal method.

Valuation Date	Accrued Liability (Dollars in Millions)				Actuarial Assets (Dollars in Millions)	Portion of Actuarial Accrued Liabilities Covered by Actuarial Assets		
	Member Contributions (1)	Retiree (2)	Active (3)	Total (1) + (2) + (3)		(1)	(2)	(3)
ERS								
4/1/14	\$ 8,462	\$ 85,528	\$ 64,648	\$ 158,638	\$ 145,985	100.0%	100.0%	80.4%
4/1/15	8,608	90,163	68,294	167,065	156,648	100.0	100.0	84.7
4/1/16	8,635	95,102	68,509	172,246	162,119	100.0	100.0	85.2
4/1/17	8,666	100,320	69,230	178,216	168,246	100.0	100.0	85.6
4/1/18	8,537	107,506	68,461	184,504	175,430	100.0	100.0	86.7
4/1/19	8,567	111,708	69,476	189,751	180,723	100.0	100.0	87.0
4/1/20	8,273	116,711	70,750	195,734	181,509	100.0	100.0	79.9
4/1/21	8,805	131,389	79,104	219,298	220,349	100.0	100.0	101.3
4/1/22	8,528	138,626	80,821	227,975	226,336	100.0	100.0	98.0
4/1/23	9,263	144,538	82,300	236,101	228,037	100.0	100.0	90.2
PFRS								
4/1/14	\$ 10	\$ 15,958	\$ 11,409	\$ 27,377	\$ 25,474	100.0%	100.0%	83.3%
4/1/15	20	17,072	12,244	29,336	27,330	100.0	100.0	83.6
4/1/16	34	17,599	12,987	30,620	28,362	100.0	100.0	82.6
4/1/17	55	18,920	12,801	31,776	29,586	100.0	100.0	82.9
4/1/18	85	20,265	12,639	32,989	31,009	100.0	100.0	84.3
4/1/19	125	21,625	12,510	34,260	32,050	100.0	100.0	82.3
4/1/20	175	23,038	12,957	36,170	32,303	100.0	100.0	70.2
4/1/21	183	26,477	14,423	41,083	39,424	100.0	100.0	88.5
4/1/22	251	28,015	14,519	42,785	40,619	100.0	100.0	85.1
4/1/23	359	29,931	14,681	44,971	41,319	100.0	100.0	75.1

# SCHEDULE OF ACTIVE MEMBER DATA

Fiscal Year Ending March 31	Active Members	Annual Member Payroll (Dollars in Millions)	Percentage Increase in Annual Member Payroll	Average Salary
ERS				
2014	493,209	\$ 24,361	(0.2)%	\$ 49,392
2015	491,558	24,480	0.5	49,801
2016	494,411	24,985	2.1	50,536
2017	496,441	25,520	2.1	51,406
2018	500,945	25,973	1.8	51,847
2019	501,037	26,668	2.7	53,226
2020	497,659	27,350	2.6	54,958
2021	469,968	27,074	(1.0)	57,608
2022	473,915	27,650	2.1	58,343
2023	481,547	29,020	5.0	60,264
PFRS				
2014	31,218	\$ 3,233	2.2%	\$ 103,549
2015	31,372	3,257	0.8	103,822
2016	31,720	3,416	4.9	107,700
2017	32,332	3,522	3.1	108,930
2018	32,470	3,548	0.7	109,265
2019	32,573	3,593	1.3	110,309
2020	32,888	3,910	8.8	118,902
2021	31,922	3,719	(4.9)	116,499
2022	32,169	3,884	4.4	120,735
2023	32,603	4,017	3.4	123,196

# SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES

*Added to and Removed from Benefit Payroll*

Fiscal Year	Number of Retired Members and Beneficiaries		Annual Benefits of Retired Members and Beneficiaries		Total Number of Retired Members and Beneficiaries	Total Annual Benefit	Percentage Increase in Total Annual Benefits	Average Annual Benefit
	Added During the Year	Removed During the Year	Added During the Year	Removed During the Year				
ERS								
2014	23,320	14,931	\$ 636,672,277	\$ 229,131,028	389,288	\$ 8,922,757,178	4.79%	\$ 22,921
2015	21,832	14,339	615,594,488	225,462,412	396,781	9,312,889,254	4.37	23,471
2016	25,517	15,186	764,025,727	247,047,150	407,112	9,829,867,831	5.55	24,145
2017	25,828	15,441	783,795,021	260,190,707	417,499	10,353,472,145	5.33	24,799
2018	31,709	14,655	974,084,983	248,074,441	434,553	11,079,482,687	7.01	25,496
2019	26,559	16,393	860,370,424	283,931,808	444,719	11,655,921,302	5.20	26,210
2020	25,018	19,931	824,249,961	318,809,092	449,806	12,161,362,171	4.34	27,037
2021	26,155	17,700	860,284,597	297,582,782	458,261	12,724,063,986	4.63	27,766
2022	27,115	16,712	988,935,582	357,043,950	468,664	13,355,955,619	4.97	28,498
2023	23,583	17,686	936,329,472	384,694,952	474,561	13,907,590,139	4.13	29,306
PFRS								
2014	1,431	851	\$ 99,767,882	\$ 27,650,778	33,117	\$ 1,590,078,348	4.75%	\$ 48,014
2015	1,222	812	89,763,321	27,980,968	33,527	1,651,860,701	3.89	49,270
2016	1,163	859	90,801,381	30,667,776	33,831	1,711,994,306	3.64	50,604
2017	2,028	903	157,020,746	32,764,190	34,956	1,836,250,862	7.26	52,530
2018	2,027	940	162,851,223	34,346,639	36,043	1,964,755,446	7.00	54,511
2019	2,011	978	169,652,095	37,229,104	37,076	2,097,178,437	6.74	56,564
2020	1,763	1,238	146,089,459	59,162,270	37,601	2,184,105,626	4.14	58,086
2021	1,960	1,194	162,871,045	35,722,187	38,367	2,311,254,484	5.82	60,241
2022	1,971	1,079	191,514,388	48,007,465	39,259	2,454,761,407	6.21	62,527
2023	1,993	1,184	196,936,696	56,920,116	40,068	2,594,777,987	5.70	64,759
For both systems, annual benefits are based on option 0 benefits (prior to option selection and partial lump sum distribution) plus cost-of-living adjustments (COLA).								



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# STATISTICAL



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# SCHEDULE OF ADDITIONS TO FIDUCIARY NET POSITION

(Dollars in Thousands)

Year Ending	Member Contributions	Employer Contributions	Other Income*	Investment Income/(Loss)	Total
2024	\$ 788,771	\$ 5,054,513	\$ 88,389	\$ 28,363,232	\$ 34,294,905
ERS	676,976	3,886,387	64,785	24,004,744	28,632,892
PFRS	111,795	1,168,126	23,604	4,358,488	5,662,013
2023	\$ 656,764	\$ 4,404,086	\$ 72,921	\$ (13,540,771)	\$ (8,407,000)
ERS	565,110	3,305,845	64,648	(11,475,648)	(7,540,045)
PFRS	91,654	1,098,241	8,273	(2,065,123)	(866,955)
2022	\$ 577,594	\$ 5,627,746	\$ 126,708	\$ 22,374,115	\$ 28,706,163
ERS	494,802	4,528,207	109,874	18,984,398	24,117,281
PFRS	82,792	1,099,539	16,834	3,389,717	4,588,882
2021	\$ 492,341	\$ 5,029,790	\$ 116,652	\$ 70,649,606	\$ 76,288,389
ERS	427,032	4,062,302	103,941	59,964,043	64,557,318
PFRS	65,309	967,488	12,711	10,685,563	11,731,071
2020	\$ 453,698	\$ 4,782,706	\$ 146,762	\$ (8,798,771)	\$ (3,415,605)
ERS	395,338	3,920,360	138,859	(7,470,542)	(3,015,985)
PFRS	58,360	862,346	7,903	(1,328,229)	(399,620)
2019	\$ 386,519	\$ 4,744,309	\$ 170,154	\$ 10,761,776	\$ 16,062,758
ERS	345,846	3,890,215	160,431	9,140,487	13,536,979
PFRS	40,673	854,094	9,723	1,621,289	2,525,779
2018	\$ 349,389	\$ 4,823,307	\$ 215,614	\$ 21,338,033	\$ 26,726,343
ERS	318,439	3,949,873	181,725	18,128,993	22,579,030
PFRS	30,950	873,434	33,889	3,209,040	4,147,313
2017	\$ 328,827	\$ 4,786,963	\$ 236,401	\$ 20,225,244	\$ 25,577,435
ERS	306,218	3,949,710	200,379	17,194,267	21,650,574
PFRS	22,609	837,253	36,022	3,030,977	3,926,861
2016	\$ 306,631	\$ 5,140,204	\$ 332,880	\$ (384,834)	\$ 5,394,881
ERS	289,333	4,347,619	198,332	(327,069)	4,508,215
PFRS	17,298	792,585	134,548	(57,765)	886,666
2015	\$ 284,793	\$ 5,797,449	\$ 230,799	\$ 12,444,891	\$ 18,757,932
ERS	272,004	4,893,110	193,176	10,582,102	15,940,392
PFRS	12,789	904,339	37,623	1,862,789	2,817,540

\* Includes interest earned on member loans, interest on accounts receivable and transfers from other systems.

# SCHEDULE OF INVESTMENT INCOME/(LOSS)

(Dollars in Thousands)

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Net Change in Fair Value of Investments	\$ 24,309,441	\$ (17,270,032)	\$ 18,519,023	\$ 67,602,333	\$ (12,135,353)	\$ 7,179,934	\$ 17,859,769	\$ 16,923,203	\$ (3,934,853)	\$ 9,275,335
Interest	1,857,864	1,517,186	1,234,903	1,195,961	1,321,234	1,321,174	1,312,608	1,349,658	1,446,569	1,447,757
Dividends	1,526,494	1,680,733	1,653,824	1,556,765	1,794,002	1,825,117	1,723,896	1,611,929	1,593,010	1,589,248
Real Estate and Mortgages	427,040	558,630	604,534	500,894	459,732	523,165	472,188	531,225	491,949	414,345
Alternative	994,536	735,432	853,919	598,918	440,806	354,214	352,488	230,919	174,552	174,850
Security Lending Income	1,621,501	774,037	45,123	47,393	29,326	48,942	73,563	74,428	52,878	35,639
International Equity	330,918	246,362	452,267	148,733	197,033	242,877	295,388	153,368	360,723	137,227
Other Including Prior Year Adjustment	(52,419)	(122,225)	(27,891)	(85,210)	(117,563)	(5,575)	(14,581)	33,456	1,461	(40,881)
Security Lending Expenses	(1,554,908)	(728,502)	(14,607)	(11,927)	(2,735)	(4,893)	(49,128)	(18,001)	(5,278)	(3,563)
Investment Expenses	(1,097,235)	(932,392)	(946,980)	(904,254)	(785,253)	(723,179)	(688,158)	(664,941)	(565,845)	(585,066)
<b>Net Investment Income/(Loss)</b>	<b>\$ 28,363,232</b>	<b>\$ (13,540,771)</b>	<b>\$ 22,374,115</b>	<b>\$ 70,649,606</b>	<b>\$ (8,798,771)</b>	<b>\$ 10,761,776</b>	<b>\$ 21,338,033</b>	<b>\$ 20,225,244</b>	<b>\$ (384,834)</b>	<b>\$ 12,444,891</b>

# SCHEDULE OF DEDUCTIONS FROM FIDUCIARY NET POSITION

(Dollars in Thousands)

Year Ending	Retirement Allowances	Post-Retirement Supplements	Death Benefits	Separation from Service	Administrative Expenses	Other Expenses	Total
2024	\$ 14,922,999	\$ 885,655	\$ 300,814	\$ 25,073	\$ 235,478	\$ 65,276	<b>\$ 16,435,295</b>
ERS	12,486,925	775,895	283,616	21,456	210,635	64,787	13,843,314
PFRS	2,436,074	109,760	17,198	3,617	24,843	489	2,591,981
2023	\$ 14,402,759	\$ 771,483	\$ 310,254	\$ 43,987	\$ 207,995	\$ 67,159	<b>\$ 15,803,637</b>
ERS	12,076,625	668,940	289,991	39,362	184,229	67,058	13,326,205
PFRS	2,326,134	102,543	20,263	4,625	23,766	101	2,477,432
2022	\$ 13,791,579	\$ 690,266	\$ 237,791	\$ 32,755	\$ 163,500	\$ 152,632	<b>\$ 15,068,523</b>
ERS	11,594,341	593,110	227,566	29,620	144,128	59,626	12,648,391
PFRS	2,197,238	97,156	10,225	3,135	19,372	93,006	2,420,132
2021	\$ 13,096,127	\$ 668,641	\$ 257,999	\$ 37,390	\$ 165,097	\$ 61,814	<b>\$ 14,287,068</b>
ERS	11,034,609	571,485	244,443	36,158	144,234	61,488	12,092,417
PFRS	2,061,518	97,156	13,556	1,232	20,863	326	2,194,651
2020	\$ 12,424,608	\$ 662,035	\$ 159,510	\$ 12,760	\$ 139,050	\$ 275,831	<b>\$ 13,673,794</b>
ERS	10,489,929	563,583	154,249	12,472	121,694	244,530	11,586,457
PFRS	1,934,679	98,452	5,261	288	17,356	31,301	2,087,337
2019	\$ 11,880,340	\$ 646,606	\$ 214,666	\$ 34,645	\$ 136,477	\$ 57,674	<b>\$ 12,970,408</b>
ERS	10,030,590	548,382	202,809	32,984	119,304	57,931	10,992,000
PFRS	1,849,750	98,224	11,857	1,661	17,173	(257)	1,978,408
2018	\$ 11,197,802	\$ 628,287	\$ 201,252	\$ 34,969	\$ 122,806	\$ 66,609	<b>\$ 12,251,725</b>
ERS	9,478,272	530,354	191,579	34,302	106,972	68,769	10,410,248
PFRS	1,719,530	97,933	9,673	667	15,834	(2,160)	1,841,477
2017	\$ 10,617,500	\$ 615,032	\$ 216,150	\$ (5,406)	\$ 107,134	\$ 65,037	<b>\$ 11,615,447</b>
ERS	9,015,444	516,852	207,976	820	93,943	64,441	9,899,476
PFRS	1,602,056	98,180	8,174	(6,226)	13,191	596	1,715,971
2016	\$ 10,113,758	\$ 606,536	\$ 188,190	\$ 34,488	\$ 106,620	\$ 117,500	<b>\$ 11,167,092</b>
ERS	8,536,930	508,112	179,861	33,097	93,012	117,197	9,468,209
PFRS	1,576,828	98,424	8,329	1,391	13,608	303	1,698,883
2015	\$ 9,651,227	\$ 601,850	\$ 183,091	\$ 27,628	\$ 107,151	\$ 49,918	<b>\$ 10,620,865</b>
ERS	8,152,183	502,916	174,652	26,067	93,357	51,321	9,000,496
PFRS	1,499,044	98,934	8,439	1,561	13,794	(1,403)	1,620,369

# SCHEDULE OF TOTAL CHANGES IN FIDUCIARY NET POSITION

(Dollars in Thousands)

Year Ending	Member Contributions	Employer Contributions	Other Income	Investment Income/(Loss)	Total Additions
2024	\$ 788,771	\$ 5,054,513	\$ 88,389	\$ 28,363,232	\$ <b>34,294,905</b>
ERS	676,976	3,886,387	64,785	24,004,744	28,632,892
PFRS	111,795	1,168,126	23,604	4,358,488	5,662,013
2023	\$ 656,764	\$ 4,404,086	\$ 72,921	\$ (13,540,771)	\$ <b>(8,407,000)</b>
ERS	565,110	3,305,845	64,648	(11,475,648)	(7,540,045)
PFRS	91,654	1,098,241	8,273	(2,065,123)	(866,955)
2022	\$ 577,594	\$ 5,627,746	\$ 126,708	\$ 22,374,115	\$ <b>28,706,163</b>
ERS	494,802	4,528,207	109,874	18,984,398	24,117,281
PFRS	82,792	1,099,539	16,834	3,389,717	4,588,882
2021	\$ 492,341	\$ 5,029,790	\$ 116,652	\$ 70,649,606	\$ <b>76,288,389</b>
ERS	427,032	4,062,302	103,941	59,964,043	64,557,318
PFRS	65,309	967,488	12,711	10,685,563	11,731,071
2020	\$ 453,698	\$ 4,782,706	\$ 146,762	\$ (8,798,771)	\$ <b>(3,415,605)</b>
ERS	395,338	3,920,360	138,859	(7,470,542)	(3,015,985)
PFRS	58,360	862,346	7,903	(1,328,229)	(399,620)
2019	\$ 386,519	\$ 4,744,309	\$ 170,154	\$ 10,761,776	\$ <b>16,062,758</b>
ERS	345,846	3,890,215	160,431	9,140,487	13,536,979
PFRS	40,673	854,094	9,723	1,621,289	2,525,779
2018	\$ 349,389	\$ 4,823,307	\$ 215,614	\$ 21,338,033	\$ <b>26,726,343</b>
ERS	318,439	3,949,873	181,725	18,128,993	22,579,030
PFRS	30,950	873,434	33,889	3,209,040	4,147,313
2017	\$ 328,827	\$ 4,786,963	\$ 236,401	\$ 20,225,244	\$ <b>25,577,435</b>
ERS	306,218	3,949,710	200,379	17,194,267	21,650,574
PFRS	22,609	837,253	36,022	3,030,977	3,926,861
2016	\$ 306,631	\$ 5,140,204	\$ 332,880	\$ (384,834)	\$ <b>5,394,881</b>
ERS	289,333	4,347,619	198,332	(327,069)	4,508,215
PFRS	17,298	792,585	134,548	(57,765)	886,666
2015	\$ 284,793	\$ 5,797,449	\$ 230,799	\$ 12,444,891	\$ <b>18,757,932</b>
ERS	272,004	4,893,110	193,176	10,582,102	15,940,392
PFRS	12,789	904,339	37,623	1,862,789	2,817,540

