2024

Annual Comprehensive Financial Report of the Qualified Pension Plan and the Tax Deferred Annuity Program















A Fiduciary Fund of the City of New York
State of New York

For the Fiscal Years Ended June 30, 2024 & June 30, 2023



Just as young trees need careful staking to ensure they grow straight and strong, planning for retirement requires thoughtful preparation to secure a stable and fulfilling future. For individuals, it means financial planning, setting goals, and building a support network to enjoy the golden years with peace of mind. Both processes highlight the importance of nurturing growth and stability, whether it's in a garden or in life's later stages.

Featuring NYC 5 most popular trees. Information sourced from New York City Parks Website.



New York City Board of Education Retirement System

(A Fiduciary Fund of The City of New York)
State of New York

Annual Comprehensive Financial Report of the Qualified Pension Plan and the Tax Deferred Annuity Program

For the Fiscal Years Ended June 30, 2024 and June 30, 2023

Prepared by
Sanford R. Rich, Executive Director
Chithra Subramaniam, Director of Fiscal Operations

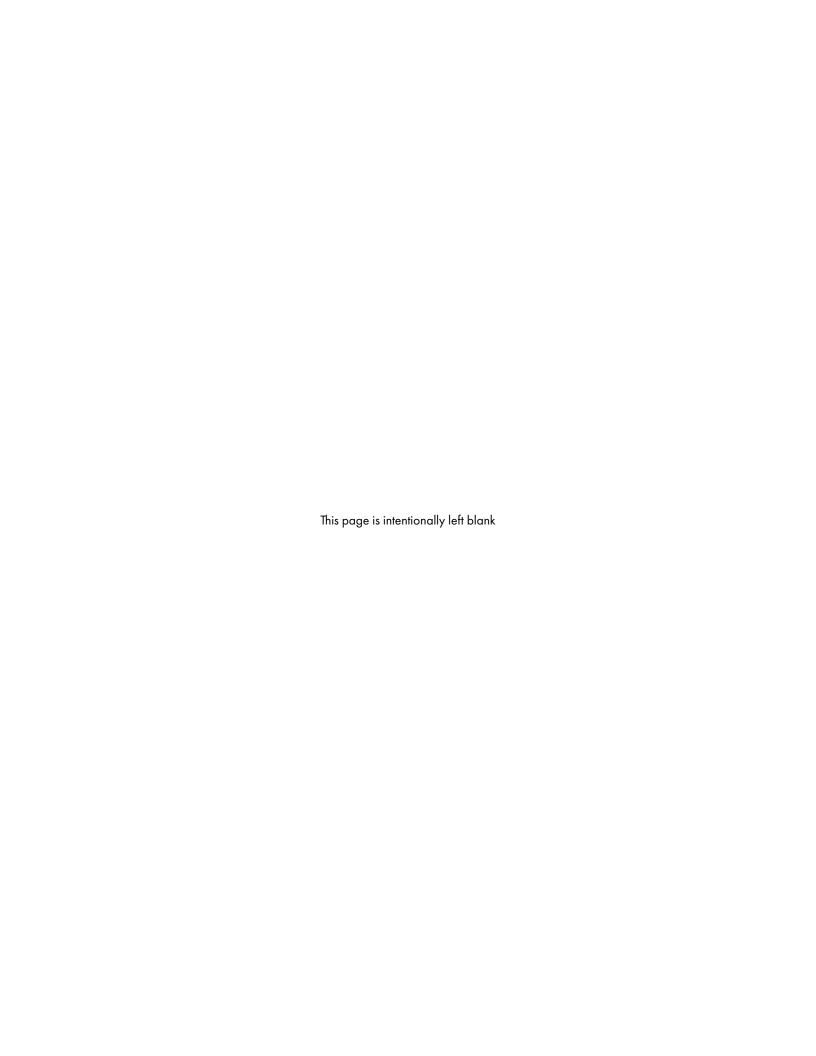


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Plant the seeds of savings today to enjoy the shade of security tomorrow.



SANFORD R. RICH EXECUTIVE DIRECTOR

DANIEL D. MILLER DEPUTY EXECUTIVE DIRECTOR

December 20, 2024

Dear Members of the Board of Trustees:

I am pleased to present the Annual Comprehensive Financial Report ("ACFR") of the New York City Board of Education Retirement System ("BERS", "Funds", the "Plan" or the "System") for the fiscal years ended June 30, 2024, and June 30, 2023. BERS administers the BERS Qualified Pension Plan (the "QPP") and the BERS Tax Deferred Annuity Program (the "TDA Program").

The QPP is a cost sharing, multiple employer Public Employee Retirement System ("PERS") that was created on August 31, 1921. The QPP provides pension benefits to non-pedagogical employees of the Department of Education, certain other specific schools, school crossing guards employed by the New York City Police Department, and certain employees of the New York City School Construction Authority. The QPP combines features of a defined benefit pension plan with those of a defined contribution plan and functions in accordance with existing State statutes and City laws.

The TDA Program became operational on February 1, 1970 and is administered pursuant to the Internal Revenue Code Section 403(b) and existing State statutes and City laws. Certain members of the QPP have the option to participate in the TDA Program, which provides a means of deferring income tax payments on their voluntary tax-deferred contributions until the period after retirement or upon withdrawal of contributions. Contributions to the TDA Program are made by the members only. The TDA Program is maintained as a separate plan.

The responsibility for the accuracy of the data, and the completeness and fairness of the presentation, including all disclosures, rests with BERS. All disclosures necessary to enable the reader to gain an understanding of the system's financial activities have been included. Analysis of the changes that affected BERS fiduciary net position is presented in the Management's Discussion and Analysis section of this report.

MAJOR LEGAL INITIATIVES - July 1, 2020 through June 30, 2024

Chapter 89 of the Laws of 2020

Provides death benefits to statutory beneficiaries of members whose death was a result of or was contributed to by COVID-19. This law provides an Accidental Death Benefit to the eligible beneficiaries of a member or a retiree who retired after March 1, 2020, where such member reported for work outside their home and contracted COVID-19 within 45 days after reporting for work, and whose death was caused by COVID-19 or where COVID-19 contributed to such member's death. Amounts payable are reduced by payments of any ordinary death benefits or option benefit paid to another statutory beneficiary.

Chapter 78 of the Laws of 2021

Establishes a COVID-19 public employee death benefit for individuals who reported to their usual place of employment or an alternate worksite at the direction of their employer on or after March 1, 2020 and such individual contracted COVID-19 within 45 days of reporting to such workplace as confirmed by a laboratory test or by a licensed physician and such individual died on or before December 31, 2022.

> Executive Office 55 Water Street, 50th Floor, New York, NY 10041 Service Center 65 Court Street, 1st Floor, Brooklyn, NY 11201 PH 929.305.3800 • 800.843.5575



Chapter 417 of the Laws of 2021

Authorizes political subdivisions to permit any public body to hold meetings remotely and without in-person access during the COVID-19 state disaster emergency until the expiration or termination of the disaster emergency.

Chapter 424 of the Laws of 2021

Expands the definition of a member for World Trade Center purposes to include certain professionals who were in qualifying employment in a qualifying period for a qualifying employer, irrespective of whether such person was a participant in such system at that time, provided they purchased service credit for a period of time that includes some or all of the qualifying period in accordance with applicable law.

Chapter 525 of the Laws of 2021

Places family workers, family assistants, family associates, and parent program assistants under the jurisdiction of BERS instead of TRS, and provides that the membership of paraprofessionals in TRS is mandatory.

Chapter 56 of the Laws of 2022

Enacted into law major components of legislation necessary to implement the state education, labor, housing and family assistance budget for the 2022-2023 state fiscal year and including some reform of the retirement law. This law provides that all BERS members, including Tier 6 members, now become vested with 5 years of credited service; suspends earnings limitations for retirees from April 9, 2022 through June 30, 2023; and revises the Tier 6 contribution rate determination process to disregard overtime between April 1, 2022 and April 1, 2024.

Chapter 364 of the Laws of 2022

Provides that as of August 15, 2022, the Board of Education shall consist of 23 voting members: 5 members elected by the Community Education Councils (one from each borough), 1 appointed by each Borough President, and 13 appointed by the Mayor. This chapter law further provides that the Chancellor of Schools and the Comptroller of the City of New York as ex officio non-voting members. As a result, the BERS Board of Trustees now consists of 27 members. See also Chapter 71 of the Laws of 2023, below.

Chapter 482 of the Laws of 2022

Amends the Freedom of Information Law (FOIL) to provide that the home address of a retiree or beneficiary of a public New York City or State retirement system shall be exempt from disclosure under the FOIL.

Chapter 561 of the Laws of 2022

Extends the deadline for members who participated in the World Trade Center rescue, recovery and cleanup operations to file a Notice of Participation until September 11, 2026.

Chapter 775 of the Laws of 2022

Increases the portion of the assets of a public New York City or State retirement system that may be invested in miscellaneous investments ("the basket clause") from 25% to 35%.

Chapter 783 of the Laws of 2022

Extends the COVID-19 Accidental Death Benefit established by Chapter 89 of 2020 to cover members who die on or before December 31, 2024.



Chapter 58 of the Laws of 2023

Amends the Open Meetings Law to provide that a public body may adopt a written procedure to allow for a member to attend a meeting through videoconferencing, if that member has a disability that prevents the member from attending this meeting in person. Such attendance counts towards quorum for a meeting of the public body.

Chapter 71 of the Laws of 2023

Postpones the effective date of Chapter 364 of the Laws of 2022 from August 15, 2022 to January 15, 2023. .