# SCHEDULE OF TOTAL CHANGES IN FIDUCIARY NET POSITION

CONTINUED

Retirement Allowances	Post-Retirement Supplement	Death Benefits	Separation from Service	Administrative Expenses	Other Expenses	Total Deductions	Net Increase / Decrease
\$ 14,922,999	\$ 885,655	\$ 300,814	\$ 25,073	\$ 235,478	\$ 65,276	\$ 16,435,295	\$ 17,859,610
12,486,925	775,895	283,616	21,456	210,635	64,787	13,843,314	14,789,578
2,436,074	109,760	17,198	3,617	24,843	489	2,591,981	3,070,032
\$ 14,402,759	\$ 771,483	\$ 310,254	\$ 43,987	\$ 207,995	\$ 67,159	\$ 15,803,637	\$ (24,210,637)
12,076,625	668,940	289,991	39,362	184,229	67,058	13,326,205	(20,866,250)
2,326,134	102,543	20,263	4,625	23,766	101	2,477,432	(3,344,387)
\$ 13,791,579	\$ 690,266	\$ 237,791	\$ 32,755	\$ 163,500	\$ 152,632	\$ 15,068,523	\$ 13,637,640
11,594,341	593,110	227,566	29,620	144,128	59,626	12,648,391	11,468,890
2,197,238	97,156	10,225	3,135	19,372	93,006	2,420,132	2,168,750
\$ 13,096,127	\$ 668,641	\$ 257,999	\$ 37,390	\$ 165,097	\$ 61,814	\$ 14,287,068	\$ 62,001,321
11,034,609	571,485	244,443	36,158	144,234	61,488	12,092,417	52,464,901
2,061,518	97,156	13,556	1,232	20,863	326	2,194,651	9,536,420
\$ 12,424,608	\$ 662,035	\$ 159,510	\$ 12,760	\$ 139,050	\$ 275,831	\$ 13,673,794	\$ (17,089,399)
10,489,929	563,583	154,249	12,472	121,694	244,530	11,586,457	(14,602,442)
1,934,679	98,452	5,261	288	17,356	31,301	2,087,337	(2,486,957)
\$ 11,880,340	\$ 646,606	\$ 214,666	\$ 34,645	\$ 136,477	\$ 57,674	\$ 12,970,408	\$ 3,092,350
10,030,590	548,382	202,809	32,984	119,304	57,931	10,992,000	2,544,979
1,849,750	98,224	11,857	1,661	17,173	(257)	1,978,408	547,371
\$ 11,197,802	\$ 628,287	\$ 201,252	\$ 34,969	\$ 122,806	\$ 66,609	\$ 12,251,725	\$ 14,474,618
9,478,272	530,354	191,579	34,302	106,972	68,769	10,410,248	12,168,782
1,719,530	97,933	9,673	667	15,834	(2,160)	1,841,477	2,305,836
\$ 10,617,500	\$ 615,032	\$ 216,150	\$ (5,406)	\$ 107,134	\$ 65,037	\$ 11,615,447	\$ 13,961,988
9,015,444	516,852	207,976	820	93,943	64,441	9,899,476	11,751,098
1,602,056	98,180	8,174	(6,226)	13,191	596	1,715,971	2,210,890
\$ 10,113,758	\$ 606,536	\$ 188,190	\$ 34,488	\$ 106,620	\$ 117,500	\$ 11,167,092	\$ (5,772,211)
8,536,930	508,112	179,861	33,097	93,012	117,197	9,468,209	(4,959,994)
1,576,828	98,424	8,329	1,391	13,608	303	1,698,883	(812,217)
\$ 9,651,227	\$ 601,850	\$ 183,091	\$ 27,628	\$ 107,151	\$ 49,918	\$ 10,620,865	\$ 8,137,067
8,152,183	502,916	174,652	26,067	93,357	51,321	9,000,496	6,939,896
1,499,044	98,934	8,439	1,561	13,794	(1,403)	1,620,369	1,197,171



# SERVICE RETIREES — ERS

This table shows the number (*Number*), average final average salary (*Avg FAS*), and average annual pension benefit prior to option selection, including any cost-of-living adjustment (*Avg Pen*), of surviving Employees' Retirement System service retirees on March 31, 2024. Groupings are based on years of service and age, with a breakdown by category of employer.

Years of Service	Nearest Age														
	Under 55			55 – 64			65 – 74			75 – 84			85 & Over		
	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen
<b>State</b>															
Under 10	–	–	–	1,058	49,345	4,958	2,773	48,079	5,871	1,789	41,165	5,926	471	30,852	5,023
10 – 14	–	–	–	2,643	53,348	8,772	8,430	49,655	9,908	6,469	39,039	8,826	2,541	31,588	8,510
15 – 19	–	–	–	1,724	61,785	14,418	5,168	58,187	16,182	3,832	47,565	15,028	1,972	36,318	13,882
20 – 24	–	–	–	2,877	76,203	28,959	8,387	71,230	30,832	7,147	57,172	27,346	3,248	41,938	23,364
25 – 29	824	109,437	54,517	6,076	88,112	43,753	10,653	76,729	41,369	7,565	60,783	35,844	2,689	45,793	30,968
30 – 34	9	100,264	49,862	10,591	88,904	54,828	17,045	78,859	51,039	9,013	63,484	44,220	2,180	50,485	38,891
35 & Over	–	–	–	4,181	83,431	57,922	15,148	78,626	59,727	12,429	68,929	56,398	2,176	60,055	52,597
<b>Total</b>	<b>833</b>	<b>109,337</b>	<b>54,467</b>	<b>29,150</b>	<b>80,437</b>	<b>42,034</b>	<b>67,604</b>	<b>71,040</b>	<b>39,309</b>	<b>48,244</b>	<b>58,158</b>	<b>35,059</b>	<b>15,277</b>	<b>43,628</b>	<b>26,822</b>
<b>Counties</b>															
Under 10	–	–	–	788	43,764	4,357	2,393	40,249	4,863	1,641	36,051	4,998	383	28,050	4,417
10 – 14	–	–	–	1,612	47,725	7,821	5,116	42,513	8,446	4,009	35,400	8,061	1,709	27,681	7,466
15 – 19	–	–	–	1,026	54,338	12,542	2,996	49,429	13,667	2,607	42,674	13,462	1,345	32,609	12,419
20 – 24	357	97,922	51,128	2,049	68,082	28,504	5,534	59,273	25,967	4,266	49,946	24,265	1,715	37,646	21,020
25 – 29	390	97,003	50,572	2,339	87,418	44,192	4,528	66,965	36,213	3,293	54,568	32,274	1,188	40,889	27,642
30 – 34	14	128,937	76,350	4,645	82,088	51,796	6,500	68,978	45,148	3,162	56,736	39,870	720	44,765	34,501
35 & Over	–	–	–	1,353	80,249	56,617	4,964	72,026	55,455	3,533	66,740	54,657	592	53,813	47,188
<b>Total</b>	<b>761</b>	<b>98,022</b>	<b>51,307</b>	<b>13,812</b>	<b>72,474</b>	<b>36,770</b>	<b>32,031</b>	<b>59,287</b>	<b>30,352</b>	<b>22,511</b>	<b>49,766</b>	<b>26,857</b>	<b>7,652</b>	<b>36,479</b>	<b>19,971</b>
<b>Cities</b>															
Under 10	–	–	–	125	38,324	3,733	365	37,294	4,574	248	31,601	4,434	64	24,332	3,833
10 – 14	–	–	–	269	45,684	7,497	804	41,108	8,011	651	32,433	7,393	247	25,703	6,893
15 – 19	–	–	–	156	52,199	12,158	483	46,723	13,135	389	40,444	12,720	185	27,817	10,678
20 – 24	–	–	–	278	63,379	24,094	764	58,480	25,362	532	46,622	22,433	223	31,646	18,122
25 – 29	–	–	–	215	69,896	32,608	598	64,192	34,622	477	50,792	30,230	180	37,010	25,578
30 – 34	–	–	–	836	73,507	46,410	1,237	63,394	41,575	563	53,537	37,886	140	41,006	32,176
35 & Over	–	–	–	269	78,108	55,102	1,043	66,490	51,456	685	57,205	47,311	142	42,462	38,671
<b>Total</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>2,148</b>	<b>65,332</b>	<b>33,384</b>	<b>5,294</b>	<b>56,680</b>	<b>30,153</b>	<b>3,545</b>	<b>45,992</b>	<b>25,656</b>	<b>1,181</b>	<b>32,635</b>	<b>19,106</b>
<b>Towns</b>															
Under 10	–	–	–	268	42,553	4,396	901	34,603	4,250	800	28,907	4,098	206	24,815	3,793
10 – 14	–	–	–	437	50,197	8,470	1,560	44,711	9,070	1,227	33,783	7,689	534	25,655	6,764
15 – 19	–	–	–	327	54,025	12,718	1,160	49,580	13,972	849	41,090	12,868	424	30,676	11,420
20 – 24	–	–	–	602	64,384	24,063	1,733	60,564	26,238	1,292	49,964	23,885	500	35,854	19,775
25 – 29	–	–	–	362	69,874	33,622	1,259	65,231	35,407	912	55,628	32,696	364	41,935	27,529
30 – 34	–	–	–	1,658	82,797	52,399	1,883	71,870	46,714	845	56,189	39,144	241	44,927	34,019
35 & Over	–	–	–	772	92,011	64,622	1,983	79,094	61,201	1,026	66,097	54,157	194	50,174	43,080
<b>Total</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>4,426</b>	<b>73,061</b>	<b>38,966</b>	<b>10,479</b>	<b>60,855</b>	<b>31,831</b>	<b>6,951</b>	<b>47,481</b>	<b>24,882</b>	<b>2,463</b>	<b>34,743</b>	<b>18,554</b>

# SERVICE RETIREES — ERS

CONTINUED

Years of Service	Nearest Age														
	Under 55			55 – 64			65 – 74			75 – 84			85 & Over		
	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen
<b>Villages</b>															
Under 10	–	–	–	95	38,682	4,157	272	35,365	4,261	207	31,238	4,298	73	23,761	3,519
10 – 14	–	–	–	137	50,250	8,334	477	43,371	8,697	364	34,203	7,708	188	27,053	6,977
15 – 19	–	–	–	92	55,132	12,977	305	51,826	14,640	278	42,411	13,284	133	30,329	11,577
20 – 24	–	–	–	177	62,219	23,444	515	63,670	27,593	365	54,204	25,586	165	37,332	20,751
25 – 29	–	–	–	111	73,322	35,618	352	69,824	37,605	277	56,019	32,864	112	38,507	25,596
30 – 34	–	–	–	468	83,649	52,959	550	70,426	45,687	289	54,021	37,783	70	44,832	34,475
35 & Over	–	–	–	196	91,190	64,432	543	77,300	59,361	316	64,393	52,729	74	45,962	41,779
<b>Total</b>	–	–	–	<b>1,276</b>	<b>71,947</b>	<b>37,811</b>	<b>3,014</b>	<b>61,112</b>	<b>31,380</b>	<b>2,096</b>	<b>48,649</b>	<b>25,483</b>	<b>815</b>	<b>34,192</b>	<b>18,287</b>
<b>Miscellaneous</b>															
Under 10	–	–	–	780	52,997	5,479	2,111	51,380	6,143	1,296	43,882	6,029	267	34,578	5,392
10 – 14	–	–	–	1,475	59,842	9,954	4,064	56,300	11,223	2,673	44,970	10,104	969	32,346	8,523
15 – 19	–	–	–	975	62,491	14,464	2,767	61,884	16,996	1,913	52,116	16,199	644	37,465	13,763
20 – 24	–	–	–	1,370	75,240	28,165	4,620	70,784	30,259	2,987	58,770	27,688	775	44,309	23,715
25 – 29	–	–	–	761	81,091	38,159	3,166	77,300	41,553	2,219	65,223	37,594	603	48,909	32,209
30 – 34	–	–	–	3,384	97,547	61,549	4,804	86,943	56,236	1,897	71,097	48,221	483	56,027	41,924
35 & Over	–	–	–	1,190	102,001	71,777	3,224	87,368	66,414	2,114	78,333	63,513	473	67,840	57,912
<b>Total</b>	–	–	–	<b>9,935</b>	<b>81,208</b>	<b>39,696</b>	<b>24,756</b>	<b>71,886</b>	<b>34,789</b>	<b>15,099</b>	<b>59,442</b>	<b>30,312</b>	<b>4,214</b>	<b>44,538</b>	<b>24,681</b>
<b>School Districts</b>															
Under 10	–	–	–	1,211	26,405	2,756	3,784	24,681	3,038	2,705	20,600	2,882	747	16,060	2,639
10 – 14	–	–	–	2,040	33,330	5,712	6,490	32,268	6,575	4,784	26,813	6,068	2,557	20,117	5,390
15 – 19	–	–	–	1,662	39,298	9,536	5,235	36,569	10,374	3,838	30,851	9,728	1,873	23,434	8,984
20 – 24	–	–	–	2,434	47,989	18,538	9,235	45,564	20,095	6,141	38,193	18,595	2,379	26,840	15,332
25 – 29	–	–	–	1,105	57,817	27,933	5,203	49,976	27,344	3,904	41,634	24,966	1,622	28,509	19,847
30 – 34	–	–	–	2,279	69,917	43,956	4,175	56,854	36,978	2,361	45,249	31,556	815	33,632	26,049
35 & Over	–	–	–	778	76,770	54,316	2,139	64,658	49,518	1,406	51,627	41,896	423	40,024	35,163
<b>Total</b>	–	–	–	<b>11,509</b>	<b>49,096</b>	<b>21,658</b>	<b>36,261</b>	<b>42,766</b>	<b>19,211</b>	<b>25,139</b>	<b>34,962</b>	<b>16,676</b>	<b>10,416</b>	<b>25,131</b>	<b>13,187</b>

# SERVICE RETIREES — PFRS

This table shows the number (*Number*), average final average salary (*Avg FAS*), and average annual pension benefit prior to option selection, including any cost-of-living adjustment (*Avg Pen*), of surviving Police and Fire Retirement System service retirees on March 31, 2024. Groupings are based on years of service and age, with a breakdown by category of employer.

Years of Service	Nearest Age														
	Under 40			40 – 49			50 – 59			60 – 69			70 & Over		
	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen
<b>State</b>															
Under 10	–	–	–	–	–	–	16	47,245	5,311	18	50,758	7,887	8	30,156	12,802
10 – 14	–	–	–	–	–	–	10	68,809	14,167	35	51,134	10,881	33	26,753	6,770
15 – 19	–	–	–	–	–	–	5	106,917	32,125	21	75,422	24,869	23	49,599	20,099
20 – 24	–	–	–	345	151,414	78,474	627	138,979	74,895	424	98,294	54,618	757	44,091	31,254
25 – 29	–	–	–	10	169,525	98,647	481	151,900	93,533	458	128,524	80,844	433	71,048	48,796
30 – 34	–	–	–	–	–	–	223	164,553	112,619	639	147,215	101,884	503	88,249	64,364
35 & Over	–	–	–	–	–	–	8	177,880	124,516	123	156,398	108,610	244	98,825	75,331
<b>Total</b>	–	–	–	<b>355</b>	<b>151,924</b>	<b>79,043</b>	<b>1,370</b>	<b>146,205</b>	<b>86,457</b>	<b>1,718</b>	<b>126,970</b>	<b>81,311</b>	<b>2,001</b>	<b>67,420</b>	<b>48,142</b>
<b>Counties</b>															
Under 10	–	–	–	–	–	–	6	65,305	7,079	8	64,464	8,360	3	37,701	5,400
10 – 14	–	–	–	–	–	–	6	109,284	23,127	18	75,773	16,404	24	31,638	8,202
15 – 19	–	–	–	–	–	–	3	121,784	33,613	4	119,888	37,268	15	46,941	18,298
20 – 24	–	–	–	45	200,645	103,283	375	176,896	94,241	323	145,205	79,122	1,006	67,483	43,028
25 – 29	–	–	–	7	221,072	127,920	368	207,237	128,617	481	180,732	113,975	464	111,132	74,280
30 – 34	–	–	–	–	–	–	269	229,082	156,067	633	205,924	142,896	904	134,870	98,538
35 & Over	–	–	–	–	–	–	28	250,601	172,262	187	233,118	162,488	637	161,496	124,382
<b>Total</b>	–	–	–	<b>52</b>	<b>203,394</b>	<b>106,600</b>	<b>1,055</b>	<b>201,566</b>	<b>122,994</b>	<b>1,654</b>	<b>187,506</b>	<b>121,964</b>	<b>3,053</b>	<b>113,274</b>	<b>80,756</b>
<b>Cities</b>															
Under 10	–	–	–	–	–	–	18	51,768	6,439	38	44,234	6,010	14	39,759	6,836
10 – 14	–	–	–	–	–	–	26	61,713	12,687	51	44,394	9,724	90	25,904	7,052
15 – 19	–	–	–	–	–	–	8	83,110	26,437	43	56,796	17,677	43	40,764	16,800
20 – 24	1	142,668	71,334	377	129,430	65,471	1,747	110,331	56,957	1,571	88,270	47,462	1,846	48,395	31,260
25 – 29	–	–	–	11	149,423	82,839	585	131,149	76,381	890	108,980	66,397	937	72,211	47,294
30 – 34	–	–	–	–	–	–	262	140,623	91,189	797	126,690	84,933	1,125	81,855	58,951
35 & Over	–	–	–	–	–	–	11	156,753	107,971	236	134,060	88,081	736	93,001	71,606
<b>Total</b>	<b>1</b>	<b>142,668</b>	<b>71,334</b>	<b>388</b>	<b>129,997</b>	<b>65,964</b>	<b>2,657</b>	<b>117,139</b>	<b>63,953</b>	<b>3,626</b>	<b>103,326</b>	<b>61,671</b>	<b>4,791</b>	<b>67,246</b>	<b>46,440</b>
<b>Towns</b>															
Under 10	–	–	–	–	–	–	22	47,504	5,197	40	37,226	4,563	45	27,619	4,819
10 – 14	–	–	–	–	–	–	9	57,515	11,694	38	53,209	11,497	56	29,792	8,027
15 – 19	–	–	–	–	–	–	6	80,136	21,624	22	61,434	19,418	27	38,766	15,215
20 – 24	–	–	–	162	138,046	69,761	591	119,746	61,384	533	93,151	49,422	451	57,802	35,702
25 – 29	–	–	–	10	148,256	83,220	169	141,247	80,450	196	115,611	67,783	186	81,748	50,609
30 – 34	–	–	–	–	–	–	95	155,361	101,263	222	150,112	98,639	256	97,643	69,224
35 & Over	–	–	–	–	–	–	7	168,883	109,746	100	165,322	109,305	185	122,122	90,922
<b>Total</b>	–	–	–	<b>172</b>	<b>138,639</b>	<b>70,544</b>	<b>899</b>	<b>125,279</b>	<b>67,421</b>	<b>1,151</b>	<b>110,364</b>	<b>63,860</b>	<b>1,206</b>	<b>76,966</b>	<b>50,692</b>

# SERVICE RETIREES — PFRS

CONTINUED

Years of Service	Nearest Age														
	Under 40			40 – 49			50 – 59			60 – 69			70 & Over		
	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen
<b>Villages</b>															
Under 10	–	–	–	–	–	–	26	39,157	4,418	73	31,794	4,202	42	21,355	2,951
10 – 14	–	–	–	–	–	–	9	56,335	10,331	43	46,996	10,867	75	24,361	6,352
15 – 19	–	–	–	–	–	–	9	74,287	22,429	24	52,052	16,816	39	31,780	13,393
20 – 24	–	–	–	111	134,396	67,304	500	111,919	56,785	462	86,731	45,661	486	54,080	33,728
25 – 29	–	–	–	6	226,680	123,077	151	155,026	84,950	170	123,281	70,008	170	74,469	45,221
30 – 34	–	–	–	–	–	–	79	185,427	116,408	167	160,466	102,071	193	106,268	74,128
35 & Over	–	–	–	–	–	–	4	198,298	127,957	70	175,593	112,230	168	127,774	94,195
<b>Total</b>	–	–	–	<b>117</b>	<b>139,129</b>	<b>70,164</b>	<b>778</b>	<b>124,683</b>	<b>65,987</b>	<b>1,009</b>	<b>104,765</b>	<b>58,549</b>	<b>1,173</b>	<b>72,363</b>	<b>47,173</b>
<b>Miscellaneous</b>															
Under 10	–	–	–	–	–	–	4	51,087	5,394	12	80,970	10,720	6	64,385	9,921
10 – 14	–	–	–	–	–	–	1	55,990	9,798	8	95,013	22,669	13	31,324	7,715
15 – 19	–	–	–	–	–	–	3	126,914	37,262	5	111,719	32,972	7	51,590	19,400
20 – 24	–	–	–	123	190,903	100,777	322	180,556	95,909	182	135,957	73,181	384	95,215	55,991
25 – 29	–	–	–	8	205,056	120,550	185	209,672	127,839	192	170,117	106,243	202	133,097	85,931
30 – 34	–	–	–	–	–	–	36	175,137	113,902	136	178,326	123,348	179	151,245	107,690
35 & Over	–	–	–	–	–	–	–	–	–	40	187,226	129,549	89	142,681	108,592
<b>Total</b>	–	–	–	<b>131</b>	<b>191,767</b>	<b>101,985</b>	<b>551</b>	<b>188,519</b>	<b>106,672</b>	<b>575</b>	<b>159,023</b>	<b>97,652</b>	<b>880</b>	<b>118,607</b>	<b>77,381</b>

# DISABILITY RETIREES – ERS

This table shows the number (*Number*), average final average salary (*Avg FAS*), and average annual pension benefit prior to option selection, including any cost-of-living adjustment (*Avg Pen*), of surviving Employees' Retirement System disability retirees on March 31, 2024. Groupings are based on years of service and age, with a breakdown by category of employer.

Years of Service	Nearest Age														
	Under 55			55 – 64			65 – 74			75 – 84			85 & Over		
	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen
<b>State</b>															
Under 10	112	53,676	35,078	158	42,038	21,920	227	29,282	14,272	130	22,060	13,950	37	22,133	11,356
10 – 14	338	60,625	27,717	789	49,723	20,045	1,024	40,561	15,713	560	30,277	13,985	167	22,890	12,859
15 – 19	206	70,858	35,856	753	56,491	24,250	908	45,320	19,705	562	34,778	18,862	166	26,674	16,816
20 – 24	89	84,778	46,146	599	62,543	30,103	744	48,862	24,167	434	38,480	23,610	72	29,838	24,846
25 – 29	35	88,580	53,990	526	74,002	45,645	522	54,495	32,532	235	40,057	26,630	40	31,773	28,529
30 – 34	4	77,024	47,783	125	77,446	50,287	222	51,179	34,017	74	41,064	29,522	14	28,725	28,272
35 & Over	2	65,810	22,170	60	31,376	15,623	65	47,377	28,260	13	40,648	30,805	1	25,733	21,942
<b>Total</b>	<b>786</b>	<b>66,393</b>	<b>34,244</b>	<b>3,010</b>	<b>58,592</b>	<b>28,838</b>	<b>3,712</b>	<b>45,413</b>	<b>21,975</b>	<b>2,008</b>	<b>34,387</b>	<b>19,589</b>	<b>497</b>	<b>25,989</b>	<b>17,519</b>
<b>Counties</b>															
Under 10	53	72,164	49,026	39	48,153	28,292	47	33,704	19,246	41	25,672	15,667	11	18,253	9,930
10 – 14	169	68,729	35,653	323	52,484	23,963	371	42,129	16,763	228	31,307	13,152	67	22,421	11,440
15 – 19	126	82,204	42,310	337	62,474	30,674	337	48,408	23,443	183	34,239	17,217	43	26,588	16,430
20 – 24	55	70,167	33,474	257	74,360	39,837	286	56,853	30,858	121	40,980	24,967	26	29,720	25,149
25 – 29	10	83,150	51,874	170	83,242	51,558	163	60,053	36,628	45	41,248	28,157	11	37,197	32,778
30 – 34	1	66,470	45,135	37	80,252	50,629	68	64,640	43,759	13	51,942	37,025	1	28,404	26,163
35 & Over	–	–	–	13	50,079	30,631	11	48,752	30,902	3	80,663	62,405	–	–	–
<b>Total</b>	<b>414</b>	<b>73,804</b>	<b>39,516</b>	<b>1,176</b>	<b>65,277</b>	<b>34,401</b>	<b>1,283</b>	<b>50,279</b>	<b>25,827</b>	<b>634</b>	<b>34,997</b>	<b>18,530</b>	<b>159</b>	<b>25,513</b>	<b>16,495</b>
<b>Cities</b>															
Under 10	3	59,305	20,211	5	41,643	15,869	14	28,804	12,643	10	24,122	14,809	4	30,076	9,722
10 – 14	15	52,717	18,630	54	49,712	17,225	69	37,330	12,929	32	33,989	13,427	10	21,196	10,227
15 – 19	13	55,792	19,230	49	46,782	16,788	81	42,475	16,507	43	32,926	14,958	7	23,762	14,319
20 – 24	12	70,933	26,935	37	54,792	21,565	49	42,922	19,426	21	32,571	18,890	7	26,125	21,963
25 – 29	2	56,094	24,306	34	54,443	25,645	36	39,310	21,115	21	35,942	24,751	3	27,541	25,508
30 – 34	1	49,872	27,656	9	67,074	36,401	13	41,209	25,615	4	32,524	22,198	1	29,965	23,003
35 & Over	–	–	–	1	59,183	37,024	1	40,615	29,007	–	–	–	–	–	–
<b>Total</b>	<b>46</b>	<b>58,853</b>	<b>21,512</b>	<b>189</b>	<b>51,461</b>	<b>20,458</b>	<b>263</b>	<b>39,978</b>	<b>17,035</b>	<b>131</b>	<b>32,928</b>	<b>16,994</b>	<b>32</b>	<b>24,815</b>	<b>15,458</b>
<b>Towns</b>															
Under 10	7	37,294	14,320	10	40,399	16,435	13	44,089	18,607	10	24,622	17,019	3	16,961	6,284
10 – 14	30	57,894	20,468	87	50,580	17,074	94	41,846	14,848	44	30,084	14,638	12	24,900	11,568
15 – 19	19	54,135	21,803	101	54,355	19,766	107	47,286	18,720	46	33,751	14,919	9	29,511	17,713
20 – 24	15	74,500	28,201	82	63,662	25,186	84	49,547	23,736	40	40,913	28,434	8	34,383	28,303
25 – 29	2	100,274	45,873	47	69,981	33,093	49	50,589	26,906	23	40,622	29,575	1	23,161	18,679
30 – 34	2	67,410	34,780	14	78,765	43,552	22	50,749	33,843	7	44,967	32,763	3	30,183	30,554
35 & Over	–	–	–	1	21,686	11,474	9	54,182	32,140	1	60,147	49,970	–	–	–
<b>Total</b>	<b>75</b>	<b>59,724</b>	<b>22,838</b>	<b>342</b>	<b>58,269</b>	<b>23,064</b>	<b>378</b>	<b>47,120</b>	<b>21,129</b>	<b>171</b>	<b>35,486</b>	<b>21,038</b>	<b>36</b>	<b>27,890</b>	<b>18,163</b>

# DISABILITY RETIREES – ERS

CONTINUED

Years of Service	Nearest Age														
	Under 55			55 – 64			65 – 74			75 – 84			85 & Over		
	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen
<b>Villages</b>															
Under 10	2	37,474	13,032	4	34,874	14,642	4	38,847	15,468	4	17,007	8,687	2	9,728	13,350
10 – 14	8	61,466	21,650	30	47,941	17,375	28	45,874	17,365	15	29,475	13,744	1	17,569	22,598
15 – 19	6	77,585	26,029	27	60,093	21,500	34	49,389	19,531	16	32,895	17,729	4	17,785	14,309
20 – 24	7	66,794	25,593	20	57,344	23,299	24	57,034	24,964	7	36,799	23,799	1	14,571	12,049
25 – 29	2	95,715	45,730	18	68,948	32,183	11	59,150	30,500	6	35,623	26,895	–	–	–
30 – 34	–	–	–	5	79,459	42,619	8	60,611	36,006	2	32,470	22,292	–	–	–
35 & Over	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
<b>Total</b>	<b>25</b>	<b>67,647</b>	<b>25,042</b>	<b>104</b>	<b>57,553</b>	<b>23,257</b>	<b>109</b>	<b>51,591</b>	<b>22,338</b>	<b>50</b>	<b>31,455</b>	<b>17,943</b>	<b>8</b>	<b>15,342</b>	<b>14,823</b>
<b>Miscellaneous</b>															
Under 10	15	45,307	15,980	21	45,523	16,730	40	42,200	17,424	18	25,593	13,182	3	14,658	10,445
10 – 14	50	52,429	18,339	153	50,134	17,457	244	46,116	15,516	112	38,293	14,301	21	27,547	13,741
15 – 19	35	69,321	23,281	138	57,736	20,577	208	48,188	18,051	91	37,448	15,745	5	26,262	16,669
20 – 24	15	70,556	25,515	133	62,934	25,062	128	53,776	22,351	48	45,857	23,731	4	19,335	15,774
25 – 29	5	88,326	40,603	87	65,672	31,039	85	54,527	29,404	16	41,403	26,364	3	35,932	31,638
30 – 34	2	71,897	37,011	26	68,629	37,980	34	52,605	30,972	5	47,511	32,153	1	24,959	29,204
35 & Over	–	–	–	3	34,598	16,126	8	56,739	32,182	–	–	–	–	–	–
<b>Total</b>	<b>122</b>	<b>60,418</b>	<b>21,568</b>	<b>561</b>	<b>58,050</b>	<b>23,051</b>	<b>747</b>	<b>49,162</b>	<b>19,957</b>	<b>290</b>	<b>38,822</b>	<b>17,219</b>	<b>37</b>	<b>26,051</b>	<b>15,958</b>
<b>School Districts</b>															
Under 10	2	43,479	15,088	19	22,452	8,934	43	21,831	8,643	20	19,949	9,775	16	11,164	5,336
10 – 14	42	39,218	13,821	271	36,425	12,478	401	31,089	10,162	233	26,366	9,794	62	22,067	8,734
15 – 19	28	50,252	17,087	219	42,171	14,559	304	36,495	13,261	184	30,726	12,421	28	18,505	11,115
20 – 24	12	48,601	18,354	143	47,283	18,849	157	38,556	16,854	57	31,110	16,402	15	23,353	14,721
25 – 29	3	55,998	24,714	66	53,586	25,422	72	46,785	23,800	35	31,603	20,633	4	36,291	30,311
30 – 34	–	–	–	24	56,408	31,125	22	47,304	28,372	6	44,133	31,291	–	–	–
35 & Over	–	–	–	2	62,809	38,007	3	62,925	41,414	–	–	–	–	–	–
<b>Total</b>	<b>87</b>	<b>44,740</b>	<b>15,902</b>	<b>744</b>	<b>42,085</b>	<b>16,043</b>	<b>1,002</b>	<b>35,081</b>	<b>13,559</b>	<b>535</b>	<b>28,673</b>	<b>12,351</b>	<b>125</b>	<b>20,483</b>	<b>10,241</b>

# DISABILITY RETIREES – PFRS

This table shows the number (*Number*), average final average salary (*Avg FAS*), and average annual pension benefit prior to option selection, including any cost-of-living adjustment (*Avg Pen*), of surviving Police and Fire Retirement System disability retirees on March 31, 2024. Groupings are based on years of service and age, with a breakdown by category of employer.

Years of Service	Nearest Age														
	Under 40			40 – 49			50 – 59			60 – 69			70 & Over		
	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen
<b>State</b>															
Under 10	13	101,089	65,475	18	90,520	58,752	26	61,945	40,514	45	38,571	26,394	38	20,931	20,752
10 – 14	2	116,642	71,583	18	118,533	71,103	26	86,833	54,215	29	55,177	34,120	63	26,131	24,642
15 – 19	–	–	–	19	130,762	76,798	38	112,289	70,540	46	70,174	44,866	79	33,168	28,697
20 – 24	–	–	–	11	146,143	100,997	63	133,696	90,785	49	99,024	68,051	74	46,048	35,867
25 – 29	–	–	–	–	–	–	29	149,668	105,887	32	115,289	80,732	38	75,992	53,703
30 – 34	–	–	–	–	–	–	5	151,591	104,991	13	143,547	107,067	27	97,360	73,535
35 & Over	–	–	–	–	–	–	–	–	–	2	144,351	104,535	12	100,943	79,362
<b>Total</b>	<b>15</b>	<b>103,163</b>	<b>66,289</b>	<b>66</b>	<b>119,015</b>	<b>74,356</b>	<b>187</b>	<b>115,810</b>	<b>77,319</b>	<b>216</b>	<b>79,908</b>	<b>54,444</b>	<b>331</b>	<b>45,913</b>	<b>36,981</b>
<b>Counties</b>															
Under 10	3	84,997	58,265	8	68,537	45,354	32	90,770	58,618	24	55,948	39,464	34	29,671	34,966
10 – 14	4	128,525	72,804	24	145,747	95,503	78	120,467	86,109	46	88,109	60,240	125	37,758	36,581
15 – 19	–	–	–	28	178,119	122,381	103	142,991	100,967	64	105,802	75,656	210	52,527	47,134
20 – 24	–	–	–	21	184,025	118,492	126	166,977	112,412	111	133,851	94,448	248	67,652	56,485
25 – 29	–	–	–	1	187,494	140,620	62	193,561	140,877	75	164,996	119,007	73	95,881	74,981
30 – 34	–	–	–	–	–	–	16	215,090	159,165	32	201,253	150,665	42	126,221	96,325
35 & Over	–	–	–	–	–	–	1	248,835	186,627	10	205,829	150,357	21	143,495	109,570
<b>Total</b>	<b>7</b>	<b>109,870</b>	<b>66,573</b>	<b>82</b>	<b>159,580</b>	<b>106,226</b>	<b>418</b>	<b>152,534</b>	<b>106,755</b>	<b>362</b>	<b>132,314</b>	<b>94,736</b>	<b>753</b>	<b>64,875</b>	<b>55,097</b>
<b>Cities</b>															
Under 10	18	77,732	49,533	32	84,547	53,118	59	62,433	41,930	56	47,454	33,550	48	27,109	24,860
10 – 14	11	93,990	50,126	55	89,454	54,332	134	73,139	45,493	105	56,913	38,973	116	30,172	26,243
15 – 19	2	133,305	87,442	59	103,868	61,315	144	90,701	56,686	153	67,046	44,899	166	37,222	31,505
20 – 24	–	–	–	13	124,596	82,734	164	106,507	67,415	180	89,032	56,416	259	47,112	37,547
25 – 29	–	–	–	–	–	–	58	120,441	77,533	119	98,809	63,392	137	60,396	45,433
30 – 34	–	–	–	–	–	–	13	128,145	79,228	43	120,391	79,235	83	69,038	50,998
35 & Over	–	–	–	–	–	–	–	–	–	3	174,723	131,930	22	76,373	53,925
<b>Total</b>	<b>31</b>	<b>87,086</b>	<b>52,189</b>	<b>159</b>	<b>96,688</b>	<b>59,001</b>	<b>572</b>	<b>92,069</b>	<b>58,244</b>	<b>659</b>	<b>79,478</b>	<b>52,112</b>	<b>831</b>	<b>46,771</b>	<b>37,107</b>
<b>Towns</b>															
Under 10	4	87,144	49,909	13	86,494	60,492	23	67,108	44,514	26	45,960	31,410	10	22,518	22,022
10 – 14	6	116,936	60,564	28	109,694	66,099	38	89,322	59,218	45	67,482	41,553	47	31,664	27,296
15 – 19	1	144,054	108,040	21	131,831	78,815	60	107,030	71,257	37	73,852	49,421	54	40,617	35,307
20 – 24	–	–	–	8	141,672	87,476	53	128,121	81,712	72	98,954	67,477	66	57,115	44,894
25 – 29	–	–	–	–	–	–	19	138,169	90,760	33	119,167	77,089	30	73,297	57,203
30 – 34	–	–	–	–	–	–	–	–	–	18	153,040	104,008	15	106,436	77,776
35 & Over	–	–	–	–	–	–	–	–	–	2	183,026	122,859	4	128,010	100,132
<b>Total</b>	<b>11</b>	<b>108,568</b>	<b>61,005</b>	<b>70</b>	<b>115,681</b>	<b>71,315</b>	<b>193</b>	<b>107,643</b>	<b>70,491</b>	<b>233</b>	<b>90,739</b>	<b>60,237</b>	<b>226</b>	<b>53,026</b>	<b>42,726</b>

# DISABILITY RETIREES – PFRS

CONTINUED

Years of Service	Nearest Age														
	Under 40			40 – 49			50 – 59			60 – 69			70 & Over		
	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen	Number	Avg FAS	Avg Pen
<b>Villages</b>															
Under 10	5	98,915	59,240	11	73,738	53,962	21	60,430	42,294	26	39,621	27,528	23	22,351	24,647
10 – 14	3	120,800	70,294	17	117,541	69,427	39	83,422	54,639	39	66,283	44,484	44	35,214	29,821
15 – 19	2	128,699	77,073	11	105,505	64,247	58	105,631	66,521	47	78,737	53,055	66	45,421	38,422
20 – 24	–	–	–	11	152,109	98,391	50	128,307	77,743	49	87,092	59,008	50	60,706	46,875
25 – 29	–	–	–	1	124,590	62,295	18	165,467	108,287	19	142,604	96,103	23	84,432	60,182
30 – 34	–	–	–	–	–	–	4	207,202	129,241	9	141,509	95,613	16	103,220	73,114
35 & Over	–	–	–	–	–	–	–	–	–	5	167,875	106,440	4	77,239	49,790
<b>Total</b>	<b>10</b>	<b>111,437</b>	<b>66,123</b>	<b>51</b>	<b>113,091</b>	<b>71,081</b>	<b>190</b>	<b>109,851</b>	<b>69,635</b>	<b>194</b>	<b>84,566</b>	<b>56,981</b>	<b>226</b>	<b>53,093</b>	<b>42,088</b>
<b>Miscellaneous</b>															
Under 10	3	88,643	53,007	9	99,587	70,614	15	80,776	53,076	16	58,978	40,963	12	41,136	34,068
10 – 14	1	142,001	71,001	14	124,112	70,536	44	117,614	83,306	29	88,707	60,899	28	55,716	39,835
15 – 19	–	–	–	10	130,418	86,211	21	134,862	90,862	22	110,797	76,111	43	69,148	54,520
20 – 24	–	–	–	8	187,963	130,582	45	168,306	112,625	65	140,314	99,859	57	91,064	67,663
25 – 29	–	–	–	–	–	–	13	203,202	147,061	31	153,663	115,138	26	128,108	94,936
30 – 34	–	–	–	–	–	–	1	113,721	85,290	6	177,466	127,752	11	172,140	132,126
35 & Over	–	–	–	–	–	–	–	–	–	1	322,694	242,020	3	155,157	120,352
<b>Total</b>	<b>4</b>	<b>101,983</b>	<b>57,505</b>	<b>41</b>	<b>132,725</b>	<b>86,093</b>	<b>139</b>	<b>140,632</b>	<b>96,654</b>	<b>170</b>	<b>124,854</b>	<b>89,203</b>	<b>180</b>	<b>88,375</b>	<b>66,712</b>



# NEW OPTION SELECTIONS

This table shows the number of new retirees (*Number*), and the total amount paid to new retirees in annual benefits after option selection and any partial lump sum distribution\* (*\$ Amount*), during the given fiscal year. Groupings are based on option selected, with breakdowns by retirement system and member legal sex.