Chapter 184 of the Laws of 2023

Extends for two fiscal years, until June 30, 2025, the 7% rate of interest used by the Chief Actuary for BERS in valuing the retirement system liabilities for the purpose of computing the amount of employer contributions. The bill also extends for two fiscal years the rate of interest to be paid into certain constituent funds of the City retirement systems and the 8.25% per annum rate to be credited on AMCs and ITHP reserves for Tier 1 and Tier 2 members.

Chapter 708 of the Laws of 2023

Exempts certain Tier 4 carpenter titles who are participants in the 57/5 Plan from making the Physically Taxing Additional Member Contributions (AMCs) if their membership date makes it impossible for them to benefit from the early retirement provisions of their physically taxing titles. Members affected by this legislation would also be entitled to a refund of the Physically Taxing AMCs previously paid plus interest.

Chapter 711 of the Laws of 2023

Permits members of the New York City Teachers' Retirement System, the New York City Employees' Retirement System, or the New York City Board of Education Retirement System who are eligible to join any other New York City Retirement due to a separate, concurrent eligible employment with a participating employer to join the New York City Retirement System applicable to the second employment, provided such benefits in the first system of membership are suspended during their active membership in the subsequent retirement system.

Chapter 716 of the Laws of 2023

Ensures continued compliance with the Federal Older Workers' Benefit Protection Act by amending Tier 2, 3, and 4/6 ordinary death benefit provisions to ensure that, on an actuarial basis, the costs of providing such benefits to older members are no less than the costs of providing such benefits to younger members.

Chapter 717 of the Laws of 2023

Requires a transfer of reserves to transfer a membership between certain New York City and State retirement systems when the member has ten or more years of service credit.

Chapter 721 of the Laws of 2023

Provides for the automatic enrollment of certain new and existing employees of the City of New York eligible to join BERS unless they timely opt out of membership.

Chapter 55 of the Laws of 2024

Enacted into law major components of legislation necessary to implement the state public protection and general government budget for the 2024-2025 state fiscal year, including some reform of the retirement law. This law extends the retiree earnings limitation waiver for school employees by one year to June 30, 2025. In addition, this law extends the revised Tier 6 contribution rate determination process for an additional two plan years to December 31, 2026.



Chapter 56 of the Laws of 2024

Enacted into law major components of legislation necessary to implement the state education, labor, housing and family assistance budget for the 2024-2025 state fiscal year and including some reform of the retirement law. This law reduces the number of years used to calculate the Final Average Salary from 5 years to 3 years, for Tier 6 members of BERS. The law does not make changes to the 4-year lookback period for affected Tier 6 members. In addition, Chapter 56 provides that as of July 1, 2024, the Board of Education shall consist of 24 voting members: 1 appointed by each Borough President, 5 members elected by the Community Education Councils (one from each borough), 1 independent member who will serve as the chair of the Board, and 13 appointed by the Mayor. As a result, the BERS Board of Trustees now consists of 28 Members.

FUNDING

The financial objective of the QPP is to fund members' retirement benefits during their active service. The employer contributes amounts that, together with member contributions and investment income, would ultimately be sufficient to accumulate assets to pay benefits when due.

The Office of the Actuary establishes employer contribution rates which, expressed as a percentage of annualized covered payroll, remain approximately level from year to year. An adequate funding level provides assurance and security for payment of future benefits. In fiscal year 2024, BERS sought to maintain a level of funding within the established guidelines of the Government Accounting Standards Board ("GASB"). As per GASB 67, a defined benefit pension plan is required to report fiduciary net position as a percentage of plan's total pension liability. As of June 30th, 2024, the QPP's fiduciary net position represents 97.43% of the total pension liability. The funded status of the QPP is expressed by the relationship of assets to liabilities. The ratio of actuarial value of assets to the Entry Age Actuarial Accrued liability stands at 94.3% as of June 30th, 2022. Funding status has been discussed in detail in the actuarial section of this report.

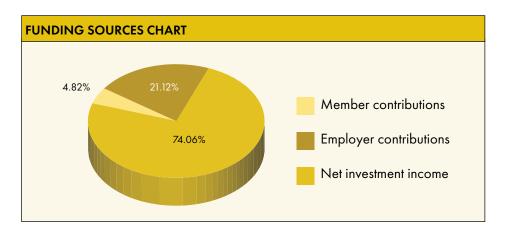
Funding Sources

The chart below summarizes the contribution funding sources for fiscal year 2024 for the QPP.

Funds	Percentage	Contribution (in thousands)
Member Contributions	4.82%	\$ 56,552
Employer Contributions	21.12%	\$ 247,721
Net Investment Income	74.06%	\$ 868,593
Total	100.00%	\$ 1,172,866

Contributions to the TDA program are made on a voluntary basis by certain eligible members of the QPP. TDA members who elect to participate in a fixed return fund investment program accounts are credited with the statutory annual rate of interest, currently 7% for members represented by the United Federation of Teachers and 8.25% for all other members. Members can also elect to participate in a variable return fund program. Beginning January 1, 2024, BERS' TDA participants have the option to make contributions on a Roth basis.





INVESTMENTS

Investment Summary

The System's assets are invested in two investment programs. These are the fixed return fund, which is managed by BERS, and the variable return fund, consisting primarily of equity securities, which is managed by the Teachers' Retirement System ("TRS").

The Board of Education Retirement System Total Fund from the fixed return program returned 10.55%, net of management fees, for the fiscal year ending June 2024, compared to the BERS Policy Benchmark of 13.71%. The gross performance for the fiscal year ranked 34th percentile among the Wilshire public plans with assets greater than \$1 billion peer group. The Fund increased in value and ended the fiscal year at \$9.31 billion (compared to \$8.49 billion at the end of previous fiscal year). Over the 5-year period ending June 2024, the Fund averaged a 8.12% annual net return versus 8.39% for the benchmark. The 5-year performance positioned the Fund in the top quartile of peers group.

As of June 2024, the variable investments held at TRS increased to \$908.95 million from \$768.29 million in FY2023. During FY2024, the variable return fund performance was at 17.13% versus 15.58% during FY2023.

Investment Description¹

The Trustees establish an Investment Policy and asset allocation target after considering the long-term growth prospects of a diversified portfolio of investments and the expected costs of administering participants' benefits. Asset allocation refers to the percentages of the BERS Fund assets that are in stocks, bonds, and private markets investments (also referred to alternatives and real assets investments). In order to participate in the performance of the broad markets while keeping expenses contained, the Fund invests in passive or indexed strategies for much of its U.S. public equity allocation. For BERS, diversification and the focus on low investment expenses and fees are critical for long-term planning.

The approved asset allocation implementation plan continues to commit assets to private equity, real estate, and private infrastructure investments, while reducing U.S. equities and developed market non-U.S. equities. During the first half of the fiscal year, the Trustees adopted a new long-term asset allocation target mix. Broad changes to Total Equity, Total Fixed

¹ Segal Marco Advisors, Report on Investment Activity



Income, Total Alternatives and Real Assets remained very similar, while structural changes within each broad segment were more pronounced. The underlying changes included eliminating Inflation Linked Bonds, reducing High Yield Bonds, Non-US Developed Equity and Private Equity and increases to Core Fixed Income and US Equity as well as establishing a target for Cash and Cash Equivalents.

The Fund's target asset mix, approved in FY2024, is 47% Equity (including US and Non-US), 13% Alternative Private Markets (including Private equities, Real Estate and Infrastructure), 28% Fixed Income, and 12% Real Assets. Over the long-term, which is the framework for considering the term structure of the Plan's liabilities, we expect our asset allocation will provide asset base growth to meet the benefit payments while protecting through diversification.

Investment Policy

BERS' investment policy statement, ratified by the Board of Trustees in January 2009 and amended in October 2011, in January 2013, February 2015, June 2016, April 2020, November 2021 and December 2021. It addresses investment objectives, investment philosophy and strategy, monitoring and evaluating performance, risk management, security lending protocol and rebalancing investment mix. The investment policy is available upon request.

Investment Valuation

Investments are reported at fair value. Fair value is defined as the quoted market price at the end of the last trading day for the specified period, except for alternative investments which are considered long-term and illiquid in nature. Alternative investments consist of limited partnership structures invested in privately held investments for which exchange quotations are not readily available and are valued at estimated fair value. Fair value at fiscal year-end is based on the fair value of net assets reported in the most recently available partnership's capital account statements from the general partner, adjusted for any subsequent contributions, distributions, management fees and changes in values of foreign currency. They include investments held within Hedge Funds, Private Equity, Real Estate, Opportunistic-Fixed Income, and Infrastructure.

Purchases and sales of securities are reflected on the trade date. Dividend income is recorded on the ex-dividend date. Interest income is recorded as earned on an accrual basis.

ECONOMIC AND MARKET COMMENT²

The BERS Fund/Plan is diversified across U.S. and non-U.S. markets. U.S. equities continue to rise amidst favorable corporate earnings and the likelihood of moderate slowdown rather than a recession. Global markets have remained resilient against a backdrop of global macro-economic issues such as higher inflation, increased borrowing costs and global conflicts. Non-U.S. developed market equities also experienced positive performance during the fiscal year. Emerging markets were also positive for the fiscal year, slightly outpacing developing markets.

Fixed income sectors were positive except for long-term bonds. Within the U.S. fixed income market, lower quality and shorter duration fixed income investments outpaced non-spread and longer duration fixed income investments for the fiscal year.

² Segal Marco Advisors, Report on Investment Activity



OTHER INFORMATION

Internal Control

The Executive Director is responsible for establishing and maintaining an internal control structure designed to provide reasonable assurance that the assets of the system are safeguarded and to ensure that adequate accounting data are compiled to allow for the preparation of financial statements in conformity with generally accepted accounting principles. The System's internal control practices are designed to provide reasonable assurance that these objectives are met.

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.

Accounting and Reporting

This ACFR has been prepared in conformity with principles of governmental accounting and reporting, promulgated by the Governmental Accounting Standards Board ("GASB"), and according to guidelines adopted and published by the Government Finance Officers Association of the United States and Canada ("GFOA").

The QPP as well as the TDA Program use the accrual basis of accounting where the measurement focus is on a flow of economic resources. Revenues are recognized in the accounting period in which they are earned, and expenses are recognized in the period incurred. Contributions from the members are recognized when respective employers make payroll deductions from the QPP members and the TDA Program participants. Employer contributions to the QPP are recognized when due, and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of governing the QPP and the TDA Program.

Independent Audit

The five major retirement systems of the City of New York are required to undergo an annual audit by a firm of certified public accountants, in accordance with generally accepted auditing standards. Grant Thornton LLP, whose opinion is presented in the Financial Section of this report, conducted the audit of the financial statements of BERS for the fiscal year ended June 30, 2024.

Professional Services

The Chief Actuary provides actuarial services for the five major pension systems maintained by the City. The Chief Actuary's actuarial report and certification are included in this ACFR. The New York City Comptroller and the Teachers' Retirement System retain investment managers to assist in the execution of investment policy in accordance with statutory authority, Retirement Board decisions and standard governing fiduciary practices.

Details about the consulting and professional services are mentioned in the introductory section, page 12. Schedule of the investment management fees and the schedule of payments of commissions to brokers are found in the investment section, page 97-108.



Awards

The GFOA awarded a Certificate of Achievement for Excellence in Financial Reporting to BERS for its ACFR for the fiscal year ended June 30, 2023. The Certificate of Achievement is a prestigious national award, recognizing conformance with the highest standards for preparation of a state and local government finance reports. To be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized annual comprehensive financial report, whose contents conform to program standards. The ACFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. BERS has received a Certificate of Achievement over the last thirty-eight consecutive years. We believe our current report continues to conform to the Certificate of Achievement program requirements and it will be submitted to the GFOA.

Acknowledgments

The dedicated service of the managers and staff of BERS made the preparation of this ACFR, on a timely basis, possible. In addition, our appreciation is extended to those members of the staffs of the Bureaus of Accountancy and Asset Management of the New York City Comptroller's Office and the Office of the Actuary who worked closely with the BERS personnel in the compilation of this report. We hope that the members of the Retirement Board, officials of the Department of Education of the City of New York, our members and the citizens of the City will find this report informative and helpful.

Respectfully submitted,

Sanford R. Rich **Executive Director**



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Prepared By:

Sanford R. Rich, Executive Director Chithra Subramaniam, Director of Fiscal Operations

Actuary:

Marek Tyszkiewicz, Chief Actuary

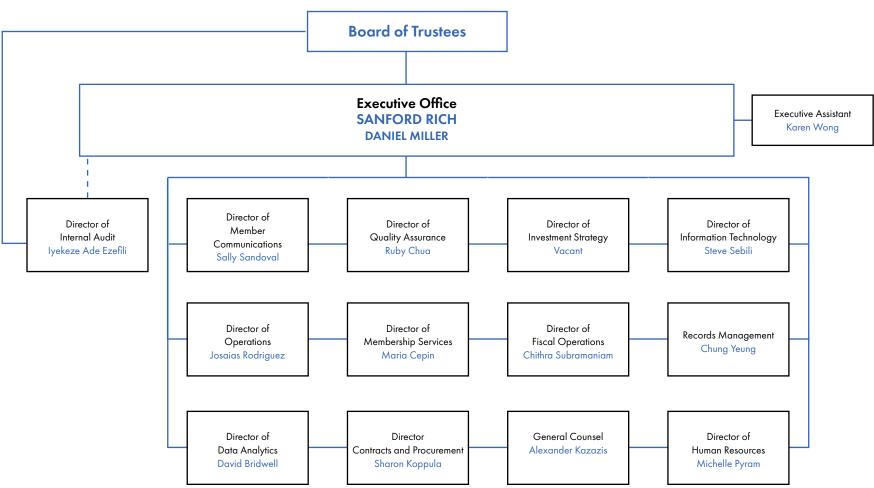
Custodian of the Funds:

Brad Lander, Comptroller of the City of New York Teachers' Retirement System of the City of New York

Headquarters Address:

Board of Education Retirement System of the City of New York 55 Water Street, 50th Floor, New York, New York 10041







Consulting and Professional Services

Actuary

Office of the Actuary 255 Greenwich Street, 9th Floor New York, NY 10007

Auditors

Grant Thornton LLP 757 Third Ave., 9th Floor New York, NY 10017-2013

Custodian Of Funds

Office of the Comptroller 1 Centre Street New York, NY 10007

Teachers' Retirement System of the City of New York 55 Water Street New York, NY 10041

HR Research and Advisory Services

McLean & Company 3960 Howard Hughes Parkway, Suite 500 Las Vegas, NV 89169

Internal Audit Consultant

Baker Tilly Virchow Krause, LLP 2801 Via Fortuna, Suite 300 Austin, TX 78746

Pension Benchmarking Services

CEM Benchmarking 372 Bay Street, Suite 1000 Toronto, Ontario

Legal Consultant

Groom Law Group, Chartered Department 0589 Washington, DC 20073

Investment Consultant

Aksia TorreyCove Capital Partners LLC 10180 Barnes Canyon Road, Suite 200 San Diego, CA 92121

Segal Marco Advisors 333 West 34th Street New York, NY 10001

Architectural Consultant

The Switzer Group Inc. 475 Park Avenue South, New York, NY 10016



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Presented to

New York City Board of Education Retirement System Qualified Pension Plan

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

June 30, 2023

Christopher P. Morrill

Executive Director/CEO

JAPANESE ZELKOVA | BROOKLYN **ECOLOGICAL BENEFITS** Stormwater intercepted each year 959 gallons Energy conserved each year 1,052 kWh Air pollutants removed each year 2 pounds

FINANCIAL

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Like a tree's roots, solid retirement savings provide stability for life's storms.

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REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

To the Board of Trustees of New York City Board of Education Retirement System

Opinion

We have audited the combining financial statements of New York City Board of Education Retirement System Qualified Pension Plan and the New York City Board of Education Retirement System Tax-Deferred Annuity Program, which collectively comprise the New York City Board of Education Retirement System (the "System"), which comprise the combining statements of fiduciary net position as of June 30, 2024 and 2023, and the related combining statements of changes in fiduciary net position for the years then ended, and the related notes to the combining financial statements, which collectively comprise the System's basic combining financial statements.

In our opinion, the accompanying combining financial statements present fairly, in all material respects, the combining fiduciary net position of the System as of June 30, 2024 and 2023, and the changes in the combining fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for opinion

We conducted our audits of the financial statements in accordance with auditing standards generally accepted in the United States of America (US GAAS). Our responsibilities under those standards are further described in the Auditor's 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 audits. 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 combining financial statements in accordance with accounting principles generally accepted in the United States of America, 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.

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Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the combining financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's 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 US GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the combining financial statements.

In performing an audit in accordance with US GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the combining 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 combining 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

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule 1 - schedules of changes in the employer's net pension liability and related ratios for each of the ten years in the period ended June 30, 2024, schedule 2 - schedules of employer contributions for each of the ten years in the period ended June 30, 2024, and schedule 3 - schedule of investment returns for each of the ten years in the period ended June 30, 2024, be presented to supplement the basic combining financial statements. Such information is the responsibility of management and, although not a part of the basic combining 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 combining financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with US GAAS. These limited procedures 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 combining financial statements, and other knowledge we obtained during our audit of the basic combining 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 audits were conducted for the purpose of forming an opinion on the basic combining financial statements as a whole. The schedule of investment expenses, schedule of administrative expenses and schedule of direct payments to consultants ("Additional Supplementary Information") for the year ended June 30, 2024, are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such supplementary 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 combining financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic combining financial statements and certain additional procedures. These additional procedures included comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic combining financial statements or to the basic combining financial statements themselves, and other additional procedures in accordance with US GAAS. In our opinion, the Additional Supplementary Information is fairly stated, in all material respects, in relation to the basic combining financial statements as a whole.

Other information

Management is responsible for the other information. The other information comprises the accompanying Introductory Section, Investment Section, Actuarial Section, and Statistical Section, but does not include the basic combining financial statements and our auditor's report thereon. Our opinion on the basic combining 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 combining financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic combining 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.

New York, New York

Sunt Thornton LLP

October 29, 2024 (except for the Additional Supplementary Information and the Other information section of our report, as to which the date is December 18, 2024)

Management's Discussion and Analysis (UNAUDITED) For the Years Ended June 30, 2024 and 2023

This narrative discussion and analysis of the New York City Board of Education Retirement System's ("BERS", "Funds", the "Plan" or the "System") financial performance provides an overview of the System's combining financial activities for the Fiscal Years ended June 30, 2024 and 2023. It is meant to assist the reader in understanding the System's combining financial statements by providing an overall review of the combining financial activities during the years, the effects of significant changes, and a comparison of the prior years' activities and results. This discussion and analysis is intended to be read in conjunction with the System's combining financial statements. The System administers the BERS Qualified Pension Plan (the "QPP") and the BERS Tax-Deferred Annuity Program (the "TDA Program").