Options	2020		2021		2022		2023		2024	
	Number	\$ Amount	Number	\$ Amount	Number	\$ Amount	Number	\$ Amount	Number	\$ Amount
<b>ERS Females</b>										
Single Life Allowance**	7,494	193,955,163	8,077	213,349,680	7,981	214,111,702	6,948	181,001,036	6,657	174,204,484
Cash Refund	8	255,096	3	238,208	3	70,683	1	29,023	—	—
Joint Allowance — Full	606	11,590,002	843	17,598,093	736	15,594,487	629	12,669,810	570	10,827,531
Joint Allowance — Half	135	3,982,328	199	5,438,576	166	4,678,604	130	3,656,825	132	3,040,870
Five Year Certain	92	2,756,281	109	2,911,558	122	3,558,873	87	2,590,350	70	1,832,706
Ten Year Certain	298	7,529,028	294	8,230,932	266	7,382,200	207	5,472,429	229	6,036,610
Pop-Up — Full	2,103	54,882,652	1,932	50,079,503	1,731	46,255,257	1,487	38,142,961	1,428	35,788,540
Pop-Up — Half	848	29,941,152	829	28,910,032	776	27,868,782	595	23,151,863	617	22,635,707
Other (Option 4)	764	29,259,512	1,402	51,651,839	1,370	50,398,824	1,200	43,571,474	1,146	39,994,054
<b>Total</b>	<b>12,348</b>	<b>334,151,218</b>	<b>13,688</b>	<b>378,408,424</b>	<b>13,151</b>	<b>369,919,416</b>	<b>11,284</b>	<b>310,285,774</b>	<b>10,849</b>	<b>294,360,507</b>
<b>ERS Males</b>										
Single Life Allowance**	3,501	118,808,585	3,578	123,212,184	3,509	125,451,810	3,271	112,994,460	3,160	107,259,762
Cash Refund	2	45,768	1	132,310	2	112,345	—	—	—	—
Joint Allowance — Full	1,409	50,905,250	1,641	62,449,602	1,710	64,500,597	1,367	49,840,068	1,337	49,674,066
Joint Allowance — Half	213	9,828,230	249	11,298,867	236	9,999,062	211	10,118,014	207	10,018,985
Five Year Certain	35	1,258,873	55	2,096,271	54	2,280,306	44	1,660,311	48	1,822,569
Ten Year Certain	148	4,733,889	161	6,148,667	141	5,102,470	151	5,239,115	141	4,877,426
Pop-Up — Full	2,740	102,742,477	2,341	91,433,789	2,184	84,808,600	1,853	70,956,648	1,879	70,955,725
Pop-Up — Half	715	32,589,400	685	32,704,597	630	30,973,065	535	26,168,944	529	24,787,895
Other (Option 4)	972	48,802,333	1,288	60,908,507	1,307	62,897,730	1,073	51,347,871	999	48,780,474
<b>Total</b>	<b>9,735</b>	<b>369,714,808</b>	<b>9,999</b>	<b>390,384,798</b>	<b>9,773</b>	<b>386,125,989</b>	<b>8,505</b>	<b>328,325,435</b>	<b>8,300</b>	<b>318,176,905</b>
<b>PFRS Females</b>										
Single Life Allowance**	83	6,433,337	60	4,520,475	80	6,570,255	80	6,521,028	80	6,514,112
Cash Refund	—	—	—	—	—	—	—	—	—	—
Joint Allowance — Full	4	301,195	3	179,244	7	344,923	7	307,715	7	506,600
Joint Allowance — Half	—	—	5	511,519	1	78,880	1	54,739	1	5,942
Five Year Certain	1	116,993	—	—	1	144,129	—	—	1	131,880
Ten Year Certain	6	496,751	11	1,107,545	4	264,964	8	948,945	5	343,032
Pop-Up — Full	19	1,396,329	15	1,056,648	8	455,687	30	2,208,261	20	1,638,423
Pop-Up — Half	8	632,727	11	936,944	12	1,055,359	5	536,001	7	605,301
Other (Option 4)	9	695,924	14	1,251,756	17	1,605,613	13	1,262,666	18	1,809,113
<b>Total</b>	<b>130</b>	<b>10,073,259</b>	<b>119</b>	<b>9,564,134</b>	<b>130</b>	<b>10,519,814</b>	<b>144</b>	<b>11,839,356</b>	<b>139</b>	<b>11,554,406</b>
<b>PFRS Males</b>										
Single Life Allowance**	391	31,485,743	449	36,727,925	405	32,375,925	400	32,134,288	372	28,947,199
Cash Refund	1	71,591	—	—	—	—	—	—	—	—
Joint Allowance — Full	173	13,985,544	247	20,403,913	219	18,293,700	196	16,486,166	190	17,791,030
Joint Allowance — Half	40	3,776,545	63	6,339,285	54	5,250,626	36	3,839,279	45	5,479,525
Five Year Certain	3	137,439	3	303,062	4	498,069	4	384,358	5	508,974
Ten Year Certain	19	1,560,943	45	3,986,930	39	3,453,267	39	3,928,108	25	2,009,365
Pop-Up — Full	428	30,749,752	456	34,128,873	405	31,609,097	434	35,502,018	395	30,865,474
Pop-Up — Half	142	12,705,827	141	13,414,969	123	10,467,772	141	14,139,696	113	11,109,510
Other (Option 4)	223	21,908,590	298	28,192,059	242	23,734,870	253	26,127,012	241	25,037,362
<b>Total</b>	<b>1,420</b>	<b>116,381,978</b>	<b>1,702</b>	<b>143,497,020</b>	<b>1,491</b>	<b>125,683,330</b>	<b>1,503</b>	<b>132,540,930</b>	<b>1,386</b>	<b>121,748,442</b>
* In the fiscal year ending March 31, 2024, 14 ERS retirees selected partial lump sums which totaled \$2,962,821 and 107 PFRS retirees selected partial lump sums which totaled \$26,464,161. There were 16 new retirees not reported in this table whose legal sex was unknown and whose annual benefits totaled \$525,468.										
** Includes Single Life Allowance and Option ½.										

# OPTION SELECTIONS – TOTAL PAYMENTS

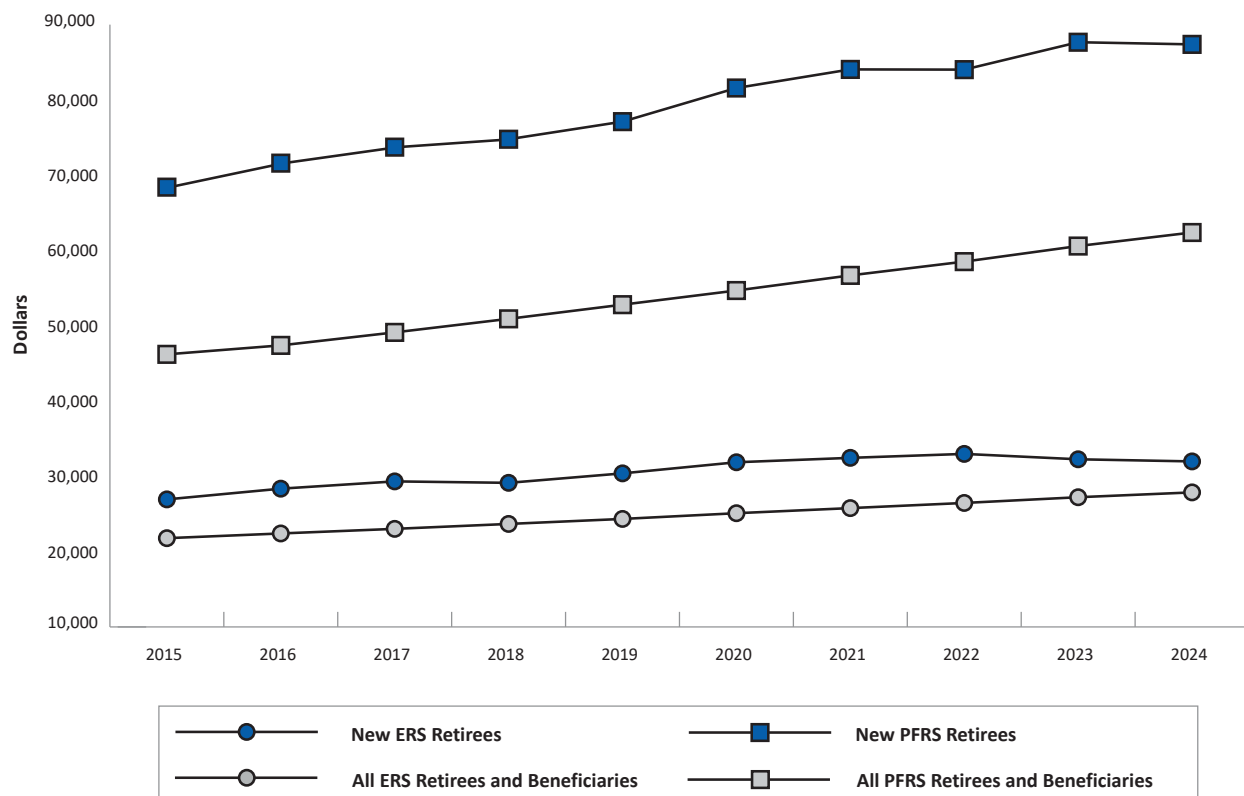
This table shows the number of surviving retirees (*Number*), and the total amount paid to surviving retirees in annual benefits after option selection and any partial lump sum distribution\* (*\$ Amount*), on March 31 of the given year. Groupings are based on option selected, with breakdowns by retirement system and member legal sex.

Options	2020		2021		2022		2023		2024	
	Number	\$ Amount	Number	\$ Amount	Number	\$ Amount	Number	\$ Amount	Number	\$ Amount
<b>ERS Females</b>										
Single Life Allowance**	153,725	2,979,273,483	155,918	3,112,384,906	158,676	3,257,286,808	159,903	3,359,118,734	161,292	3,457,835,944
Cash Refund	4,775	72,194,493	4,377	67,916,247	4,070	64,713,908	3,722	60,386,972	3,439	57,284,366
Joint Allowance — Full	11,615	159,884,469	12,092	173,056,112	12,456	184,859,914	12,717	193,349,522	12,935	200,239,155
Joint Allowance — Half	2,870	63,111,606	2,938	66,541,788	2,990	69,506,007	3,004	71,617,985	3,029	72,923,889
Five Year Certain	3,662	69,572,558	3,567	70,224,731	3,508	71,285,328	3,394	71,140,779	3,302	70,749,242
Ten Year Certain	7,011	116,331,193	7,012	120,916,879	6,998	124,791,744	6,904	126,483,717	6,873	129,657,275
Pop-Up — Full	24,020	494,118,843	25,427	537,220,378	26,748	578,447,263	27,728	609,861,604	28,741	640,920,851
Pop-Up — Half	15,958	424,654,736	16,377	447,014,336	16,711	468,078,804	16,899	484,428,738	17,124	500,017,393
Other (Option 4)	8,745	279,543,719	9,961	326,165,307	11,190	373,319,356	12,265	414,630,186	13,228	450,730,557
<b>Total</b>	<b>232,381</b>	<b>4,658,685,104</b>	<b>237,669</b>	<b>4,921,440,687</b>	<b>243,347</b>	<b>5,192,289,135</b>	<b>246,536</b>	<b>5,391,018,240</b>	<b>249,963</b>	<b>5,580,358,677</b>
<b>ERS Males</b>										
Single Life Allowance**	67,614	1,928,355,918	68,033	1,984,790,144	68,803	2,053,366,991	69,222	2,106,707,157	69,694	2,155,064,544
Cash Refund	2,886	69,453,638	2,610	64,292,207	2,393	59,950,181	2,172	55,327,605	1,982	51,269,864
Joint Allowance — Full	32,469	897,130,873	32,642	929,668,182	33,067	968,087,550	33,005	987,848,927	33,118	1,011,944,028
Joint Allowance — Half	7,730	276,376,551	7,510	274,849,146	7,324	273,742,359	7,139	272,710,928	6,988	273,166,316
Five Year Certain	1,689	46,783,149	1,614	46,456,806	1,590	47,273,038	1,539	46,719,841	1,507	46,398,399
Ten Year Certain	4,572	118,557,208	4,490	120,039,266	4,444	121,486,232	4,362	122,496,283	4,284	122,625,552
Pop-Up — Full	34,682	1,068,486,475	36,002	1,137,566,580	37,259	1,202,027,136	38,128	1,251,281,953	39,130	1,305,154,659
Pop-Up — Half	15,290	579,559,321	15,395	596,573,836	15,523	614,772,156	15,514	625,332,208	15,566	637,505,175
Other (Option 4)	12,908	552,402,528	13,851	602,998,488	14,897	659,060,331	15,733	705,391,816	16,370	742,361,775
<b>Total</b>	<b>179,840</b>	<b>5,537,105,666</b>	<b>182,147</b>	<b>5,757,234,659</b>	<b>185,300</b>	<b>5,999,765,979</b>	<b>186,814</b>	<b>6,173,816,722</b>	<b>188,639</b>	<b>6,345,490,317</b>
<b>PFRS Females</b>										
Single Life Allowance**	1,214	73,186,217	1,263	77,230,840	1,338	83,844,236	1,404	90,080,025	1,478	96,493,263
Cash Refund	4	253,162	4	253,162	4	253,162	4	253,162	3	216,687
Joint Allowance — Full	59	3,019,737	62	3,199,695	69	3,547,216	76	3,855,822	82	4,291,332
Joint Allowance — Half	32	1,981,483	37	2,494,102	38	2,572,983	39	2,627,722	38	2,504,417
Five Year Certain	19	1,231,800	19	1,231,800	20	1,383,765	20	1,383,765	21	1,514,545
Ten Year Certain	109	6,540,722	119	7,592,549	123	7,856,004	130	8,702,525	134	9,041,159
Pop-Up — Full	212	11,625,143	227	12,710,126	234	13,196,019	263	15,412,261	282	17,089,279
Pop-Up — Half	119	6,627,755	129	7,505,354	141	8,578,276	146	9,131,899	153	9,751,416
Other (Option 4)	65	5,108,735	77	6,266,123	94	7,891,802	109	9,347,363	128	11,242,212
<b>Total</b>	<b>1,833</b>	<b>109,574,757</b>	<b>1,937</b>	<b>118,483,754</b>	<b>2,061</b>	<b>129,123,466</b>	<b>2,191</b>	<b>140,794,548</b>	<b>2,319</b>	<b>152,144,315</b>
<b>PFRS Males</b>										
Single Life Allowance**	14,859	679,609,710	14,675	699,432,337	14,558	718,613,939	14,455	737,163,882	14,363	752,872,457
Cash Refund	1,127	39,497,836	1,049	37,116,794	977	34,875,600	911	33,130,461	854	31,606,433
Joint Allowance — Full	3,729	207,687,851	3,882	224,780,152	4,031	240,142,581	4,153	254,304,313	4,261	269,616,999
Joint Allowance — Half	1,466	91,967,811	1,473	95,942,110	1,483	99,675,040	1,466	100,816,420	1,468	104,418,017
Five Year Certain	317	13,555,294	307	13,470,260	294	13,536,232	278	13,469,320	268	13,555,266
Ten Year Certain	1,330	59,371,442	1,319	61,808,085	1,320	64,268,170	1,297	66,069,920	1,279	66,658,824
Pop-Up — Full	4,915	273,727,808	5,270	303,350,605	5,638	334,972,393	5,985	366,365,896	6,321	396,632,941
Pop-Up — Half	3,137	207,905,337	3,201	218,102,071	3,261	226,372,728	3,319	236,393,447	3,396	246,639,044
Other (Option 4)	2,513	208,535,266	2,768	233,826,623	3,003	258,752,409	3,270	286,762,210	3,446	307,850,781
<b>Total</b>	<b>33,393</b>	<b>1,781,858,359</b>	<b>33,944</b>	<b>1,887,829,041</b>	<b>34,565</b>	<b>1,991,209,097</b>	<b>35,134</b>	<b>2,094,475,872</b>	<b>35,656</b>	<b>2,189,850,766</b>
* In the 10 years since this program began, 85 ERS retirees have selected partial lump sums which totaled \$13,611,573. In the 16 years since the program began, 2,203 PFRS retirees have selected partial lump sums which totaled \$342,578,589. As of the fiscal year ending March 31, 2024, there were 193 retirees not reported in this table whose legal sex was unknown and whose annual benefits totaled \$6,440,240.										
**Includes Single Life Allowance figures and Option ½.										

## AVERAGE PENSION BENEFITS PAID DURING YEAR SHOWN

This table shows the average annual benefit payments to all retirees and beneficiaries receiving benefits during the given fiscal year compared with average annual benefit payments to new retirees during the year. The benefit consists of actual payments after option selection and any partial lump sum distribution, plus any cost-of-living adjustment. A breakdown is provided by retirement system. The marked line graph (below) shows the trend in these benefit payments over the past ten years.

Year	ERS		PFRS	
	All Retirees & Beneficiaries	New Retirees	All Retirees & Beneficiaries	New Retirees
2015	\$ 21,788	\$ 26,941	\$ 46,207	\$ 68,414
2016	22,415	28,364	47,397	71,603
2017	23,026	29,331	49,123	73,729
2018	23,680	29,139	50,922	74,779
2019	24,345	30,397	52,804	77,116
2020	25,105	31,872	54,684	81,584
2021	25,783	32,458	56,695	84,053
2022	26,467	32,982	58,522	84,024
2023	27,227	32,267	60,592	87,663
2024	27,870	31,985	62,391	87,379



# AVERAGE BENEFIT PAY TYPES

## New Benefits — ERS

This table shows the number of retirements granted (*Number*), the average monthly retirement allowance prior to option selection or any partial lump sum distribution (*Monthly Allowance*), and the average final average salary (*Average FAS*) of members retiring during the fiscal year ending March 31, 2024. Groupings are based on years of service, with a breakdown by retirement type.