OVERVIEW OF COMBINING FINANCIAL STATEMENTS

The following discussion and analysis is intended to serve as an introduction to the System's combining financial statements. The combining financial statements, which are prepared in accordance with Governmental Accounting Standards Board ("GASB") pronouncements and include the financial statements of the QPP and the TDA Program, are as follows:

- The Combining Statements of Fiduciary Net Position presents the financial position of the System at fiscal year-end. It provides information about: the nature and amounts of resources with present service capacity that the System presently controls (assets); consumption of net assets by the System that is applicable to a future reporting period (deferred outflow of resources); present obligations to sacrifice resources that the System has little or no discretion to avoid (liabilities); and acquisition of net assets by the System that is applicable to a future reporting period (deferred inflow of resources) with the difference between assets/deferred outflow of resources and liabilities/ deferred inflow of resources being reported as net position. Investments are shown at fair value. All other assets and liabilities are determined on an accrual basis.
- The Combining Statements of Changes in Fiduciary Net Position presents the results of activities during the fiscal year. All changes affecting the assets/deferred outflow and liabilities/deferred inflow of the System are reflected on an accrual basis when the activity occurred, regardless of the timing of the related cash flows. In that regard, changes in the fair values of investments are included in the year's activity as net appreciation (depreciation) in fair value of investments.
- The Notes to Combining Financial Statements provide additional information that is essential to a full understanding of the data provided in the combining financial statements. The notes present information about the System's accounting policies, significant account balances and activities, material risks, obligations, contingencies and subsequent events, if any.
- Required Supplementary Information (Unaudited) as required by GASB includes the management discussion and analysis (this section) and information presented following the Notes to combining financial statements.

FINANCIAL HIGHLIGHTS

QPP Fiduciary Net Position

QPP's net position restricted for pension benefits reached \$6.85 billion during Fiscal Year 2024, reflecting a 11.36 % increase compared to Fiscal Year 2023. This growth was primarily driven by a rise in the fair value of investments. The fair value of investments, which includes the collateral from security lending, grew from \$9.08 billion in Fiscal Year 2023 to \$10.04 billion in Fiscal Year 2024, marking a 10.58% increase. Return on investments stood at 8.65%.

During Fiscal Year 2023, QPP's net position restricted for pension benefits totaled \$6.15 billion, an increase of 4.65% from Fiscal Year 2022. The increase was primarily attributable to the rise in the fair value of investments. The fair value of investments, including the collateral from security lending, stood at \$9.08 billion in Fiscal Year 2023, an increase of 6.46% from the fiscal year 2022. Return on investments stood at 7.44%.

QPP Fiduciary Net Position June 30, 2024, 2023, and 2022 (In thousands)

	2024	2023	2022
Assets:			
Cash	\$ 6,802	\$ 2,864	\$ 7,556
Receivables	260,512	169,655	212,230
Investments, at fair value	9,373,988	8,564,948	<i>7</i> ,991,279
Collateral from securities lending	671,994	519, <i>7</i> 42	<i>5</i> 41, <i>7</i> 60
Other	327,579	199,888	319,776
Total assets	10,640,875	9,457,097	9,072,601
Liabilities:			
Accounts payable	92,313	65,414	63,581
Payable for investment securities purchased	223,823	156,536	204,459
Accrued benefits payable	15,957	13,604	12,621
Due to the TDA Program's fixed return fund from the System	2,788,667	2,552,317	2,374,096
Payables for securities lending	671,994	519,742	541,760
Total liabilities	3,792,754	3,307,613	3,196,517
Net position restricted for pension benefits	\$ 6,848,121	\$ 6,149,484	\$ 5,876,084

Management's Discussion and Analysis (UNAUDITED) June 30, 2024 and 2023 (Cont'd)

Total receivables increased from \$169.66 million in Fiscal Year 2023 to \$260.51 million in Fiscal Year 2024, an increase of 53.55%. The increase in the receivables was primarily due to an increase in the receivables for investment securities sold. Receivables for investment securities sold totaled \$173.59 million in Fiscal Year 2024, an increase of 89.13% from Fiscal Year 2023. Payables for investment securities purchased also increased from \$156.54 million in Fiscal Year 2023 to \$223.82 million in Fiscal Year 2024, an increase of 42.99% from Fiscal Year 2023.

At the close of Fiscal Year 2023, total receivables decreased from \$212.23 million in Fiscal Year 2022 to \$169.66 million in Fiscal Year 2023, a decrease of 20.06%. The decrease in the receivables was mainly caused by the decrease in the receivables for investment securities sold. Receivables for investment securities sold totaled \$91.79 million in Fiscal Year 2023, a decrease of 33.63% from Fiscal Year 2022. Payables for investment securities purchased also decreased from \$204.46 million in Fiscal Year 2022 to \$156.54 million in Fiscal Year 2023, a decrease of 23.44% from Fiscal Year 2022.

The QPP's receivables and payables for investments are primarily generated through the timing differences between the trade and settlement dates for investment securities purchased or sold.

As of June 30, 2024, member loans totaled \$55.18 million, reflecting a 8.52% increase compared to Fiscal Year 2023.

The account "Due to the TDA Program's fixed return fund from the System" represents a liability to the TDA program since the TDA Program assets are pooled with QPP assets for investment purposes. The liability for Fiscal Year 2024 stood at \$2.79 billion, an increase of 9.26% from Fiscal Year 2023. This liability includes the TDA members' account balances for deposits in the fixed investment program.

Changes in QPP Fiduciary Net Position

During Fiscal Year 2024, the QPP member contributions increased to \$56.55 million, an increase of 13.54% from Fiscal Year 2023. In Fiscal Year 2023, the QPP member contributions stood at \$49.81 million, an increase of 0.44% from Fiscal Year 2022 contributions of \$49.59 million.

Changes in QPP Program Fiduciary Net Position Years ended June 30, 2024, 2023, and 2022 (In thousands)

·		2024	2023	2022
Additions:				
Member contributions	\$	56,552	\$ 49,810	\$ 49,591
Employer contributions		247,721	233,546	262,404
Net investment income (loss) before securities lending transaction		866,933	674,345	(805,356)
Net securities lending income		1,660	1,747	1,692
TDA Program's interest income		(220,785)	(201,361)	(191,054)
Other - receipts from (payments to) other retirement systems				
and other revenues/expenses		164,300	(88,699)	(124,188)
Total additions		1,116,381	669,388	(806,911)
Deductions:				
Benefit payments and withdrawals		377,494	359,271	325,679
Administrative expenses		40,250	36,717	35,566
Total deductions		417,744	395,988	361,245
Net increase (decrease) in net position		698,637	273,400	(1,168,156)
Net position restricted for pension benefits:				
Beginning of year	_	6,149,484	 5,876,084	 7,044,240
End of year	<u>\$</u>	6,848,121	\$ 6,149,484	\$ 5,876,084

Employer contributions received through the QPP Program increased from \$233.55 million in the Fiscal Year 2023 to \$247.72 million in the Fiscal Year 2024, an increase of 6.07%. The employer contributions are made on a statutory basis based on the one-year lag methodology.

Fiscal Year 2024 reported a net investment income before securities lending transactions of \$866.93 million. Return on investments increased from 7.44% in Fiscal Year 2023 to 8.65% in Fiscal Year 2024.

The benefit payments and withdrawals increased from \$359.27 million in Fiscal Year 2023 to \$377.49 million in Fiscal Year 2024, reflecting a 5.07% increase. In Fiscal Year 2024, benefit payments to retirees grew by 5.45%, death benefits increased by 14.66% while refund payments saw a 14.03% decline.

During Fiscal Year 2023, the benefits payments and withdrawals increased by 10.31%, from \$325.68 million in Fiscal Year 2022 to \$359.27 million in Fiscal Year 2023. The increase was primarily driven by a 10.13% increase in benefit payments to retirees.

Management's Discussion and Analysis (UNAUDITED) June 30, 2024 and 2023 (Cont'd)

Administrative expenses totaled \$40.25 million in Fiscal Year 2024. Included in the administrative expense is the depreciation expense of \$7.85 million of the System's Enterprise Resource Planning ("ERP") system. During Fiscal Year 2023, administrative expenses stood at \$36.72 million, an increase of 3.24% from Fiscal Year 2022.

Interest to the TDA Program includes statutory interest credited on the member's account balances on the TDA Program's fixed return fund. The statutory rate of interest is currently 7.0% for United Federation of Teachers ("UFT") members and 8.25% for all other members. During Fiscal Year 2024, the interest to the TDA Program's fixed return fund stood at \$202.19 million, an increase of \$16.90 million from Fiscal Year 2023. The table below displays revenue (expenses) to the System due to any surplus or deficiency between the actual rate of return on the fixed investments and the statutory rate.

Net Investment Income (Loss) to the System from TDA Member Holdings in Fixed Return Fund*: Years ended June 30, 2024, 2023, 2022, 2021, and 2020 (In thousands)

	2024	2023	2022	2021	2020
Net investment income (loss)	\$ 855,367	\$ 665,751	\$ (791,687)	\$ 1,867,031	\$ 364,638
TDA percent of fixed assets (average)	28.15%	28.17%	25.21%	24.60%	26.22%
Investment income (loss) on account of					
TDA investment	240,786	187,528	(199,622)	459,255	95,601
Less: statutory interest to TDA	 (202,222)	(185,298)	(172,365)	(155,904)	(142,223)
Revenue (expense) to the System	\$ 38,564	\$ 2,230	\$ (371,987)	\$ 303,351	\$ (46,622)

^{*}Includes security-lending income

TDA Program Fiduciary Net Position

The TDA program's net position restricted for TDA benefits stood at \$3.37 billion as on June 30, 2024, a net increase of 7.26% from Fiscal Year 2023. The increase in Fiscal Year 2024 was primarily due to an increase in the fair value of investments. Amount due to the TDA Program's fixed return fund from the System increased from \$2.55 billion in Fiscal Year 2023 to \$2.79 billion in Fiscal Year 2024, an increase of 9.26%. Fair value of variable investments including collateral security lending stood at \$888.02 million, an increase of 19.50%, from Fiscal Year 2023.