Years of Service	Number	Monthly Allowance	Average FAS
<b>Service Retirements</b>			
Under 5	4	\$ 113	\$ 20,617
5 – 9	1,919	421	43,280
10 – 14	2,633	843	52,846
15 – 19	2,214	1,343	60,077
20 – 24	3,871	2,500	70,771
25 – 29	2,654	3,608	83,302
30 – 34	3,589	4,776	91,784
35 – 39	1,386	5,571	95,664
40 & Over	439	6,324	95,943
<b>Total</b>	<b>18,709</b>	<b>\$ 2,827</b>	<b>\$ 72,396</b>
<b>Ordinary Disability Retirements</b>			
Under 5	–	\$ –	\$ –
5 – 9	–	–	–
10 – 14	117	1,647	62,538
15 – 19	102	1,813	66,402
20 – 24	77	2,204	72,483
25 – 29	24	2,850	77,098
30 – 34	4	3,138	71,037
35 – 39	–	–	–
40 & Over	–	–	–
<b>Total</b>	<b>324</b>	<b>\$ 1,939</b>	<b>\$ 67,301</b>
<b>Performance of Duty Disability Retirements</b>			
Under 5	3	\$ 3,469	\$ 55,511
5 – 9	18	4,272	68,642
10 – 14	21	5,202	90,678
15 – 19	30	6,405	103,895
20 – 24	12	5,526	90,509
25 – 29	8	6,374	110,467
30 – 34	4	6,318	116,507
35 – 39	–	–	–
40 & Over	–	–	–
<b>Total</b>	<b>96</b>	<b>\$ 5,534</b>	<b>\$ 92,282</b>
<b>Accidental Disability Retirements</b>			
Under 5	5	\$ 1,283	\$ 46,250
5 – 9	16	1,458	52,979
10 – 14	2	1,364	49,110
15 – 19	1	6,779	108,468
20 – 24	3	6,264	101,470
25 – 29	3	6,600	105,611
30 – 34	3	3,792	62,985
35 – 39	–	–	–
40 & Over	1	5,958	108,220
<b>Total</b>	<b>34</b>	<b>\$ 2,799</b>	<b>\$ 64,824</b>

# AVERAGE BENEFIT PAY TYPES

CONTINUED

## New Benefits — PFRS

This table shows the number of retirements granted (*Number*), the average monthly retirement allowance prior to option selection or any partial lump sum distribution (*Monthly Allowance*), and the average final average salary (*Average FAS*) of members retiring during the fiscal year ending March 31, 2024. Groupings are based on years of service, with a breakdown by retirement type.

Years of Service	Number	Monthly Allowance	Average FAS
<b>Service Retirements</b>			
Under 5	–	\$ –	\$ –
5 – 9	41	584	56,200
10 – 14	21	1,169	65,854
15 – 19	6	1,869	72,980
20 – 24	643	6,412	149,522
25 – 29	253	9,057	182,134
30 – 34	253	10,970	196,833
35 – 39	81	11,499	202,358
40 & Over	15	12,408	210,758
<b>Total</b>	<b>1,313</b>	<b>\$ 7,896</b>	<b>\$ 164,279</b>
<b>Ordinary Disability Retirements</b>			
Under 5	–	\$ –	\$ –
5 – 9	–	–	–
10 – 14	4	3,891	125,286
15 – 19	1	2,405	86,614
20 – 24	–	–	–
25 – 29	–	–	–
30 – 34	–	–	–
35 – 39	–	–	–
40 & Over	–	–	–
<b>Total</b>	<b>5</b>	<b>\$ 3,594</b>	<b>\$ 117,551</b>
<b>Performance of Duty Disability Retirements</b>			
Under 5	3	\$ 2,670	\$ 64,102
5 – 9	11	3,706	88,967
10 – 14	29	4,569	109,934
15 – 19	38	5,446	128,931
20 – 24	17	5,963	143,129
25 – 29	6	4,681	112,366
30 – 34	1	6,100	146,402
35 – 39	–	–	–
40 & Over	–	–	–
<b>Total</b>	<b>105</b>	<b>\$ 4,989</b>	<b>\$ 119,164</b>
<b>Accidental Disability Retirements</b>			
Under 5	1	\$ 4,003	\$ 64,061
5 – 9	17	5,746	92,750
10 – 14	13	7,990	127,850
15 – 19	32	9,265	148,240
20 – 24	23	9,661	154,589
25 – 29	11	10,106	161,980
30 – 34	6	12,253	196,048
35 – 39	1	15,552	248,835
40 & Over	–	–	–
<b>Total</b>	<b>104</b>	<b>\$ 8,889</b>	<b>\$ 142,394</b>

## NEW BENEFITS — SERVICE RETIREMENTS BY AGE AND SERVICE

This table shows the number of retirements granted (*Number*), the average annual retirement allowance prior to option selection or any partial lump sum distribution (*Allowance*), and the average allowance as a percentage of the average final average salary (%) of new service retirees during the fiscal year ending March 31, 2024. Groupings are based on years of service and age at retirement, within each retirement system.

Years of Service	Age at Retirement											
	50 – 59			60 – 64			65 – 69			70 & Over		
	Number	Allowance	%	Number	Allowance	%	Number	Allowance	%	Number	Allowance	%
ERS												
Under 5	–	\$ –	–	1	\$ 347	3	–	\$ –	–	3	\$ 1,701	7
5 – 9	232	4,243	9	631	5,095	12	708	5,447	12	348	4,718	12
10 – 14	447	8,392	15	918	9,950	20	899	11,001	20	369	10,541	20
15 – 19	368	12,958	22	796	16,095	27	720	16,764	28	330	18,312	28
20 – 24	621	27,824	36	1,589	30,375	43	1,212	30,495	44	449	30,363	44
25 – 29	705	47,343	47	1,104	41,981	53	621	41,700	54	224	41,508	55
30 – 34	1,797	58,348	62	1,148	57,190	62	471	54,299	63	173	55,763	63
35 – 39	473	64,196	69	543	66,719	70	243	71,101	71	127	69,277	71
40 & Over	6	59,681	70	161	69,452	76	161	73,556	79	111	89,487	84
<b>Total</b>	<b>4,649</b>	<b>\$ 42,103</b>	<b>47</b>	<b>6,891</b>	<b>\$ 33,789</b>	<b>43</b>	<b>5,035</b>	<b>\$ 28,474</b>	<b>38</b>	<b>2,134</b>	<b>\$ 29,470</b>	<b>38</b>

Years of Service	Age at Retirement											
	40 – 49			50 – 54			55 – 59			60 & Over		
	Number	Allowance	%	Number	Allowance	%	Number	Allowance	%	Number	Allowance	%
PFRS												
Under 5	–	\$ –	–	–	\$ –	–	–	\$ –	–	–	\$ –	–
5 – 9	–	–	–	–	–	–	25	6,583	11	16	7,686	13
10 – 14	–	–	–	–	–	–	14	13,380	19	7	15,355	26
15 – 19	–	–	–	–	–	–	5	22,897	29	1	20,149	47
20 – 24	330	78,216	51	202	77,214	52	83	75,024	52	28	66,198	52
25 – 29	27	101,056	56	116	102,872	58	82	118,898	60	28	110,301	60
30 – 34	–	–	–	36	140,128	66	165	131,530	67	52	126,174	66
35 – 39	–	–	–	–	–	–	28	151,148	68	53	131,047	68
40 & Over	–	–	–	–	–	–	–	–	–	15	148,896	70
<b>Total</b>	<b>357</b>	<b>\$ 79,944</b>	<b>51</b>	<b>354</b>	<b>\$ 92,020</b>	<b>55</b>	<b>402</b>	<b>\$ 105,417</b>	<b>57</b>	<b>200</b>	<b>\$ 104,663</b>	<b>58</b>

# NEW BENEFITS — ACCIDENTAL AND ORDINARY DEATH

## Accidental Death Benefits

During the fiscal year ending March 31, 2024, the Employees' Retirement System approved 20 accidental death benefits, which averaged \$28,553 annually. The Police and Fire Retirement System approved 12 accidental death benefits, which averaged \$80,523 annually.

## Ordinary Death Benefits

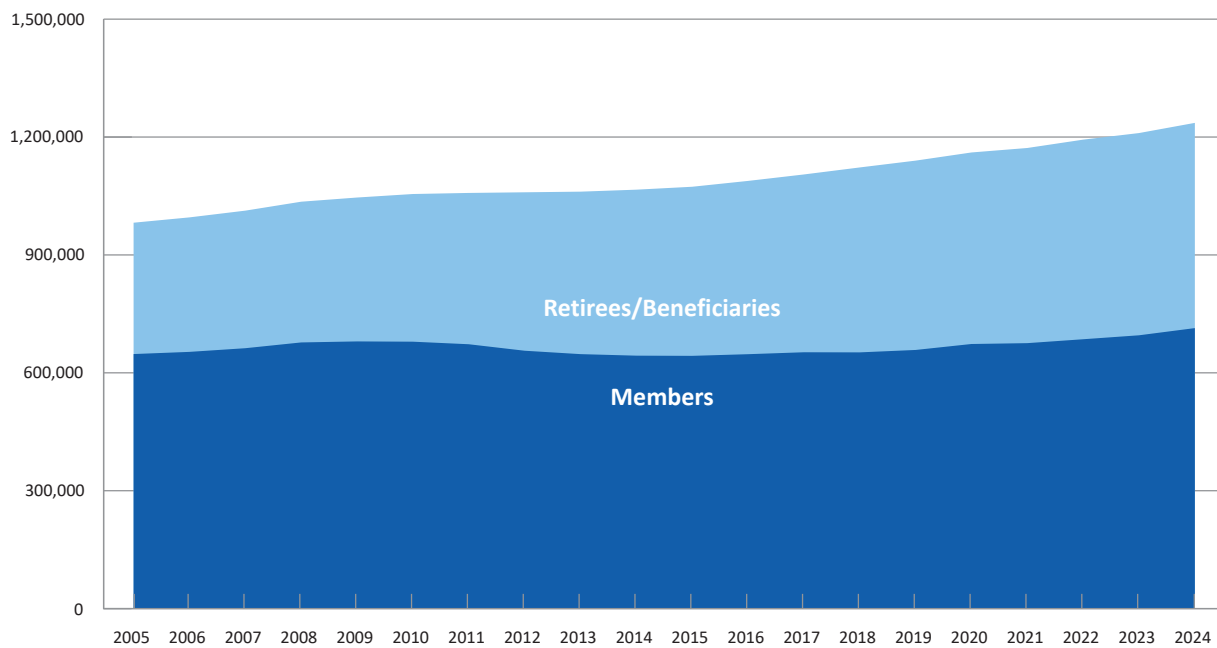
This table shows the number of ordinary death benefits granted (*Number*), the average benefit paid (*Average Benefit*), and the average benefit paid as a percentage of average final average salary (*Percentage of Salary*) of new ordinary death beneficiaries during the fiscal year ending March 31, 2024. Groupings are based on years of service, with a breakdown by retirement system.

Years of Service	ERS			PFRS		
	Number	Average Benefit	Percentage of Salary	Number	Average Benefit	Percentage of Salary
Under 5	105	\$ 89,993	162.7	–	\$ –	–
5 – 9	109	160,786	264.4	2	303,000	275.8
10 – 14	74	179,606	275.8	4	167,198	308.7
15 – 19	70	197,000	261.7	5	365,600	292.3
20 – 24	79	216,112	272.1	4	992,117	648.3
25 – 29	42	232,828	277.2	3	1,175,982	637.8
30 – 34	22	173,624	260.3	2	1,860,708	842.3
35 – 39	13	333,560	295.1	–	–	–
40 & Over	14	309,272	336.2	–	–	–
<b>Total</b>	<b>528</b>	<b>\$ 176,881</b>	<b>250.2</b>	<b>20</b>	<b>\$ 716,031</b>	<b>473.1</b>

## COMBINED SYSTEM PARTICIPANTS

This table shows participant counts for ERS and PFRS combined. The *Members* column represents those participants not currently collecting a benefit, while the *Retirees/Beneficiaries* column represents those currently collecting a benefit. The *Total Participants* column represents the sum of the member and retiree/beneficiary counts. The *Percentage Changed* column shows the percentage change increase or decrease in counts calculated on a year-over-year basis. The stacked line graph (below) shows the trends in these counts over the prior 20 years.

Fiscal Year	Members	Percentage Changed	Retirees/ Beneficiaries	Percentage Changed	Total Participants	Percentage Changed
2005	647,758	1	334,251	2	982,009	1
2006	653,291	1	342,245	2	995,536	1
2007	662,633	1	350,066	2	1,012,699	2
2008	677,321	2	358,109	2	1,035,430	2
2009	679,908	0	366,178	2	1,046,086	1
2010	679,217	0	375,803	3	1,055,020	1
2011	672,723	(1)	385,031	2	1,057,754	0
2012	656,224	(2)	403,174	5	1,059,398	0
2013	647,574	(1)	413,436	3	1,061,010	0
2014	643,659	(1)	422,405	2	1,066,064	0
2015	643,178	0	430,308	2	1,073,486	1
2016	647,399	1	440,943	2	1,088,342	1
2017	652,324	1	452,455	3	1,104,779	2
2018	652,030	0	470,596	4	1,122,626	2
2019	658,176	1	481,795	2	1,139,971	2
2020	673,336	2	487,407	1	1,160,743	2
2021	675,519	0	496,628	2	1,172,147	1
2022	685,450	1	507,923	2	1,193,373	2
2023	695,504	1	514,629	1	1,210,133	1
2024	713,802	3	522,255	1	1,236,057	2

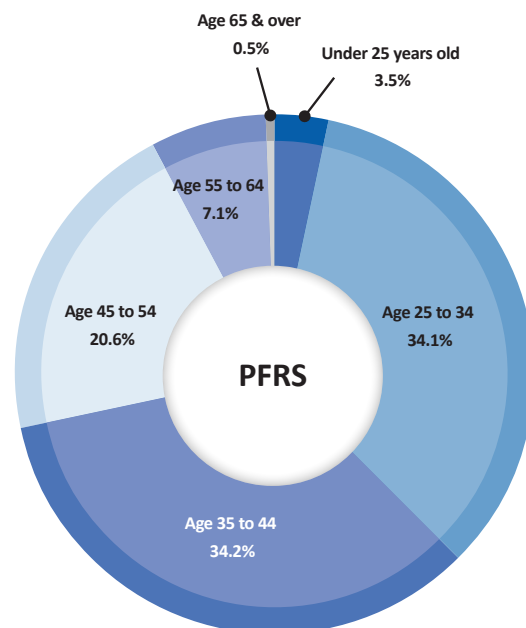
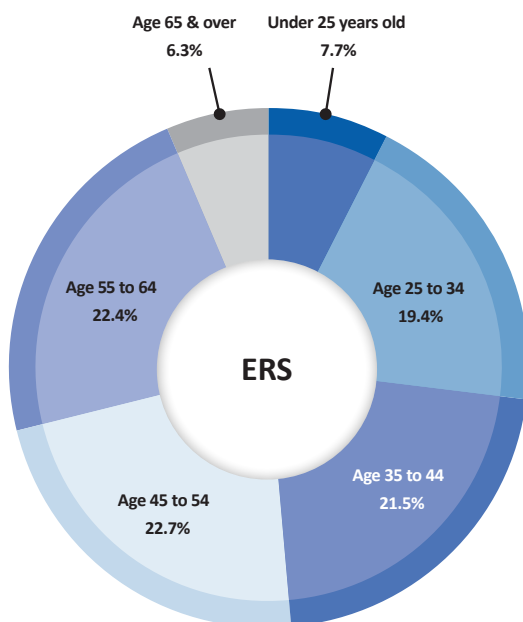




# MEMBERSHIP BY AGE AND YEARS OF SERVICE

This table shows membership counts (*Number*), and percentage of the system's total membership count (*Percentage*), as of the fiscal year ending March 31, 2024. Groupings are based on age and years of service, with a breakdown by retirement system.

Age	Years of Service											
	Total		0 – 4		5 – 9		10 – 19		20 – 29		30 & Over	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
<b>ERS</b>												
Under 25	52,195	7.7	51,257	7.6	938	0.1	–	–	–	–	–	–
25 – 34	131,509	19.4	99,536	14.7	28,461	4.2	3,512	0.5	–	–	–	–
35 – 44	145,844	21.5	63,631	9.4	39,527	5.8	39,422	5.8	3,264	0.5	–	–
45 – 54	153,609	22.7	42,952	6.3	33,881	5.0	45,129	6.7	28,813	4.3	2,834	0.4
55 – 64	151,886	22.4	29,727	4.4	30,305	4.5	46,610	6.9	33,012	4.9	12,232	1.8
65 & Over	42,561	6.3	8,021	1.2	8,850	1.3	13,020	1.9	8,146	1.2	4,524	0.7
<b>Total</b>	<b>677,604</b>	<b>100.0</b>	<b>295,124</b>	<b>43.6</b>	<b>141,962</b>	<b>21.0</b>	<b>147,693</b>	<b>21.8</b>	<b>73,235</b>	<b>10.8</b>	<b>19,590</b>	<b>2.9</b>
<b>PFRS</b>												
Under 25	1,256	3.5	1,252	3.5	4	–	–	–	–	–	–	–
25 – 34	12,353	34.1	7,155	19.8	4,541	12.5	657	1.8	–	–	–	–
35 – 44	12,380	34.2	1,843	5.1	3,243	9.0	6,821	18.8	473	1.3	–	–
45 – 54	7,464	20.6	293	0.8	551	1.5	2,892	8.0	3,536	9.8	192	0.5
55 – 64	2,574	7.1	108	0.3	243	0.7	348	1.0	933	2.6	942	2.6
65 & Over	171	0.5	30	0.1	54	0.1	29	0.1	9	–	49	0.1
<b>Total</b>	<b>36,198</b>	<b>100.0</b>	<b>10,681</b>	<b>29.5</b>	<b>8,636</b>	<b>23.9</b>	<b>10,747</b>	<b>29.7</b>	<b>4,951</b>	<b>13.7</b>	<b>1,183</b>	<b>3.3</b>



**Note:** Percentages may not sum to 100% due to rounding.

# MEMBERSHIP BY TIER

This table shows membership counts (*Number*), and percentage of the system's total membership count (*Percentage*), as of the fiscal year ending March 31, 2024. Groupings are based on tier, with a breakdown by retirement system.

	ERS		PFRS		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Tier 1	765	0.1	10	—	775	0.1
Tier 2	701	0.1	14,020	38.7	14,721	2.1
Tiers 3 & 4*	224,481	33.1	104	0.3	224,585	31.5
Tier 5	27,708	4.1	1,799	5.0	29,507	4.1
Tier 6	423,949	62.6	20,265	56.0	444,214	62.2
<b>Total</b>	<b>677,604</b>	<b>100.0</b>	<b>36,198</b>	<b>100.0</b>	<b>713,802</b>	<b>100.0</b>

\* There is no Tier 4 in the Police and Fire Retirement System.



**Note:** Percentages may not sum to 100% due to rounding.

## MEMBERSHIP BY STATUS

This table shows membership counts by status — active or inactive — as of the fiscal year ending March 31, 2024, with a breakdown by retirement system. Active status means the member was reported on payroll at the fiscal year end. Inactive status means the member was not reported on payroll (including pending retirement and pending deaths) at the fiscal year end. The sum of these two statuses represents the total membership count for the system.