During Fiscal Year 2023, the TDA program's net position restricted for TDA benefits increased to \$3.14 billion, a net increase of 14.25% from Fiscal Year 2022. The increase in Fiscal Year 2023 was primarily due to an increase in the fair value of investments. Amount due to the TDA Program's fixed return fund from the System stood at \$2.55 billion in Fiscal Year 2023, an increase of 7.51% from Fiscal Year 2022. Fair value of variable investments including collateral security lending increased from \$637.15 million in Fiscal Year 2022 to \$743.09 million in Fiscal Year 2023.

TDA Program Fiduciary Net Position June 30, 2024, 2023, and 2022 (In thousands)

	2024	2023	2022
Assets:			
Cash	\$ 693	\$ 487	\$ 556
Receivables	52,277	45,159	48,802
Due to the TDA Program's fixed return fund from the System	2,788,667	2,552,317	2,374,096
Investments, at fair value	829,646	702,227	602,475
Collateral from securities lending	 58,370	 40,867	 34,684
Total assets	 3,729,653	 3,341,057	3,060,613
Liabilities:			
Other liability	289,900	155,247	269,491
Payable for investment securities purchased	5,805	362	529
Accrued benefits payable	8,973	5,915	8,681
Payables for securities lending transactions	 58,370	 40,867	34,684
Total liabilities	 363,048	 202,391	 313,385
Net position restricted for TDA benefits	\$ 3,366,605	\$ 3,138,666	\$ 2,747,228

Receivables and payables for investment stood at \$6.29 million and \$5.81 million, respectively, as of June 30, 2024. Payables for collateral security lending stood at \$58.37 million. The TDA Program's receivables and payables are primarily generated through the timing differences between the trade and settlement dates for investment securities purchased or sold within the variable return fund. Total receivables increased by 15.76% from Fiscal Year 2023. The receivables include outstanding member loans from the TDA program, which increased from \$43.35 million in the Fiscal Year 2023 to \$45.30 million in the Fiscal Year 2024, an increase of 4.49% from Fiscal Year 2023.

Management's Discussion and Analysis (UNAUDITED) June 30, 2024 and 2023 (Cont'd)

At the end of Fiscal Year 2023, total receivables decreased by 7.46% from Fiscal Year 2022. Included in these receivables are the TDA Program's member loans outstanding, which decreased from \$47.15 million in the Fiscal Year 2022 to \$43.35 million in the Fiscal Year 2023.

Changes in TDA Program Fiduciary Net Position

During Fiscal Year 2024, member contributions to the TDA Program was at \$127.82 million, contributions increased by 9.65% from fiscal year 2023. Effective January 1, 2024, the System introduced the ROTH program for the TDA participants.

Net investment income increased from of \$112.73 million in the Fiscal Year 2023 to \$141.62 million in the Fiscal Year 2024, an increase of \$28.89 million.

During Fiscal Year 2023, member contributions to the TDA Program was at \$116.57 million, an increase of 4.37% from fiscal year 2022. Net investment income increased from a net loss of \$119.08 million in the Fiscal Year 2022 to a net gain of \$112.73 million in the Fiscal Year 2023, an increase of \$231.82 million.

Changes in TDA Program Fiduciary Net Position Years ended June 30, 2024, 2023, and 2022 (In thousands)

		2024	2023	2022
Additions:				
Member contributions	\$	127,817	\$ 116,569	\$ 111,685
Net investment income (loss) before securities lending transaction		141,492	112,569	(119,188)
Net securities lending income		128	161	102
TDA Program's interest income		220,785	201,361	191,054
Other - receipts from (payments to) other retirement systems				
and other revenues/expenses		(137,326)	<i>7</i> 1,665	 115,459
Total additions	_	352,896	 502,325	 299,112
Deductions:				
Benefit payments and withdrawals		124,658	110,577	95,317
Administrative expenses		299	 310	 285
Total deductions	_	124,957	 110,887	 95,602
Net increase in net position		227,939	391,438	203,510
Net position restricted for TDA benefits:				
Beginning of year		3,138,666	2,747,228	 2,543,718
End of year	<u>\$</u>	3,366,605	\$ 3,138,666	\$ 2,747,228

Benefit payments and withdrawals increased from \$110.58 million in Fiscal Year 2023 to \$124.66 million in Fiscal Year 2024, an increase of \$14.08 million or 12.73%. The death benefit payments increased from \$28.51 million in Fiscal Year 2023 to \$32.22 million in Fiscal Year 2024, an increase of 13% from Fiscal Year 2023. The refund payments stood at \$91.96 million in Fiscal Year 2024, an increase of \$10.29 million from Fiscal Year 2023.

During Fiscal Year 2023, the benefit payments and withdrawals stood at \$110.58 million, an increase of \$15.26 million from Fiscal Year 2022. The increase was primarily due to the net impact of the benefit payments towards death benefits and refund payments. The death benefit payments increased from \$22.60 million in Fiscal Year 2022 to \$28.51 million in Fiscal Year 2023. The refund payments totaled \$81.66 million in fiscal year 2023, an increase of \$9.36 million from fiscal year 2022.

Investment Summary

Investments held by BERS's QPP and TDA Programs (which include the fixed fund and the variable fund programs), including collateral from securities lending transactions from both programs, are listed according to their investment classification in the following table:

Investment Summary Fair Value (In thousands)

		June 30, 2024	June 30, 2023	June 30, 2022
Short-term investments	\$	146,212	\$ 126,663	\$ 270,497
Debt (fixed income) securities	2	2,473,377	2,146,559	2,103,604
Equity securities		4,757,534	4,555,898	4,147,837
Collective trust funds		84,411	87,999	92,540
Alternative investments		2,742,100	2,350,056	1,979,276
Collateral from securities lending		730,364	560,609	 576,444
Total	\$ 10),933,998	\$ 9,827,784	\$ 9,170,198

Because the QPP's liabilities are of a long-term nature, the assets of the QPP and the TDA Programs are invested with a long-term investment horizon. Assets are invested in a diversified portfolio of capital market securities. Investments in these assets are expected to produce higher returns but are also subject to greater volatility and may produce negative returns. The System's investments increased by 11.26% in Fiscal Year 2024 and 7.17% in Fiscal Year 2023.

CONTACT INFORMATION

This financial report is designed to provide a general overview of the New York City Board of Education Retirement System's finances. Questions concerning any data provided in this report or requests for additional information should be directed to the Director of Fiscal Operations, New York City Board of Education Retirement System, 55 Water Street, 50th Floor, New York, New York 10041.

Combining Statement of Fiduciary Net Position June 30, 2024 (In thousands)

	Q	PP	TDA Program	Eliminations	Total
ASSETS	¢ 40	00	¢ 400	¢	¢ 7.405
Cash	\$ 6,8	02	\$ 693	\$ -	\$ 7,495
Receivables:	170.5	00			170.005
Investment securities sold	173,5		6,293	-	179,885
Accrued interest and dividends	29,6		688	-	30,362
Member loans	55,1		45,296	-	100,472
Other	2,0				2,070
Total receivables	260,5	012	52,277		312,789
Investments - at fair value: (Notes 2 and 3)					
Fixed return funds:					
Short-term investments:	05.00				05.000
Commercial paper	25,00		-	-	25,000
Short-term investment fund	91,48		-	-	91,488
T-bills and discount notes	22,89		-	-	22,890
Debt (fixed income) securities	2,473,37		-	-	2,473,377
Equity securities	3,857,43	88	-	-	3,857,438
Collective trust funds:					
International equity	2,65	6	-	-	2,656
Domestic equity	61,46	51	-	-	61,461
Mortgage debt security	8,92	26	-	-	8,926
Fixed income	11,36	8	=	-	11,368
Alternative investments	2,742,10	00	-	-	2,742,100
Collateral from securities lending	666,55	57	-	-	666,557
Variable return funds:					
Short-term investments	58	3	6,251	-	6,834
Debt (fixed income) securities		-	-	-	-
Equities	76,70	01	823,395	-	900,096
Collateral from securities lending	5,4	37	58,370	_	63,807
Total investments	10,045,9		888,016		10,933,998
iolai ilivesimenis		<u>=</u>			10,700,770
Due to the TDA Program's fixed return fund from System		-	2,788,667	(2,788,667)	-
Other assets	327,5			(289,900)	37,679
Total assets	10,640,8	75	3,729,653	(3,078,567)	11,291,961
LIABILITIES					
Accounts payable	92,3	313	-	-	92,313
Other liability		-	289,900	(289,900)	-
Payable for investment securities purchased	223,8	23	5,805	-	229,628
Accrued benefits payable	15,9	57	8,973	-	24,930
Due to the TDA Program's fixed return fund from System	2,788,6		-	(2,788,667)	-
Payables for securities lending	671,9		58,370	-	730,364
Total liabilities	3,792,7		363,048	(3,078,567)	1,077,235
Net position restricted for benefits:					
Net position restricted for QPP (Qualified Pension Plan) benefits	6,848,12	21	-	-	6,848,121
Net position restricted for TDA (Tax-Deferred Annuity) benefits		_	3,366,605	-	3,366,605
Total net position restricted for benefits	\$ 6,848,1	121	\$ 3,366,605	\$ -	\$ 10,214,726
ioidi nei posiiion resiricled for benefits	 	=	- 2,300,000	<u> </u>	

The accompanying notes are an integral part of this combining financial statement.