	ERS			PFRS		
	Active	Inactive	Total	Active	Inactive	Total
2015	491,558	117,079	<b>608,637</b>	31,372	3,169	<b>34,541</b>
2016	494,411	117,883	<b>612,294</b>	31,720	3,385	<b>35,105</b>
2017	496,441	120,702	<b>617,143</b>	32,332	2,849	<b>35,181</b>
2018	500,945	115,961	<b>616,906</b>	32,470	2,654	<b>35,124</b>
2019	501,037	122,053	<b>623,090</b>	32,573	2,513	<b>35,086</b>
2020	497,659	140,087	<b>637,746</b>	32,888	2,702	<b>35,590</b>
2021	469,968	170,613	<b>640,581</b>	31,922	3,016	<b>34,938</b>
2022	473,915	176,336	<b>650,251</b>	32,169	3,030	<b>35,199</b>
2023	481,547	178,203	<b>659,750</b>	32,603	3,151	<b>35,754</b>
2024	494,556	183,048	<b>677,604</b>	32,848	3,350	<b>36,198</b>

# NUMBER OF EMPLOYERS

As of March 31, 2024.

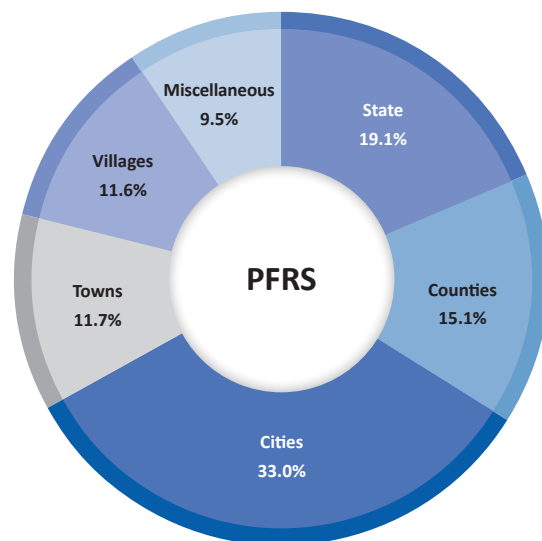
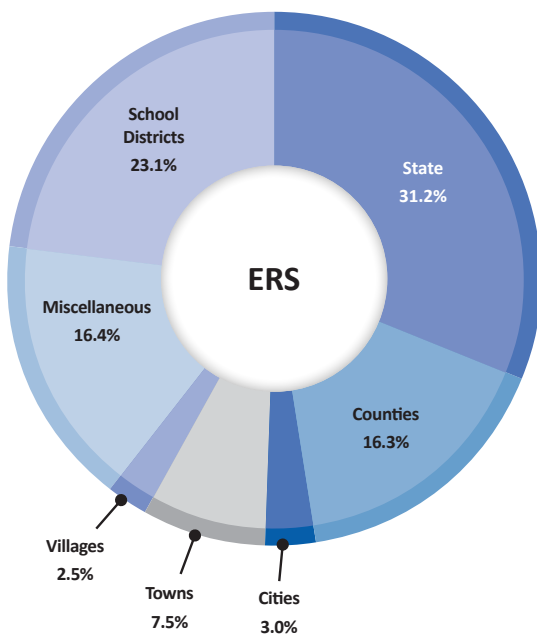
Category	ERS	PFRS
State	1	1
Counties	57	4
Cities	61	61
Towns	920	169
Villages	484	298
Miscellaneous	771	38
School Districts	692	0
<b>Total*</b>	<b>2,986</b>	<b>571</b>

\* Please note that some ERS employers are also PFRS employers.  
Therefore the total of ERS employers and PFRS employers above  
will not equal the total number of NYSLRS participating employers.

## TOTAL MEMBERSHIP BY EMPLOYER TYPE

This table shows total and active membership counts, grouped by primary employer type as of the fiscal year ending March 31, 2024, with a breakdown by retirement system. Active status means the member was reported on payroll at the fiscal year end.

	ERS		PFRS		Total	
	Total	Active	Total	Active	Total	Active
State	211,361	156,448	6,913	6,181	218,274	162,629
Counties	110,384	81,394	5,466	5,349	115,850	86,743
Cities	20,528	15,054	11,955	11,016	32,483	26,070
Towns	51,130	36,624	4,224	3,715	55,354	40,339
Villages	16,650	11,608	4,203	3,308	20,853	14,916
Miscellaneous	111,196	78,026	3,437	3,279	114,633	81,305
School Districts	156,355	115,402	–	–	156,355	115,402
<b>Total</b>	<b>677,604</b>	<b>494,556</b>	<b>36,198</b>	<b>32,848</b>	<b>713,802</b>	<b>527,404</b>



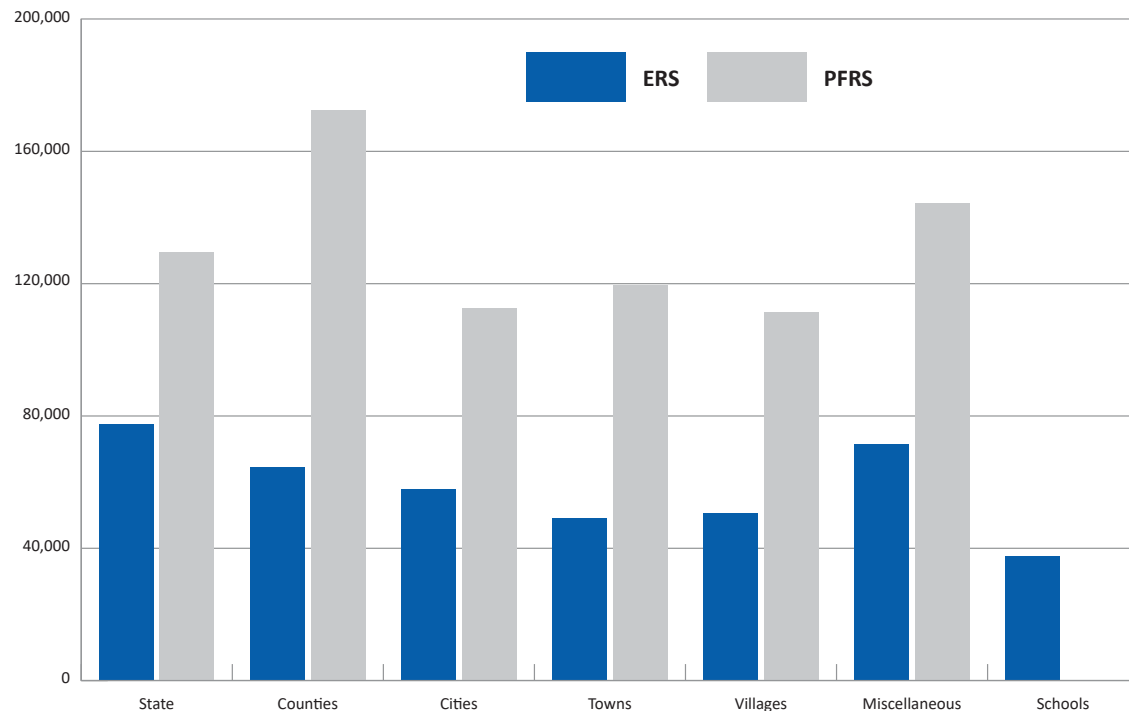
**Note:** Numbers may not add up due to rounding. A detailed listing of employers as of March 31, 2024 is available on our website at [www.osc.ny.gov/files/retirement/employers/pdf/participating-employers.pdf](http://www.osc.ny.gov/files/retirement/employers/pdf/participating-employers.pdf).

## AVERAGE SALARY BY EMPLOYER TYPE

This table shows the average salary (*Average Salary*), membership counts (*Total Members\**), and total salary (*Total Salaries*) for active members as of the fiscal year ending March 31, 2024. Groupings are based on primary employer type, with a breakdown by retirement system. Active status means the member was reported on payroll at the fiscal year end.

	Average Salary	Total Members*	Total Salaries
<b>ERS</b>			
State	\$ 77,443	156,448	\$ 12,115,739,370
Counties	64,540	81,394	5,253,182,910
Cities	57,990	15,054	872,987,630
Towns	49,278	36,624	1,804,753,629
Villages	50,562	11,608	586,923,216
Miscellaneous	71,499	78,026	5,578,794,002
School Districts	37,506	115,402	4,328,303,919
<b>Total</b>	<b>\$ 61,754</b>	<b>494,556</b>	<b>\$ 30,540,684,677</b>
<b>PFRS</b>			
State	\$ 129,473	6,181	\$ 800,274,996
Counties	172,393	5,349	922,130,796
Cities	112,498	11,016	1,239,276,466
Towns	119,591	3,715	444,281,623
Villages	111,547	3,308	368,998,217
Miscellaneous	144,259	3,279	473,024,087
<b>Total</b>	<b>\$ 129,323</b>	<b>32,848</b>	<b>\$ 4,247,986,186</b>
* Active members receiving salary.			

The bar graph below represents the average salary by retirement system for each primary employer type.



## MEMBERS AND SALARIES BY PLAN — ERS

These tables show membership counts (*Members*) and total salary (*Total Salaries*) for active members in the Employees' Retirement System, as of the fiscal year ending March 31, 2024. Groupings are based on plan, with a breakdown by tier. Active status means the member was reported on payroll at the end of the fiscal year.

Plan	Tier 1		Tier 2	
	Members	Total Salaries	Members	Total Salaries
Age 55/60 Contributory	2	\$ 4,953	1	\$ 56,038
Age 55 75-c	3	46,232	5	254,722
Age 55 75-e	1	46,343	1	54,647
Age 55 75-g	10	586,768	5	128,258
Age 55 75-h	142	14,572,410	147	15,514,783
Age 55 75-i	208	14,597,694	249	15,096,634
Regular Correction Officers/Security Hospital Treatment Asst. ¼ Disability	—	—	—	—
Correction Officers 89	—	—	1	63,260
Sheriffs 89-a	—	—	—	—
Sheriffs 89-b	—	—	—	—
Sheriffs 89-b(m)	—	—	—	—
Investigators 89-d	—	—	—	—
Investigators 89-d(m)	—	—	—	—
Sheriffs — 551	—	—	—	—
Sheriffs — 551e	—	—	—	—
Sheriffs — 552	—	—	—	—
Sheriffs — 553	—	—	—	—
Legislators 80-a	—	—	—	—
Unified Court Peace Officers	—	—	5	739,408
25-Year Correction Officers/Sheriffs/Office of Mental Health	2	209,377	—	—
25-Year 1/60 Peace Officers, Amb Med Techs, Paramedics	1	127,948	—	—
<b>Total</b>	<b>369</b>	<b>\$ 30,191,726</b>	<b>414</b>	<b>\$ 31,907,750</b>

# MEMBERS AND SALARIES BY PLAN — ERS

CONTINUED

Plan	Tier 3 & 4		Tier 5		Tier 6	
	Members	Total Salaries	Members	Total Salaries	Members	Total Salaries*
Article 14 & 15	159,895	\$ 12,915,895,101	20,312	\$ 1,421,508,250	277,974	\$ 12,736,557,502
Regular Correction Officers/ Security Hospital Treatment Asst. % Disability	281	34,092,134	23	1,980,881	192	16,042,347
Article 14 Correction Officers	6,885	785,052,130	765	70,418,059	8,276	664,598,143
Sheriffs — 551	81	9,903,679	8	735,816	93	7,111,763
Sheriffs — 551e	13	1,297,927	7	582,497	25	1,777,080
Sheriffs — 552	225	23,501,148	42	3,887,960	352	24,344,993
Sheriffs — 553	891	118,819,155	178	19,584,735	1,041	87,096,590
Unified Court Peace Officers	3,505	396,046,134	306	29,387,857	2,757	202,050,307
25-Year Correction Officers/Sheriffs/Office of Mental Health	3,993	474,484,198	582	63,827,989	4,848	337,000,155
25-Year 1/60 Peace Officers, Paramedics	9	778,797	—	2,765	10	373,111
20-Year 1/60 Investigators	6	1,323,317	2	275,800	6	879,701
Westchester County Criminal Investigators	17	3,529,395	2	335,850	10	1,341,563
25-Year 1/60 % Accidental Disability Amb Med Techs	90	14,210,790	5	534,013	23	1,611,931
25-Year % Accidental Disability Fire Marshals	28	4,352,115	5	583,547	10	867,978
<b>Total</b>	<b>175,919</b>	<b>\$ 14,783,286,020</b>	<b>22,237</b>	<b>\$ 1,613,646,019</b>	<b>295,617</b>	<b>\$ 14,081,653,162</b>
* Reportable Tier 6 salary is capped at the Governor's salary, which was \$250,000 for fiscal year 2024.						

There may be plans with no member count and salary greater than zero. Members who work for multiple employers may have salary under multiple plans but will only be counted once, under their primary plan.



## MEMBERS AND SALARIES BY PLAN — PFRS

These tables show membership counts (*Members*) and total salary (*Total Salaries*) for active members in the Police and Fire Retirement System, as of the fiscal year ending March 31, 2024. Groupings are based on plan, with a breakdown by tier and contributory status. Active status means the member was reported on payroll at the end of the fiscal year.

Plan	Tier 1		Tier 2		Tier 3	
	Members	Total Salaries	Members	Total Salaries	Members	Total Salaries
Age 55/60 Basic	–	\$ –	9	\$ 131,046	–	\$ –
Age 55 375-c	–	–	36	1,577,430	–	–
Age 55 375-e	–	–	15	387,360	–	–
Age 55 375-g	–	–	9	587,328	–	–
Age 55 375-h	–	–	4	492,605	–	–
Age 55 375-i	–	–	66	5,780,944	–	–
Age 55 375-j	–	–	3	616,182	–	–
State Police 381-b	–	–	2,011	340,132,554	–	–
Regional Park Police 383-a	–	–	114	14,908,308	–	–
EnCon Police 383-b	–	–	149	18,858,907	1	96,336
Forest Ranger 383-c	–	–	72	8,623,347	2	205,166
SUNY Police 383-d	–	–	205	23,494,978	7	551,430
25-Year 384	–	–	23	2,225,969	–	–
25-Year 384(f)	–	–	47	7,622,667	14	1,837,485
20-Year 384-d	–	–	3,650	531,699,814	–	–
20-Year 1/60 384-e	1	127,671	6,349	1,249,724,926	–	–
Article 14 Police and Fire	–	–	–	–	54	7,502,587
<b>Total</b>	<b>1</b>	<b>\$ 127,671</b>	<b>12,762</b>	<b>\$ 2,206,864,364</b>	<b>78</b>	<b>\$ 10,193,005</b>

# MEMBERS AND SALARIES BY PLAN — PFRS

CONTINUED

Plan	Tier 5 Contributory		Tier 5 Non-Contributory		Tier 6 Contributory		Tier 6 Non-Contributory	
	Members	Total Salaries	Members	Total Salaries	Members	Total Salaries*	Members	Total Salaries*
Age 55/60 Basic	2	\$ 47,388	—	\$ —	8	\$ 93,106	—	\$ —
Age 55 375-c	3	143,217	—	—	55	1,068,639	—	—
Age 55 375-e	2	30,268	—	—	56	692,868	—	—
Age 55 375-g	2	40,533	—	—	10	333,655	—	—
Age 55 375-h	—	—	—	—	3	330,370	—	—
Age 55 375-i	3	430,592	—	—	23	1,835,429	—	—
Age 55 375-j	—	—	—	—	—	—	—	—
State Police 381-b	123	16,957,175	—	—	2,849	318,685,597	—	—
Regional Park Police 383-a	3	332,385	—	—	105	8,790,694	—	—
EnCon Police 383-b	10	1,019,136	—	—	113	11,584,627	—	—
Forest Ranger 383-c	3	286,372	—	—	77	6,812,467	—	—
SUNY Police 383-d	42	4,228,083	—	—	297	24,024,827	—	—
25-Year 384	4	372,439	—	—	28	1,740,808	—	—
25-Year 384(f)	5	1,130,982	4	779,331	39	4,480,153	3	338,825
20-Year 384-d	545	68,372,003	92	9,552,486	5,864	511,032,138	24	869,521
20-Year 1/60 384-e	774	115,309,195	75	9,615,433	8,720	901,905,710	41	7,534,694
Article 14 Police and Fire	—	—	—	—	—	—	—	—
<b>Total</b>	<b>1,521</b>	<b>\$ 208,699,768</b>	<b>171</b>	<b>\$ 19,947,250</b>	<b>18,247</b>	<b>\$ 1,793,411,088</b>	<b>68</b>	<b>\$ 8,743,039</b>
* Reportable Tier 6 salary is capped at the Governor's salary, which was \$250,000 for fiscal year 2024.								

There may be plans with no member count and salary greater than zero. A member who works for multiple employers may have salary under multiple plans but will only be counted once, under their primary plan.

# RETIREES AND BENEFICIARIES BY AGE

This table shows retiree and beneficiary counts as of the fiscal year ending March 31, 2024, grouped by age, with a breakdown by retirement system.

Age	ERS			PFRS		
	Retirees & Beneficiaries	Retirees	Beneficiaries	Retirees & Beneficiaries	Retirees	Beneficiaries
0 – 25	114	–	114	10	–	10
26 – 30	188	1	187	5	3	2
31 – 35	349	6	343	30	18	12
36 – 40	524	67	457	89	77	12
41 – 45	913	254	659	503	477	26
46 – 50	1,502	749	753	1,688	1,641	47
51 – 55	4,702	3,538	1,164	3,853	3,764	89
56 – 60	29,165	27,322	1,843	6,389	6,202	187
61 – 65	69,368	66,002	3,366	6,574	6,308	266
66 – 70	99,753	94,617	5,136	5,197	4,870	327
71 – 75	100,738	93,901	6,837	5,804	5,299	505
76 – 80	80,106	72,596	7,510	5,230	4,669	561
81 – 85	49,672	43,199	6,473	3,433	2,987	446
86 – 90	27,281	22,823	4,458	1,441	1,198	243
91 – 95	12,630	10,289	2,341	509	396	113
96 – 100	3,805	2,976	829	121	77	44
101+	560	440	120	9	4	5
<b>Total</b>	<b>481,370</b>	<b>438,780</b>	<b>42,590</b>	<b>40,885</b>	<b>37,990</b>	<b>2,895</b>

## RETIREES AND BENEFICIARIES — ERS

This table shows the number (*Number*), the average annual modified pension benefit prior to option selection and without any cost-of-living adjustment (*Average Option 0 Benefit w/o COLA*), and the average cost-of-living adjustment (*Average COLA*) of surviving Employees' Retirement System retirees and beneficiaries\* as of March 31, 2024. Groupings are based on the fiscal year of the member's retirement. The modified pension benefit has been reduced for any partial lump sum distribution.

Year of Retirement	Number	Average Option 0 Benefit w/o COLA	Average COLA	Total
1963	1	\$ 3,006	\$ 13,411	\$ 16,417
1964	–	–	–	–
1965	–	–	–	–
1966	1	3,311	11,217	14,528
1967	–	–	–	–
1968	–	–	–	–
1969	2	1,543	2,220	3,763
1970	4	2,016	3,721	5,737
1971	5	4,936	9,220	14,156
1972	9	3,746	7,001	10,747
1973	12	3,496	4,915	8,411
1974	16	8,042	9,511	17,553
1975	31	5,829	6,336	12,166
1976	46	6,321	6,799	13,119
1977	76	6,279	6,751	13,030
1978	108	5,982	6,000	11,983
1979	138	5,723	5,430	11,153
1980	178	6,351	5,290	11,641
1981	249	6,236	4,608	10,844
1982	321	7,235	4,632	11,867
1983	370	7,033	4,284	11,317
1984	551	9,525	4,956	14,481
1985	635	9,025	4,484	13,508
1986	879	9,435	4,429	13,864
1987	1,095	10,100	4,696	14,797
1988	1,171	11,683	4,725	16,407
1989	1,555	12,237	4,577	16,815
1990	1,984	13,517	4,420	17,937
1991	3,573	17,945	4,975	22,920
1992	3,485	14,942	4,378	19,319
1993	3,183	15,887	4,150	20,037

\* 9,530 of the 42,590 beneficiaries are not eligible for COLA and are not included in the above counts.