		QPP	TD	Program	Eliminations	Total
ASSETS						
Cash	\$	2,864	\$	487	\$ -	\$ 3,351
Receivables:						
Investment securities sold		91,786		1,077	-	92,863
Accrued interest and dividends		26,603		<i>7</i> 33	-	27,336
Member loans		50,845		43,349	-	94,194
Other		421				 421
Total receivables		169,655		45,159		 214,814
Investments - at fair value: (Notes 2 and 3)						
Fixed return funds:						
Short-term investments:						
Commercial paper		-		-	-	-
Short-term investment fund		101,1 <i>7</i> 9		-	-	101,1 <i>7</i> 9
T-bills and discount notes		20,037		-	-	20,037
Debt (fixed income) securities		2,146,559		-	-	2,146,559
Equity securities		3,793,046		-	=	3,793,046
Collective trust funds:						
International equity		2,563		-	-	2,563
Domestic equity		65,141		-	-	65,141
Mortgage debt security		8,879		-	-	8,879
Fixed income		11,416		-	-	11,416
Alternative investments		2,350,056		-	-	2,350,056
Collateral from securities lending		515,897		-	-	515,897
Variable return funds:						
Short-term investments		469		4,978	-	5,447
Debt (fixed income) securities		-		-	-	=
Equities		65,603		697,249	-	762,852
Collateral from securities lending		3,845		40,867	-	44,712
Total investments		9,084,690		743,094		9,827,784
Due to the TDA Program's fixed return fund from System		-	2	,552,317	(2,552,317)	-
Other assets		199,888		-	(155,247)	44,641
Total assets		9,457,097	3	,341,057	(2,707,564)	10,090,590
LIABILITIES						
Accounts payable		65,414		-	-	65,414
Other liability		-		155,247	(155,247)	-
Payable for investment securities purchased		156,536		362	-	156,898
Accrued benefits payable		13,604		5,915	-	19,519
Due to the TDA Program's fixed return fund from System		2,552,317		-	(2,552,317)	-
Payables for securities lending		519, <i>7</i> 42		40,867	-	560,609
Total liabilities	_	3,307,613		202,391	(2,707,564)	802,440
Net position restricted for benefits:						
Net position restricted for QPP (Qualified Pension Plan) benefits		6,149,484		-	-	6,149,484
Net position restricted for TDA (Tax-Deferred Annuity) benefits		-	3	,138,666	-	3,138,666
Total net position restricted for benefits	\$	6,149,484		,138,666	\$ -	\$ 9,288,150

The accompanying notes are an integral part of this combining financial statement.

Combining Statement of Changes in Fiduciary Net Position Year Ended June 30, 2024 (In thousands)

		QPP	TDA Program	Total
Additions				
Contributions:				
Member contributions	\$	56,552	\$ 127,817	\$ 184,369
Employer contributions		247,721	 	 247,721
Total contributions		304,273	 127,817	 432,090
Investment income:				
Interest income		133,524	372	133,896
Dividend income		97,696	12, <i>7</i> 11	110,407
Net appreciation in fair value of investments		724,174	 133,375	 857,549
Total investment income		955,394	146,458	1,101,852
Less - investment expenses		(88,461)	 (4,966)	 (93,427)
Net investment income, before securities				
lending transactions		866,933	 141,492	 1,008,425
Securities lending transactions:				
Securities lending income		1,844	142	1,986
Securities lending fees		(184)	(14)	(198)
Net securities lending income		1,660	 128	 1,788
Net investment income		868,593	141,620	1,010,213
Other - receipts from (payments to) other retirement systems				
and other revenues/expenses		164,300	(137,326)	26,9 <i>7</i> 4
TDA Program's interest income		(220,785)	220,785	-
Total additions		1,116,381	352,896	1,469,277
Deductions				
Benefit payments and withdrawals		377,494	124,658	502,152
Administrative expenses		40,250	299	40,549
Total deductions		417,744	124,957	542,701
Net increase in net position		698,637	227,939	926,576
Net position restricted for benefits:				
Beginning of year		6,149,484	 3,138,666	 9,288,150
End of year	<u>\$</u>	6,848,121	\$ 3,366,605	\$ 10,214,726

The accompanying notes are an integral part of this combining financial statement.

	QPP		TDA Program	Total
Additions				
Contributions:				
Member contributions	\$ 49,810	\$	116,569	\$ 166,379
Employer contributions	 233,546		-	 233,546
Total contributions	 283,356		116,569	 399,925
Investment income:				
Interest income	124,400		3,793	128,193
Dividend income	100,229		12,044	112,273
Net appreciation in fair value of investments	516,847		98,8 <i>7</i> 4	615, <i>7</i> 21
Total investment income	<i>7</i> 41,476		114,711	856,187
Less - investment expenses	(67,131)		(2,142)	(69,273)
Net investment income (loss), before securities				_
lending transactions	 674,345	·	112,569	 786,914
Securities lending transactions:				
Securities lending income	1,939		1 <i>7</i> 8	2,11 <i>7</i>
Securities lending fees	(192)		(17)	(209)
Net securities lending income	1,747		161	1,908
Net investment income	 676,092		112,730	 788,822
Other - (payments to) receipts from other retirement systems				
and other revenues/expenses	(88,699)		<i>7</i> 1,665	(17,034)
TDA Program's interest income	(201,361)		201,361	-
Total additions	669,388		502,325	1,171,713
Deductions				
Benefit payments and withdrawals	359,271		110,577	469,848
Administrative expenses	36,717		310	37,027
Total deductions	 395,988		110,887	506,875
Net increase in net position	273,400		391,438	664,838
Net position restricted for benefits:				
Beginning of year	 5,876,084		2,747,228	 8,623,312
End of year	\$ 6,149,484	\$	3,138,666	\$ 9,288,150

NOTE 1 - SYSTEM DESCRIPTION

The City of New York ("The City" or "City") maintains a number of pension systems providing benefits for employees of its various agencies (as defined within New York State ("State") statutes and City laws). The City's five major actuarially funded pension systems are the New York City Board of Education Retirement System ("BERS", "Funds", the "Plan" or the "System"), the New York City Employees' Retirement System ("NYCERS"), the Teachers' Retirement System of the City of New York ("TRS"), the New York City Police Pension Funds ("POLICE"), and the New York City Fire Pension Funds ("FIRE"). Each pension system is a separate Public Employee Retirement System ("PERS") with a separate oversight body and is financially independent of the other.

BERS administers the BERS Qualified Pension Plan (the "QPP") and the BERS Tax-Deferred Annuity Program (the "TDA Program"). BERS is the fiduciary for the QPP and the TDA Program, which are included under BERS in the Pension and Other Employee Benefit Trust Funds section of The City's Annual Comprehensive Financial Report ("ACFR"). GASB Statement No. 98, The Annual Comprehensive Financial Report, establishes the term annual comprehensive financial report and its acronym ACFR.

The QPP is a cost-sharing, multiple-employer pension plan. The QPP provides pension benefits for non-pedagogical employees of the New York City Department of Education, certain other specific schools, and certain employees of the New York City School Construction Authority (collectively, the "Employer"). Substantially, all Department of Education non-pedagogical permanent employees, other than members of TRS, become members of the QPP on the first day of permanent employment. Employees classified as noncompetitive, exempt or provisional by Civil Service are eligible to enroll in the QPP voluntarily. For voluntary enrollment, membership date is governed by the date of filing.

The QPP functions in accordance with existing State statutes and City laws, which establish and amend the benefit terms and the Employer and member contribution requirements. It combines features of a defined benefit pension plan with those of a defined contribution pension plan but is considered a defined benefit pension plan for financial reporting purposes. Contributions are made by the Employer and the members.

At June 30, 2024, June 30, 2023, June 30, 2022, June 30, 2021, June 30, 2020, June 30, 2019, and June 30, 2018, the QPP's membership consisted of:

	2024*	2023*	2022	2021	2020	2019	2018
Retirees and beneficiaries receiving benefits	20,849	21,216	20,481	19,448	19,120	18,502	18,041
Terminated vested members not receiving benefits	3,041	2,856	2,410	1,972	1,972	2,019	1,934
Terminated non-vested members **	14,937	9,618	9,245	8,922	8,826	11,422	10,525
Active members receiving salary	24,753	24,612	25,639	27,556	28,183	25,825	25,864
Total	<u>63,580</u>	<u>58,302</u>	<u>57,775</u>	<u>57,898</u>	<u>58,101</u>	<u>57,768</u>	<u>56,364</u>

^{*} Preliminary figures.

BERS is a fiduciary component unit of The City and is included in The City's Annual Report as a Pension and Other Employee Benefit Trust Fund.

The TDA Program was created and is administered pursuant to the Internal Revenue Code ("IRC") Section 403(b) and existing State statutes and City laws. Certain members of the QPP have the option to participate in the TDA Program, which provides a means of deferring income tax payments on members' voluntary tax-deferred contributions until the period after retirement or upon withdrawal of contributions. Contributions to the TDA Program are made by the members only. The TDA Program is maintained as a separate plan.

The TDA Program participants consisted of the following as of June 30:

	2024	2023	2022	2021	2020	2019	2018
Contributing members	17,384	1 <i>7</i> ,688	18,205	18,551	19,148	18,881	1 <i>7</i> ,899
Retired members with TDA balances	8,786	8,789	8,124	<i>7</i> ,628	<i>7</i> ,102	6,798	6,484

^{**}As of June 30, 2020, represents terminated members (and members deemed to be terminated) who are not vested in a pension benefit but who are eligible to withdraw their employee contribution account balance only. As of June 30, 2018, represents terminated members who are not vested in a pension benefit but who are eligible to withdraw their employee contribution account balance, and members who are no longer on payroll but who are not otherwise classified. Prior to June 30, 2018, represents members who are no longer on payroll but not otherwise classified.