Year of Retirement	Number	Average Option 0 Benefit w/o COLA	Average COLA	Total
1994	3,126	\$ 15,864	\$ 3,925	\$ 19,788
1995	3,975	16,885	3,968	20,853
1996	7,770	21,950	4,335	26,284
1997	7,458	20,379	3,975	24,355
1998	5,889	17,818	3,442	21,260
1999	6,696	17,715	3,281	20,996
2000	8,467	18,998	3,197	22,195
2001	9,601	22,423	3,281	25,704
2002	8,190	20,210	2,975	23,185
2003	18,819	29,285	3,259	32,544
2004	9,421	20,157	2,568	22,724
2005	11,663	22,442	2,517	24,959
2006	13,179	23,149	2,381	25,531
2007	13,972	25,718	2,338	28,056
2008	14,613	27,484	2,245	29,728
2009	13,730	27,415	2,084	29,499
2010	15,879	28,980	1,974	30,954
2011	25,062	35,251	1,970	37,221
2012	16,059	27,926	1,670	29,596
2013	16,262	27,511	1,525	29,036
2014	17,911	28,433	1,400	29,832
2015	18,987	29,752	1,243	30,996
2016	19,531	31,315	1,111	32,426
2017	19,976	32,080	965	33,045
2018	21,141	32,437	745	33,182
2019	20,652	33,449	450	33,900
2020	20,768	34,653	–	34,653
2021	22,386	34,556	–	34,556
2022	22,739	35,301	–	35,301
2023	19,577	34,552	–	34,552
2024	18,663	\$ 34,195	\$ –	\$ 34,195

\* 9,530 of the 42,590 beneficiaries are not eligible for COLA and are not included in the above counts.

## RETIREES AND BENEFICIARIES — PFRS

This table shows the number (*Number*), the average annual modified pension benefit prior to option selection and without any cost-of-living adjustment (*Average Option 0 Benefit w/o COLA*), and the average cost-of-living adjustment (*Average COLA*) of surviving Police and Fire Retirement System retirees and beneficiaries\* as of March 31, 2024. Groupings are based on the fiscal year of the member's retirement. The modified pension benefit has been reduced for any partial lump sum distribution.

Year of Retirement	Number	Average Option 0 Benefit w/o COLA	Average COLA	Total
1963	—	\$ —	\$ —	\$ —
1964	—	—	—	—
1965	—	—	—	—
1966	1	3,252	12,251	15,503
1967	3	4,861	13,584	18,445
1968	1	7,681	19,850	27,531
1969	2	5,042	14,407	19,448
1970	—	—	—	—
1971	3	13,898	18,570	32,468
1972	11	7,665	15,961	23,626
1973	15	7,143	13,471	20,614
1974	25	8,184	14,574	22,758
1975	15	8,772	13,037	21,808
1976	18	9,456	14,437	23,893
1977	60	10,428	14,077	24,505
1978	60	11,513	13,987	25,499
1979	94	11,448	13,027	24,475
1980	98	12,599	12,499	25,098
1981	101	13,384	10,743	24,126
1982	158	14,438	10,341	24,778
1983	173	15,506	10,032	25,538
1984	180	17,653	10,016	27,669
1985	216	19,659	9,623	29,282
1986	343	20,671	9,440	30,111
1987	368	22,880	9,360	32,240
1988	486	24,927	8,847	33,774
1989	555	24,889	8,448	33,337
1990	598	27,407	7,686	35,094
1991	673	30,753	7,344	38,098
1992	766	34,818	6,660	41,478
1993	748	33,996	6,374	40,370
* 539 of the 2,895 beneficiaries are not eligible for COLA and are not included in the above counts.				

Year of Retirement	Number	Average Option 0 Benefit w/o COLA	Average COLA	Total
1994	709	\$ 33,180	\$ 5,841	\$ 39,020
1995	601	38,048	5,348	43,396
1996	621	36,672	5,127	41,799
1997	610	40,996	4,784	45,780
1998	604	39,308	4,412	43,720
1999	644	39,965	4,291	44,256
2000	783	47,340	3,922	51,261
2001	997	52,744	3,890	56,634
2002	860	54,058	3,685	57,743
2003	1,174	60,881	3,458	64,339
2004	1,126	58,763	3,285	62,048
2005	1,033	58,711	3,003	61,713
2006	1,048	59,518	2,787	62,305
2007	1,066	60,593	2,643	63,236
2008	1,096	62,866	2,394	65,260
2009	1,027	66,465	2,263	68,728
2010	1,066	68,491	2,077	70,567
2011	1,222	68,922	1,882	70,804
2012	1,178	71,036	1,687	72,723
2013	1,199	69,356	1,478	70,834
2014	1,196	72,633	1,209	73,842
2015	1,301	75,613	857	76,470
2016	1,264	78,756	733	79,489
2017	1,212	80,273	634	80,907
2018	1,508	84,869	436	85,304
2019	1,565	86,475	242	86,717
2020	1,447	89,538	—	89,538
2021	1,676	90,816	—	90,816
2022	1,627	88,853	—	88,853
2023	1,671	92,002	—	92,002
2024	1,444	\$ 92,371	\$ —	\$ 92,371
* 539 of the 2,895 beneficiaries are not eligible for COLA and are not included in the above counts.				

# LOCAL GOVERNMENT SALARIES AND BILLINGS – ERS

The contribution amounts shown below are due February 1 preceding the fiscal year end (FYE).

FYE	Salaries	Contributions	Normal	Deficiency	GLIP*	Administrative
<b>Counties</b>						
2015	\$ 4,268,067,445	\$ 916,967,766	\$ 884,569,811	\$ –	\$ 14,822,845	\$ 17,575,110
2016	4,268,067,445	764,800,462	729,885,087	–	17,843,119	17,072,256
2017	4,442,433,004	718,015,326	685,263,761	–	14,981,831	17,769,734
2018	4,526,327,445	719,117,404	685,809,717	–	15,202,362	18,105,325
2019	4,550,654,486	704,395,273	671,966,793	–	18,776,511	13,651,969
2020	4,711,426,453	721,858,881	682,580,561	–	15,721,198	23,557,122
2021	4,760,305,412	731,642,789	688,184,857	–	19,656,355	23,801,577
2022	4,752,745,726	821,596,734	777,146,609	–	15,933,651	28,516,474
2023	4,873,400,674	605,358,806	567,451,450	–	8,666,950	29,240,406
2024	5,138,346,150	711,977,322	662,128,138	–	29,295,797	20,553,387
<b>Cities</b>						
2015	679,974,366	134,647,196	129,157,994	–	2,744,601	2,744,601
2016	679,974,366	118,631,364	112,511,612	–	3,399,861	2,719,891
2017	711,933,076	106,482,115	100,786,663	–	2,847,726	2,847,726
2018	742,043,938	108,756,209	102,819,863	–	2,968,173	2,968,173
2019	744,199,863	105,742,763	99,789,168	–	3,721,006	2,232,589
2020	758,132,484	105,255,949	98,432,744	–	3,032,535	3,790,670
2021	772,791,379	107,820,375	100,092,450	–	3,863,959	3,863,966
2022	756,927,178	116,756,626	109,187,353	–	3,027,709	4,541,564
2023	793,963,459	87,481,081	81,129,371	–	1,587,928	4,763,782
2024	855,122,851	105,958,717	96,552,365	–	5,985,861	3,420,491
<b>Towns</b>						
2015	1,541,087,303	304,935,776	292,018,266	704,881	6,104,792	6,107,837
2016	1,541,087,303	277,193,215	262,917,719	409,489	7,701,640	6,164,367
2017	1,579,960,510	240,525,450	227,504,169	384,233	6,317,184	6,319,864
2018	1,615,922,678	241,429,341	228,132,484	372,380	6,460,806	6,463,671
2019	1,624,034,309	236,023,695	222,651,419	385,020	8,115,114	4,872,142
2020	1,654,262,964	235,874,419	220,645,937	343,749	6,613,385	8,271,348
2021	1,666,644,088	238,596,311	221,621,654	312,725	8,328,687	8,333,245
2022	1,666,275,361	263,906,092	246,959,685	287,029	6,661,724	9,997,654
2023	1,721,980,427	194,322,683	180,265,932	282,275	3,442,590	10,331,886
2024	1,801,569,171	228,651,769	208,614,528	228,403	12,602,558	7,206,280
<b>Villages</b>						
2015	475,868,379	93,000,032	88,986,865	214,831	1,899,168	1,899,168
2016	475,868,379	84,779,246	80,364,318	134,970	2,377,750	1,902,208
2017	492,146,116	74,142,234	70,095,276	109,818	1,968,570	1,968,570
2018	505,159,356	74,546,172	70,399,418	105,502	2,020,626	2,020,626
2019	514,793,219	73,871,365	69,638,093	114,888	2,573,977	1,544,407
2020	526,403,820	74,482,744	69,641,376	103,704	2,105,622	2,632,042
2021	537,296,960	76,180,937	70,693,112	114,846	2,686,487	2,686,492
2022	547,228,239	85,752,128	80,151,189	128,655	2,188,914	3,283,370
2023	559,006,694	62,512,063	57,915,091	124,916	1,118,015	3,354,041
2024	578,933,827	72,888,706	66,384,246	136,185	4,052,538	2,315,737
* Group Life Insurance Plan (GLIP).						

# LOCAL GOVERNMENT SALARIES AND BILLINGS – ERS

CONTINUED

FYE	Salaries	Contributions	Normal	Deficiency	GLIP*	Administrative
<b>Miscellaneous</b>						
2015	\$ 4,016,329,736	\$ 786,826,716	\$ 753,471,524	\$ 785,464	\$ 16,284,864	\$ 16,284,864
2016	4,016,329,736	692,441,164	656,011,033	285,120	20,080,556	16,064,455
2017	4,218,674,267	624,983,230	590,938,378	295,426	16,874,713	16,874,713
2018	4,400,266,244	636,996,945	601,504,023	292,092	17,600,415	17,600,415
2019	4,548,171,902	639,193,644	602,507,287	300,990	22,740,865	13,644,502
2020	4,769,848,444	656,970,743	613,752,143	289,923	19,079,412	23,849,265
2021	4,928,473,582	681,965,509	632,481,941	198,772	24,642,379	24,642,417
2022	4,953,008,124	753,565,970	703,828,602	207,282	19,812,034	29,718,052
2023	5,097,739,540	557,568,720	516,583,359	203,439	10,195,482	30,586,440
2024	5,332,206,555	656,964,380	598,114,622	195,482	37,325,449	21,328,827
<b>Schools</b>						
2015	3,337,348,846	654,771,133	627,945,059	139,518	13,343,278	13,343,278
2016	3,337,348,846	593,311,380	563,142,438	134,423	16,685,833	13,348,686
2017	3,463,921,681	524,114,526	496,273,503	129,599	13,855,712	13,855,712
2018	3,591,452,866	533,074,424	504,209,323	133,487	14,365,807	14,365,807
2019	3,656,797,566	527,849,814	498,457,959	137,491	18,283,980	10,970,384
2020	3,739,951,074	528,865,706	495,064,555	141,616	14,959,764	18,699,771
2021	3,841,977,275	544,514,579	505,949,072	145,661	19,209,895	19,209,951
2022	3,758,535,947	587,739,235	550,003,627	150,240	15,034,149	22,551,219
2023	3,972,602,402	442,911,406	410,975,825	154,748	7,945,212	23,835,621
2024	4,279,850,973	534,436,058	487,198,298	159,390	29,958,961	17,119,409
* Group Life Insurance Plan (GLIP).						

For FYE 2015, the contribution amounts include the normal cost of benefits including supplemental pensions and, in some cases, the Retirement Incentive Program, Deficiency Contributions, the Group Life Insurance Plan (GLIP), and the administrative cost of the System for the fiscal year.

For FYE 2016, and all subsequent FYEs, the contribution amounts include the normal cost of benefits including supplemental pensions, Deficiency Contributions, GLIP, the administrative cost of the System for the fiscal year, and accounting adjustments. Accounting adjustments include prior year adjustments, prepayment discounts, and reconciliation of actual versus estimated salary amounts.

Legislation enacted in July 2015 (Chapter 94, Laws of 2015), requires the System to use prior year actual salaries rather than current year estimated salaries in the calculation of required contributions. This change eliminates the need for reconciliation of actual versus estimated salaries, the result of which is reflected in the FYE 2016 salaries.

# LOCAL GOVERNMENT SALARIES AND BILLINGS – PFRS

The contribution amounts shown below are due February 1 preceding the fiscal year end (FYE).

FYE	Salaries	Contributions	Normal	Deficiency	GLIP*	Administrative
<b>Counties</b>						
2015	\$ 748,062,218	\$ 204,532,593	\$ 200,811,227	\$ –	\$ 744,273	\$ 2,977,093
2016	748,062,218	183,660,699	180,668,452	–	–	2,992,247
2017	813,351,565	197,749,660	193,682,901	–	–	4,066,759
2018	837,536,191	205,595,002	201,407,318	–	837,538	3,350,146
2019	826,111,820	194,974,879	192,496,544	–	–	2,478,335
2020	829,447,380	197,111,060	192,963,822	–	–	4,147,238
2021	820,311,457	204,533,703	199,611,831	–	–	4,921,872
2022	817,314,990	235,991,642	232,722,382	–	–	3,269,260
2023	847,846,533	233,521,627	227,586,702	–	–	5,934,925
2024	881,696,381	250,946,588	246,538,105	–	881,697	3,526,786
<b>Cities</b>						
2015	935,625,377	266,374,021	261,525,612	–	969,687	3,878,722
2016	935,625,377	220,521,730	216,779,231	–	–	3,742,499
2017	1,012,327,983	244,289,630	239,227,991	–	–	5,061,639
2018	1,032,008,361	249,454,963	244,294,924	–	1,032,013	4,128,026
2019	1,046,903,046	244,069,656	240,928,943	–	–	3,140,713
2020	1,073,918,736	249,937,319	244,567,724	–	–	5,369,595
2021	1,068,635,389	258,554,169	252,142,350	–	–	6,411,819
2022	1,072,164,847	302,975,473	298,686,813	–	–	4,288,660
2023	1,137,572,489	307,035,129	299,072,121	–	–	7,963,008
2024	1,180,945,384	327,680,398	321,775,671	–	1,180,945	4,723,782
<b>Towns</b>						
2015	361,105,021	99,600,409	97,809,899	–	358,100	1,432,410
2016	361,105,021	103,194,597	101,750,184	–	–	1,444,413
2017	375,409,567	91,053,202	89,176,144	–	–	1,877,058
2018	385,731,210	94,187,748	92,259,099	–	385,724	1,542,925
2019	386,276,966	90,799,386	89,640,559	–	–	1,158,827
2020	396,084,139	92,527,775	90,547,356	–	–	1,980,419
2021	406,409,795	98,904,597	96,466,136	–	–	2,438,461
2022	405,318,283	115,075,298	113,454,025	–	–	1,621,273
2023	428,401,134	115,836,496	112,837,688	–	–	2,998,808
2024	446,465,048	123,892,320	121,659,995	–	446,465	1,785,860
<b>Villages</b>						
2015	298,766,157	81,460,417	79,943,884	–	303,296	1,213,237
2016	298,766,157	69,981,037	68,788,007	–	–	1,193,030
2017	316,804,801	73,308,396	71,724,373	–	–	1,584,023
2018	323,473,812	75,751,635	74,134,267	–	323,456	1,293,912
2019	327,388,623	73,872,681	72,890,527	–	–	982,154
2020	337,679,673	76,094,089	74,405,690	–	–	1,688,399
2021	344,249,844	80,165,375	78,099,874	–	–	2,065,501
2022	346,200,166	94,477,950	93,093,149	–	–	1,384,801
2023	361,570,900	94,268,283	91,737,287	–	–	2,530,996
2024	372,955,356	100,037,089	98,172,313	–	372,955	1,491,821
* Group Life Insurance Plan (GLIP).						



# LOCAL GOVERNMENT SALARIES AND BILLINGS — PFRS

CONTINUED

FYE	Salaries	Contributions	Normal	Deficiency	GLIP*	Administrative
<b>Miscellaneous</b>						
2015	\$ 322,131,168	\$ 89,840,321	\$ 88,189,827	\$ —	\$ 330,099	\$ 1,320,395
2016	322,131,168	73,328,115	72,039,593	—	—	1,288,522
2017	332,682,130	78,709,281	77,045,873	—	—	1,663,408
2018	345,926,023	82,341,868	80,612,241	—	345,923	1,383,704
2019	355,303,151	81,963,609	80,897,700	—	—	1,065,909
2020	368,595,543	84,573,906	82,730,930	—	—	1,842,976
2021	612,045,010	147,894,883	144,222,611	—	—	3,672,272
2022	441,412,586	122,175,420	120,409,769	—	—	1,765,651
2023	463,388,052	122,688,884	119,445,168	—	—	3,243,716
2024	490,465,058	133,777,496	131,325,170	—	490,466	1,961,860
* Group Life Insurance Plan (GLIP).						

For FYE 2015, the contribution amounts include the normal cost of benefits including supplemental pensions and, in some cases, the Retirement Incentive Program, Deficiency Contributions, the Group Life Insurance Plan (GLIP), and the administrative cost of the System for the fiscal year.

For FYE 2016, **and all subsequent FYEs**, the contribution amounts include the normal cost of benefits including supplemental pensions, Deficiency Contributions, GLIP, the administrative cost of the System for the fiscal year, and accounting adjustments. Accounting adjustments include prior year adjustments, prepayment discounts, and reconciliation of actual versus estimated salary amounts.

Legislation enacted in July 2015 (Chapter 94, Laws of 2015), requires the System to use prior year actual salaries rather than current year estimated salaries in the calculation of required contributions. This change eliminates the need for reconciliation of actual versus estimated salaries, the result of which is reflected in the FYE 2016 salaries.

# CONTRIBUTIONS RECORDED 2015 – 2024

Contributions recorded are the amounts presented in the System’s financial statements and include employer costs plus or minus any adjustments in amounts receivable and changes resulting from legislation.

(Dollars in Millions)

Year Ended 3/31	Employer Contributions*	Member Contributions
<b>2015</b>		
<b>Total</b>	<b>\$ 5,797.4</b>	<b>\$ 284.8</b>
State	2,263.0	
Local	3,534.4	
<b>2016</b>		
<b>Total</b>	<b>\$ 5,140.2</b>	<b>\$ 306.6</b>
State	1,958.4	
Local	3,181.8	
<b>2017</b>		
<b>Total</b>	<b>\$ 4,787.0</b>	<b>\$ 328.8</b>
State	1,813.6	
Local	2,973.4	
<b>2018</b>		
<b>Total</b>	<b>\$ 4,823.3</b>	<b>\$ 349.4</b>
State	1,802.1	
Local	3,021.2	
<b>2019</b>		
<b>Total</b>	<b>\$ 4,744.3</b>	<b>\$ 386.5</b>
State	1,771.5	
Local	2,972.8	
* Includes employer premiums to Group Life Insurance Plan.		