SUMMARY OF BENEFITS

QPP Benefits

The New York State Constitution provides that pension rights of public employees are contractual and shall not be diminished or impaired. In 1973, 1976, 1983, 2012, and 2022, significant amendments made to the New York State Retirement and Social Security Law ("RSSL") modified certain benefits and member contributions for employees joining the QPP on or after the effective date of such amendments. As such, benefits under the QPP fall into various categories based on the year when an employee joined the QPP. A brief overview follows:

 Members who joined prior to July 1, 1973 ("Tier 1") are entitled to service retirement benefits of 55% of "final salary" (as defined within State statutes and City laws) after 25 years of qualifying service and attainment of age 55, a portion of which is provided from member contributions. Additional benefits equal to a specified percentage per year of service of "final salary" are payable for years in excess of the 25-year minimum. These additional benefits are increased, where applicable, by an annuity attributable to accumulated member contributions in excess of the minimum required balance and by any benefits attributable to the Increased-Take-Home Pay ("ITHP") contributions accumulated after the 25th year of member qualifying service. ITHP represents amounts contributed by The City in lieu of members' own contributions. These amounts reduce the contributions that members would have to make to the QPP during their service and thereby increase their take-home pay. Members have the choice of waiving their ITHP reduction, which would reduce their take-home pay, but provide them with increased benefits upon retirement. Tier 1 members contribute on the basis of a normal rate of contribution which is assigned by the QPP at membership and which is dependent upon age and actuarial tables in effect at the time of membership.

In addition, these same members could elect a service retirement benefit with no minimum service requirement which provides an annual benefit for each year of service equal to a specified percentage (as described within State statutes and City laws) of "final salary", payable upon attainment of age 55. This benefit is increased, where applicable, by an annuity attributable to the member contributions and ITHP contributions.

For all members who enrolled in the QPP prior to July 27, 1976 ("Tier 1" and "Tier 2"), ITHP contributions made on their behalf as well as their own contributions are invested, at their election, in either the fixed return fund or the variable return fund, or 50% of such contributions in each. These investment elections can be changed every two years. The QPP guaranteed a 7.5% return on member contributions or ITHP contributions to the fixed return fund until June 30, 1982, increased the guaranteed return to 8% as of July 1, 1982, and to 8.25% as of July 1, 1988, for members who enrolled in the QPP prior to July 27, 1976 (5% on member contributions for members enrolled on or after July 27, 1976). The variable return fund includes only member contributions and ITHP contributions made on their behalf as described above and is expressed in terms of units, which are valued monthly, based on investment experience.

- Certain members of Tier 1 and Tier 2 have the right to make voluntary member contributions ("Voluntary Contributions") in excess of their required member contributions ("Required Contributions"). The investment of the Voluntary Contributions and the Required Contributions is directed by each member. A member may invest: (1) in the QPP's fixed return fund, which is credited with interest at the Statutory Interest Rate (currently 8.25% (7.0% for United Federation of Teachers ("UFT") members)); and/or (2) in the QPP's variable return fund. At the time of retirement or refund of contributions, a member's aggregate balance of actual Required Contributions and Voluntary Contributions, including the actual accumulated earnings thereon, less the outstanding balance of any member loans ("Net Actual Contributions"), may exceed ("Excess of Contributions") or fall short of ("Deficiency of Contributions") the member's Expected Balance. The Expected Balance is the sum of the Required Contributions which a member should have made during his or her credited service, plus the earnings that would have accumulated thereon at the Statutory Interest rate. The amount of the member's retirement annuity or the refund of contributions that he or she is entitled to is increased by any Excess of Contributions or reduced by any Deficiency of Contributions. The total value of active members' Excess of Contributions, net of all Deficiencies of Contributions, is \$1.69 million and \$2.07 million, for the years ended June 30, 2024 and 2023, respectively. Actuarial estimates of the impacts of Excesses and Deficiencies are incorporated into the calculation of the QPP's net pension liability (see Note 5).
- Members who joined after July 1, 1973 and before July 27, 1976 ("Tier 2") have provisions similar to Tier 1, except that the eligibility requirements for retirement and the salary base for benefits are different and there was a limitation on their maximum benefit. Also, certain members retiring prior to age 62 may have their benefit reduced by an agebased factor. This maximum benefit limitation was subsequently eliminated under Chapter 574 of the Laws of 2000 for all Tier 2 members who retired after December 8, 2000. Tier 2 members contribute on the basis of a normal rate of contribution which is assigned by the QPP at membership, and which is dependent upon age and actuarial tables in effect at the time of membership.
- Members who joined the QPP on or after July 27, 1976 and prior to September 1, 1983 ("Tier 3") were originally entitled to a retirement benefit upon the completion of 10 years of service at age 62. The formula for this benefit was 1.67% of "Final Average Salary" ("FAS") per year of credited service for members with less than 20 years of service, or 2% of FAS per year of service for members with 20 to 30 years of service. Tier 3 benefits were reduced by one half of the primary Social Security benefit attributable to service with the Employer and provided an annual cost-of-living escalator in pension benefits of not more than 3%. Tier 3 required member contributions of 3% of salary for a period not to exceed 30 years. After September 1, 1983, all Tier 3 members were mandated into the Tier 4 plan. However, these members retain their Tier 3 rights. Effective October 1, 2000, Tier 4 members with Tier 3 rights, like other Tier 4 members, are not required to make contributions once the 10th anniversary of their membership date has passed, or upon completion of 10 years of credited service, whichever is earlier, and are eligible for a pension upon the completion of five years of credited service at age 62.

- Members who joined the QPP on or after September 1, 1983 and prior to April 1, 2012 ("Tier 4") are eligible for a pension upon the completion of five years of credited service at age 62. The annual benefit is 1.67% of FAS per year of service for members with less than 20 years of service, or 2% of FAS per year of service for members with 20 to 30 years of service, plus an addition of 1.5% of FAS per year of service for service in excess of 30 years of service. Tier 4 members were originally required to make contributions of 3% of salary until termination of service. As of October 1, 2000, these members are not required to make contributions after the 10th anniversary of their membership date or upon completion of 10 years of credited service, whichever is earlier (Chapter 126 of Laws of 2000). Certain members retiring prior to age 62 have their benefit reduced by an age-based factor.
- Effective June 28, 1995, active Tier 2 and Tier 4 members, excluding those who hold a position represented by the recognized teacher organization for collective bargaining purposes (currently, the UFT), were eligible to enroll in an early retirement program permitting them to retire at age 55 with 25 years of credited service ("55/25"), with no age reduction factor to their retirement allowance, or at age 50 with 25 years of credited service in a physically taxing position (Chapter 96 of the Laws of 1995). Additionally, Tier 4 members in non-UFT positions who joined BERS on or after June 28, 1995 and before April 1, 2012 were mandated into an early retirement program permitting them to retire at age 57 with 5 years of credited service ("57/5"), with no age reduction factor to their retirement allowance, or at age 50 with 25 years of credited service in a physically taxing position. Participants in the 55/25 and 57/5 early retirement programs are required to remit additional contributions of 1.85%, or 3.83% for physically taxing positions.
- Effective February 27, 2008, active Tier 4 members who hold a position represented by the recognized teacher organization for collective bargaining purposes (currently, UFT) were eligible to enroll in an early retirement program permitting them to retire at age 55 with 25 years of credited service ("55/25 UFT"), with no age reduction factor to their retirement allowance (Chapter 19 of the Laws of 2008). Those choosing the age 55 retirement option are required to make additional contributions of 1.85% of salary from February 28, 2008 until June 29, 2008, or until they have accumulated 25 years of credited service, whichever is later. UFT members in eligible titles who joined after February 27, 2008, but before December 10, 2009 were automatically enrolled in the 55/27 retirement program. Participants in the 55/27 retirement may retire if they are at least age 55 as of their retirement date and have attained at least 27 years of credited service. These members are required to make additional plan contributions of 1.85% of salary until they have accumulated 27 years of credited service.
- UFT members in covered titles who joined the QPP after December 10, 2009 and prior to April 1, 2012 are covered by 55/27 UFT but are required to make contributions of 4.85% of salary until they have 27 years of credited service and contributions of 1.85% of salary thereafter (Chapter 504 of the Laws of 2009).

- Members who join the QPP on or after April 1, 2012 are subject to the provisions of Chapter 18 of the Laws of 2012 ("Chapter 18/12"), also known as "Tier 6". BERS members in Tier 6 are eligible for a pension upon the completion of 10 years of credited service at age 63. The annual benefit is 1.67% of FAS for the first 20 years of credited service, or 35% upon the attainment of 20 years of service plus an addition of 2% of FAS per year of service for service in excess of 20 years of service. Additionally, the FAS period is five years, rather than three, and a cap is imposed on the maximum permissible FAS. Tier 6 members are required to make Basic Member Contributions ("BMC") until they separate from service or until they retire. The BMC rate is dependent on annual wages earned during a plan year and ranges from 3% for salaries less than \$45,000 to 6% for salaries greater than \$100,000. Per Chapter 56 of the Laws of 2022, Tier 6 members become vested with 5 years of credited service.
- Under all service retirement categories, annuities attributable to member contributions are reduced on an actuarial basis for any loans with unpaid balances outstanding at the date of retirement.
- The QPP provides death benefits and retirement benefits on the occurrence of accidental or ordinary disability.
- During the Spring 2000 session, the State Legislature approved and the State Governor ("Governor") signed laws that provide automatic Cost-of-Living Adjustments ("COLA") for certain retirees and beneficiaries (Chapter 125 of the Laws of 2000). It also provides additional service credits for certain Tier 1 and Tier 2 members and reduced member contributions for certain Tier 3 and Tier 4 members (Chapter 126 of the Laws of 2000). COLA is payable to all members who are either: (1) at least age 62 and have been retired for at least five years; or (2) at least age 55 and have been retired for at least 10 years. Additionally, COLA is payable to members who retired for disability after being retired for five or more years and beneficiaries receiving accidental death benefits who have been receiving them for at least five years. COLA is one-half of the increase in the CPI-U based on the year ending March 31, rounding to the next higher 0.1%, not less than 1% nor greater than 3% of the first \$18,000 of the sum of the maximum retirement allowance and prior COLA.
- Chapter 56 of the Laws of 2022, signed on April 9, 2022, was passed as part of the budget and provided for the following three relevant parts. Part HH waives RSSL 211 and 212 approval and income limitations on retirees as a result of earnings from employment in public schools in the state. It is deemed repealed June 30, 2023. Part SS excludes certain forms of overtime and extracurricular compensation from the salary used to determine Tier 6 BMC Contribution Rates during the specified period of 2022 through 2024. Part TT reduces the Tier 6 vesting requirement from 10 years to 5 years and allows for retirement with 5 years of service.
- Chapter 721 of 2023 Provides for automatic enrollment in BERS for employees eligible for BERS membership, other than employees provisionally appointed, unless they submit a request to opt out of automatic enrollment by September 30, 2024 or within 90 days of their eligibility for BERS membership, whichever comes later. Effective date July 01, 2024.