Year Ended 3/31	Employer Contributions*	Member Contributions
<b>2020</b>		
<b>Total</b>	<b>\$ 4,782.7</b>	<b>\$ 453.7</b>
State	1,759.3	
Local	3,023.4	
<b>2021</b>		
<b>Total</b>	<b>\$ 5,029.8</b>	<b>\$ 492.3</b>
State	1,870.5	
Local	3,159.3	
<b>2022</b>		
<b>Total</b>	<b>\$ 5,627.7</b>	<b>\$ 577.6</b>
State	2,049.4	
Local	3,578.3	
<b>2023</b>		
<b>Total</b>	<b>\$ 4,404.0</b>	<b>\$ 656.8</b>
State	1,556.7	
Local	2,847.3	
<b>2024</b>		
<b>Total</b>	<b>\$ 5,054.5</b>	<b>\$ 788.8</b>
State	1,813.1	
Local	3,241.4	
* Includes employer premiums to Group Life Insurance Plan.		

# 20-YEAR SUMMARY\*

	2024	2023	2022	2021	2020	2019	2018	2017	2016
<b>Total Participants</b>	<b>1,236,057</b>	<b>1,210,133</b>	<b>1,193,373</b>	<b>1,172,147</b>	<b>1,160,743</b>	<b>1,139,971</b>	<b>1,122,626</b>	<b>1,104,779</b>	<b>1,088,342</b>
<b>Number of Members</b>	<b>713,802</b>	<b>695,504</b>	<b>685,450</b>	<b>675,519</b>	<b>673,336</b>	<b>658,176</b>	<b>652,030</b>	<b>652,324</b>	<b>647,399</b>
<b>ERS (a)</b>	<b>677,604</b>	<b>659,750</b>	<b>650,251</b>	<b>640,581</b>	<b>637,746</b>	<b>623,090</b>	<b>616,906</b>	<b>617,143</b>	<b>612,294</b>
State	211,361	206,787	204,937	206,913	207,643	203,421	201,912	203,317	202,153
Counties	110,384	107,865	107,099	105,523	105,939	103,965	103,438	104,452	104,756
Cities	20,528	19,772	19,047	18,530	18,583	18,251	18,138	18,146	18,048
Towns	51,130	49,771	49,743	48,351	47,833	46,611	45,897	45,608	45,450
Villages	16,650	16,184	16,020	15,543	15,257	14,867	14,615	14,474	14,256
Miscellaneous	111,196	108,106	105,659	103,731	101,807	99,042	98,035	97,376	95,759
School Districts	156,355	151,265	147,746	141,990	140,684	136,933	134,871	133,770	131,872
<b>PFRS (a)</b>	<b>36,198</b>	<b>35,754</b>	<b>35,199</b>	<b>34,938</b>	<b>35,590</b>	<b>35,086</b>	<b>35,124</b>	<b>35,181</b>	<b>35,105</b>
State	6,913	6,689	6,407	6,493	6,785	6,712	6,606	6,596	6,309
Counties	5,466	5,510	5,399	5,149	5,306	5,303	5,386	5,323	5,348
Cities	11,955	11,824	11,785	11,654	11,745	11,659	11,757	11,880	12,018
Towns	4,224	4,195	4,138	4,108	4,147	4,090	4,061	4,127	4,182
Villages	4,203	4,215	4,208	4,181	4,175	4,072	4,160	4,213	4,340
Miscellaneous	3,437	3,321	3,262	3,353	3,432	3,250	3,154	3,042	2,908
<b>Members by Tier (b)</b>									
ERS Tier 1	765	873	1,043	1,305	1,552	1,937	2,313	3,241	3,809
ERS Tier 2	701	847	1,042	1,364	1,762	2,278	2,817	3,668	4,420
ERS Tiers 3 through 6	676,138	658,030	648,166	637,912	634,432	618,875	611,776	610,234	604,065
PFRS Tier 1	10	13	17	19	24	27	40	54	77
PFRS Tier 2	14,020	15,508	17,032	18,763	20,500	21,938	23,733	25,518	27,364
PFRS Tiers 3, 5 & 6	22,168	20,233	18,150	16,156	15,066	13,121	11,351	9,609	7,664
<b>Retirees &amp; Beneficiaries</b>	<b>522,255</b>	<b>514,629</b>	<b>507,923</b>	<b>496,628</b>	<b>487,407</b>	<b>481,795</b>	<b>470,596</b>	<b>452,455</b>	<b>440,943</b>
ERS	481,370	474,561	468,664	458,261	449,806	444,719	434,553	417,499	407,112
PFRS	40,885	40,068	39,259	38,367	37,601	37,076	36,043	34,956	33,831
<b>Employers</b>	<b>3,557</b>	<b>3,547</b>	<b>3,539</b>	<b>3,623</b>	<b>3,616</b>	<b>3,692</b>	<b>3,044</b>	<b>3,040</b>	<b>3,040</b>
ERS	2,986	2,977	2,969	3,052	2,959	3,015	3,017	3,013	3,010
PFRS	571	570	570	571	657	677	684	687	686
<b>Benefit Payments (c)</b>	<b>\$ 16,109.4</b>	<b>\$ 15,484.6</b>	<b>\$ 14,719.7</b>	<b>\$ 14,022.7</b>	<b>\$ 13,246.1</b>	<b>\$ 12,741.6</b>	<b>\$ 12,027.3</b>	<b>\$ 11,448.7</b>	<b>\$ 10,908.5</b>
Retirement Allowances	14,922.9	14,402.8	13,791.6	13,096.1	12,424.6	11,880.3	11,197.8	10,617.5	10,113.8
Death Benefits (Lump Sum)	300.8	310.3	237.8	258.0	159.5	214.7	201.2	216.2	188.2
COLA Payments	885.7	771.5	690.3	668.6	662.0	646.6	628.3	615.0	606.5
# of Service Retirements	20,022	21,070	24,170	25,212	23,159	22,928	28,312	22,762	21,984
# of Death Benefits Paid	580	667	1,458	1,108	897	793	857	915	751
# of Disability Retirements	668	375	379	297	477	883	922	718	626
<b>Employer Contributions</b>	<b>\$ 5,054.5</b>	<b>\$ 4,404.0</b>	<b>\$ 5,518.0</b>	<b>\$ 5,029.8</b>	<b>\$ 4,782.7</b>	<b>\$ 4,744.3</b>	<b>\$ 4,823.3</b>	<b>\$ 4,787.0</b>	<b>\$ 5,140.2</b>
ERS	3,692.5	3,250.4	4,352.5	3,932.9	3,818.3	3,766.8	3,852.5	3,858.6	4,232.4
PFRS	1,163.9	1,098.2	1,060.5	967.5	862.3	854.1	869.8	837.3	792.6
Group Life Insurance Plan	198.1	55.4	105.0	129.4	102.1	123.4	101.0	91.1	115.2
<b>Rate (as a % of Salary) (d)</b>									
ERS	13.1%	11.6%	16.2%	14.6%	14.6%	14.9%	15.3%	15.5%	18.2%
PFRS	27.8%	27.0%	28.3%	24.4%	23.5%	23.5%	24.4%	24.3%	24.7%
<b>Employee Contributions</b>	<b>\$ 788.8</b>	<b>\$ 656.8</b>	<b>\$ 577.6</b>	<b>\$ 492.3</b>	<b>\$ 453.7</b>	<b>\$ 386.5</b>	<b>\$ 349.4</b>	<b>\$ 328.8</b>	<b>\$ 306.6</b>
ERS	677.0	565.1	494.8	427.0	395.3	345.8	318.4	306.2	289.3
PFRS	111.8	91.7	82.8	65.3	58.4	40.7	31.0	22.6	17.3
<b>Investments (e)</b>	<b>\$ 268,088.7</b>	<b>\$ 248,524.9</b>	<b>\$ 272,121.3</b>	<b>\$ 258,135.8</b>	<b>\$ 194,317.2</b>	<b>\$ 210,523.7</b>	<b>\$ 207,416.0</b>	<b>\$ 192,410.6</b>	<b>\$ 178,639.7</b>
Equities	114,069.5	108,998.6	133,460.2	133,744.2	93,221.9	109,560.6	114,797.1	103,688.4	90,755.4
Global Fixed Income	52,574.8	48,479.2	52,497.5	47,722.9	45,410.3	45,651.6	44,820.8	44,002.6	44,661.2
Commercial Mortgages	1,383.5	1,310.6	1,421.1	1,043.6	1,011.8	897.0	843.4	800.3	796.4
Short-Term Investments	5,844.5	4,018.7	3,852.3	11,082.7	5,697.7	6,119.0	3,366.6	5,653.3	5,578.8
Private Equity	39,570.2	36,976.6	37,026.1	29,470.2	20,314.2	19,751.0	17,500.5	15,348.5	13,961.4
Equity Real Estate	24,864.5	25,054.4	22,873.1	17,648.0	15,693.7	15,678.5	14,182.7	12,937.4	12,639.7
Opportunistic/ Absolute Return Strategy	8,139.1	6,463.4	5,730.0	5,016.1	9,881.9	10,646.0	10,386.3	9,589.5	9,748.7
Credit	12,307.3	9,411.4	9,209.8	8,478.5	0.0	0.0	0.0	0.0	0.0
Other	9,335.3	7,812.0	6,051.2	3,929.6	3,085.7	2,220.0	1,518.6	390.6	498.1
<b>Rate of Return (f)</b>	<b>11.6%</b>	<b>(4.1)%</b>	<b>9.5%</b>	<b>33.6%</b>	<b>(2.7)%</b>	<b>5.2%</b>	<b>11.4%</b>	<b>11.5%</b>	<b>0.2%</b>
Core Fixed Income	2.7%	(4.3)%	(2.9)%	2.6%	7.4%	4.8%	2.1%	2.5%	1.8%
Equity Investments	14.0%	(4.2)%	13.3%	44.2%	(5.4)%	5.6%	14.5%	14.8%	(0.4)%
Administrative Cost	\$ 235.5	\$ 208.0	\$ 163.5	\$ 165.1	\$ 139.1	\$ 136.5	\$ 122.8	\$ 107.1	\$ 106.6
Financial Statement Assets	\$ 267,367.7	\$ 249,508.1	\$ 273,718.7	\$ 260,081.1	\$ 198,079.8	\$ 215,169.2	\$ 212,076.8	\$ 197,602.2	\$ 183,640.2

# 20-YEAR SUMMARY\*

CONTINUED

2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
1,073,486	1,066,064	1,061,010	1,059,398	1,057,754	1,055,020	1,046,086	1,035,430	1,012,699	995,536	982,009
643,178	643,659	647,574	656,224	672,723	679,217	679,908	677,321	662,633	653,291	647,758
608,637	609,565	613,930	622,107	637,921	643,875	643,700	641,119	626,923	617,989	612,410
201,194	201,192	202,570	203,274	213,089	216,582	219,741	220,216	215,296	211,041	208,899
105,582	106,688	108,302	111,051	114,111	115,722	116,515	117,084	115,944	115,472	118,006
18,079	18,182	18,176	18,420	18,667	18,897	18,893	18,992	18,843	18,891	18,979
44,826	44,676	44,407	44,644	44,416	44,361	43,403	43,203	41,989	41,393	40,561
14,129	14,073	14,040	14,051	14,165	14,150	14,000	13,891	13,597	13,388	13,106
94,341	94,396	95,199	97,225	98,115	97,960	97,272	95,601	92,736	90,879	86,791
130,486	130,358	131,236	133,442	135,358	136,203	133,876	132,132	128,518	126,925	126,068
34,541	34,094	33,644	34,117	34,802	35,342	36,208	36,202	35,710	35,302	35,348
6,009	5,792	5,630	5,548	5,779	5,973	6,222	6,223	6,219	5,955	6,038
5,179	5,003	5,076	5,372	5,499	5,560	5,841	5,898	5,873	5,850	5,833
11,856	11,812	11,868	11,974	12,137	12,289	12,433	12,414	12,206	12,147	12,113
4,196	4,162	4,153	4,178	4,205	4,249	4,340	4,364	4,295	4,261	4,217
4,343	4,330	4,370	4,433	4,512	4,547	4,592	4,621	4,591	4,641	4,653
2,958	2,995	2,547	2,612	2,670	2,724	2,780	2,682	2,526	2,448	2,494
4,520	5,249	6,230	7,551	10,718	13,395	16,829	20,513	25,053	29,492	34,980
5,375	6,297	7,538	9,222	12,911	15,651	18,097	20,315	22,458	24,263	25,938
598,742	598,019	600,162	605,334	614,292	614,829	608,774	600,291	579,412	564,234	551,492
92	123	172	230	304	393	576	745	924	1,143	1,503
28,179	29,188	30,295	31,830	33,091	34,261	35,632	35,457	34,786	34,159	33,845
6,270	4,783	3,177	2,057	1,407	688	0	0	0	0	0
430,308	422,405	413,436	403,174	385,031	375,803	366,178	358,109	350,066	342,245	334,251
396,781	389,288	380,899	371,468	353,940	345,106	336,273	328,726	321,113	313,837	306,531
33,527	33,117	32,537	31,706	31,091	30,697	29,905	29,383	28,953	28,408	27,720
3,032	3,027	3,029	3,040	3,039	3,035	3,026	3,021	3,010	3,001	2,993
3,006	3,002	3,004	3,016	3,016	3,011	3,001	2,995	2,983	2,974	2,967
682	681	681	682	681	681	683	683	683	685	684
\$ 10,436.2	\$ 9,898.8	\$ 9,450.2	\$ 8,862.8	\$ 8,464.6	\$ 7,663.1	\$ 7,212.1	\$ 6,835.6	\$ 6,383.4	\$ 6,028.9	\$ 5,674.7
9,651.2	9,098.4	8,669.8	8,109.3	7,717.0	6,931.8	6,497.1	6,142.8	5,722.9	5,388.6	5,041.0
183.1	203.8	194.2	185.0	192.3	183.0	180.5	181.7	164.6	161.2	161.9
601.9	596.6	586.2	568.5	555.3	548.3	534.5	511.1	495.9	479.1	471.8
18,039	19,702	19,962	28,259	19,092	19,193	17,979	17,261	16,390	16,827	14,533
900	810	844	879	984	955	935	1,014	832	932	1,041
720	963	1,026	1,161	844	1,421	1,020	950	1,227	1,267	1,463
\$ 5,797.4	\$ 6,064.1	\$ 5,336.1	\$ 4,585.2	\$ 4,164.5	\$ 2,344.2	\$ 2,456.2	\$ 2,648.4	\$ 2,718.6	\$ 2,782.2	\$ 2,964.8
4,802.2	5,045.6	4,435.6	3,790.6	3,525.8	1,785.5	1,898.7	2,073.5	2,116.0	2,271.4	2,434.5
901.0	926.3	808.5	706.4	538.8	465.0	492.8	510.6	502.5	433.4	455.3
94.2	92.2	92.0	88.2	99.9	93.7	64.7	64.3	100.1	77.3	75.0
20.1%	20.9%	18.9%	16.3%	11.9%	7.4%	8.5%	9.6%	10.7%	11.3%	12.9%
27.6%	28.9%	25.8%	21.6%	18.2%	15.1%	15.8%	16.6%	17.0%	16.3%	17.6%
\$ 284.8	\$ 281.4	\$ 269.1	\$ 273.2	\$ 286.2	\$ 284.3	\$ 273.3	\$ 265.7	\$ 250.2	\$ 241.2	\$ 227.3
272.0	273.5	264.8	268.5	284.5	282.8	269.0	263.1	247.2	237.7	224.5
12.8	7.9	4.3	4.7	1.7	1.5	4.3	2.6	2.9	3.5	2.8
\$ 184,502.0	\$ 176,835.1	\$ 160,660.8	\$ 150,658.9	\$ 147,237.0	\$ 132,500.2	\$ 108,960.7	\$ 153,877.7	\$ 154,575.5	\$ 140,453.3	\$ 126,083.5
94,293.5	93,191.7	83,049.5	79,059.2	79,945.0	72,674.0	47,871.0	83,153.7	90,119.7	88,550.9	80,917.2
47,652.2	41,410.6	38,559.5	33,440.5	31,037.9	33,726.1	36,541.6	36,571.4	33,536.2	28,889.0	29,310.8
852.9	853.9	812.7	803.0	851.3	845.7	710.2	772.4	889.7	1,162.7	1,281.9
5,252.5	6,592.8	6,461.3	7,397.7	8,360.2	3,086.1	3,826.7	6,443.1	8,551.1	6,619.3	2,602.5
14,247.4	14,369.8	14,072.6	14,925.9	14,620.4	12,584.0	10,563.7	12,699.4	10,044.8	8,284.8	6,832.4
12,123.4	12,529.3	11,195.4	9,339.5	7,631.0	5,551.1	7,066.5	8,909.4	6,752.7	5,430.7	4,634.0
9,681.0	7,887.0	6,509.8	5,693.1	4,791.2	4,033.2	2,381.0	5,328.3	4,681.3	1,516.0	504.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
399.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.2%	13.0%	10.4%	6.0%	14.6%	25.9%	(26.4)%	2.6%	12.6%	14.6%	8.5%
5.5%	(0.5)%	4.7%	9.0%	8.0%	7.4%	2.4%	8.6%	6.0%	1.7%	3.0%
8.3%	19.1%	12.5%	4.9%	17.1%	41.3%	(30.8)%	0.9%	15.0%	19.1%	10.6%
\$ 107.2	\$ 105.7	\$ 105.7	\$ 100.6	\$ 101.3	\$ 100.0	\$ 99.2	\$ 90.3	\$ 79.8	\$ 78.5	\$ 65.3
\$ 189,412.4	\$ 181,275.3	\$ 164,221.8	\$ 153,394.4	\$ 149,548.6	\$ 134,251.7	\$ 110,937.8	\$ 155,845.9	\$ 156,625.2	\$ 142,620.1	\$ 128,037.7

## NOTES TO 20-YEAR SUMMARY

\* Combined Systems unless noted; dollars in millions; data as of March 31 fiscal year end.

- (a) Includes active members and inactive members identified with their last employer.
- (b) Tier 3 through 6 membership statistics are combined. Tier 6 was enacted on April 1, 2012.
- (c) Total does not include Employee Contributions Refunded or Other Benefits found in the Financial Statements.
- (d) Beginning in the 2006 fiscal year, all rates assume a February 1 payment date prior to the close of the fiscal year. Previous years assume rates based on a December 15 payment date. Contributions include normal, administrative, retirement incentive and deficiency costs.
- (e) Investments for 1995 and later years are shown at (and rate of return is calculated on) fair value as required by GASB 25, which the System adopted that year.
- (f) Generally, the Rate of Return is calculated on a time-weighted, gross of fees, basis.

NYSLRS

Office of the New York State Comptroller

**Thomas P. DiNapoli**