TDA Program Benefits

Contributions to the TDA Program are made by the members only and are voluntary. In order to contribute to the TDA Program, certain active members of the QPP are required to submit a salary reduction agreement and TDA enrollment request. A participant may elect to exclude an amount of his or her compensation from current taxable income (within the maximum allowed by the Internal Revenue Service ("IRS")) by contributing it to the TDA Program. The basic contribution limit for the calendar year 2024 is \$23,000. Participants, who have attained age 50, are permitted to make additional contributions. The additional contribution limit for calendar year 2024 is \$7,500. Additionally, participants can elect to invest their contributions in either the fixed return fund or the variable return fund.

Benefits provided under the TDA Program are derived from participants' accumulated contributions and earnings on those contributions. No contributions are provided by the Employer.

A participant may withdraw all or part of the balance of his or her account at the time of retirement, termination of employment, or under certain hardship conditions. Beginning January 1, 1989, the tax laws restricted withdrawals of TDA contributions and accumulated earnings thereon for reasons other than retirement or termination.

Contributions made after December 31, 1988, and investment earnings credited after that date, may only be withdrawn by active participants upon attainment of age 59½ or for reasons of hardship (as defined by IRS regulations).

Contributions made on or before December 31, 1989, and earnings credited on or before that date, may be withdrawn by active participants even before age 591/2. A member who has received a hardship withdrawal may continue to contribute to the TDA Program for the remainder of the current year.

If a member dies in active service or after retirement while his or her TDA account is in deferral, the full value of his or her account at the date of death is paid to the member's beneficiary(ies) or estate.

When a member resigns before attaining vested rights under the QPP, he or she may withdraw the value of his or her TDA Program account or leave the funds in the account for a period of up to five years after the date of resignation. If a member resigns after attaining vested rights under the QPP, he or she may leave his or her funds in the TDA Program account, accruing earnings until reaching the age at which minimum distributions are required by IRS regulations. Once a member withdraws from the QPP, participation in the TDA Program will cease, and the member will receive a refund of the value of his or her account in the TDA Program.

When a TDA Program participant applies to retire from the QPP and has a positive TDA Program account balance, the participant has three options:

- a. The participant may withdraw the total balance, either by receiving it as a taxable distribution or by rolling it over into an Individual Retirement Account ("IRA");
- b. The participant may defer distribution of the account; or
- The participant may elect to receive the balance of the account as a life annuity. The available benefit options depend on the member's Tier.

Beginning January 1, 2024, BERS' TDA participants have the option make contributions on a Roth basis. Roth contributions are taxed when they are made. Roth contributions are not subject to federal or New York State tax when paid out to the participant, since this tax has already been withheld at the time the contribution was made. Any earnings on Roth contributions are entirely free from federal and New York state tax when paid out to the member, as long as the first refund takes place in the fifth year from the participant's first Roth contribution or later.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting - The QPP and the TDA Program use the accrual basis of accounting where the measurement focus is on a flow of economic resources. Revenues are recognized in the accounting period in which they are earned, and expenses are recognized in the period incurred. Contributions from members are recognized when respective employers make payroll deductions from the QPP's members and the TDA Program participants. Employer contributions to the QPP are recognized when due and the Employer has made a formal commitment to provide the contributions. Benefit payments and withdrawals are recognized when due and payable in accordance with the terms of governing the QPP and the TDA Program.

Use of Estimates - The preparation of combining financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the combining financial statements and revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents - Cash equivalents consist of financial instruments with original maturity dates of three months or less.

Investment Valuation - Investments are reported at fair value. Fair value is defined as the quoted market price at the end of the last trading day for the specified period, except for alternative investments which are considered long term and illiquid in nature. Alternative investments consist of limited partnership structures invested in privately held investments for which exchange quotations are not readily available and are valued at estimated fair value. Fair value at fiscal year-end is based on the fair value of net assets reported in the most recently available partnership's capital account statements from the general partner, adjusted for any subsequent contributions, distributions, management fees and changes in values of foreign currency. They include investments held within Hedge Funds, Private Equity, Real Estate, Opportunistic-Fixed Income, and Infrastructure.

Purchases and sales of securities are reflected on the trade date. Dividend income is recorded on the ex-dividend date. Interest income is recorded as earned on an accrual basis.

Investment Programs - The System's assets are invested in two investment programs. These are the fixed return fund, which is managed by BERS and the variable return fund (consisting primarily of equity securities), which is managed by TRS.

Under the fixed return program, members' TDA Program accounts are credited with the statutory rate of interest, currently 7.0% for UFT members and 8.25% for all other members. TDA Program members and certain Tier 1 and 2 QPP members may transfer their balances between the fixed return fund and the variable return fund on a quarterly basis.

The QPP's assets within the variable return fund are co-invested with those assets of the TDA Program that are earmarked for the variable return fund. These combining financial statements reflect the QPP investment activity in the fixed return fund; as well as the variable return fund.

Income Taxes - Income earned by the QPP and TDA Program is not subject to federal income tax.

Accounts Payable - Accounts payable is principally comprised of amounts owed by BERS for overdrawn bank balances, accrued administrative and investment expenses. BERS's practice is to fully invest cash balances in most bank accounts on a daily basis. Overdrawn balances result primarily from outstanding benefit checks that are presented to the banks for payment on a daily basis and these balances are routinely settled each day.

Accrued Benefits Payable - Accrued benefits payable represent benefits due and unpaid by the QPP and the TDA Program for the Fiscal Year ended on June 30.

Interest (to) from TDA Program's Fixed Return Fund - The statutory interest credited on TDA Program member account balances invested in the fixed return fund is included in the "Interest (to) from TDA Program's."

Inter-Plan Eliminations - Included on the Combining Statements of Fiduciary Net Position and the Combining Statements of Changes in Fiduciary Net Position is an elimination column, the purpose of which is to remove from the statement any transactions involving dealings between reported entities.

Qualified Excess Benefit Arrangement - In April 2023, the BERS Board of Trustees resolved to establish a Qualified Excess Benefit Arrangement ("QEBA") Plan and Trust to pay the excess benefit to any retiree whose retirement benefit, as calculated under the applicable state statutes, would otherwise exceed the limits of Section 415 of the IRC of 1986. The BERS Board appointed the Executive Director of BERS as Administrator of the BERS QEBA Plan and Trust. The Actuary will notify BERS each year which BERS retirees, if any, qualify to receive a benefit in excess of Section 415. As of now, no BERS retirees fall into this category. All benefits paid by the QEBA Plan and Trust will be funded through dedicated employer contributions, which will be held in a separate account from the assets of the QPP.

Securities Lending Transactions - State statutes and Board policies permit the System to lend its investments to broker-dealers and other entities for collateral, for the same securities in the future with a simultaneous agreement to return the collateral in the form of cash, U.S. Treasury and U.S. Government securities. The System's agent lends the following types of securities: short-term securities, common stocks, long-term corporate bonds, U.S. Government and U.S. Government agency bonds, asset-backed securities, and international equities and bonds held in collective investment funds. In return, the System receives collateral in the form of cash, U.S. Treasury and U.S. Government agency securities at 100% to 105% of the principal plus accrued interest for reinvestment. At June 30, 2024 and 2023, management believes that the System has no credit risk exposure to borrowers because the fair value of collateral held by the System equaled or exceeded the fair value of securities lent to the borrowers. The contracts with the System's Securities Lending Agent (the "Agent") require the Agent to indemnify the System as follows: In the situation when a borrower goes into default, the Agent will liquidate the collateral to purchase replacement securities. Any shortfall before the replacement securities cost and the collateral value is covered by the Agent. All Securities loans can be terminated on demand within a period specified in each agreement by either the System or the borrowers. Cash collateral is invested by the securities lending agent using approved Lender's Investment guidelines. The weighted-average maturity is 75.32 days for collateral investments.

The securities lending program in which the System participates only allows pledging or selling securities in the case of borrower default.

GASB Statement No. 28, Accounting and Financial Reporting for Securities Lending Transactions, requires that securities loaned as assets and related liabilities be reported in the statements of fiduciary net position. Cash received as collateral on securities lending transactions and investments made with that cash are reported as assets. Securities received as collateral are also reported as assets if the government entity has the ability to pledge or sell them without a borrower default. Accordingly, the System recorded the investments purchased with the cash collateral as collateral from securities lending with a corresponding liability for securities lending. Securities on loan are carried at market value, the values reported by the QPP as of June 30, 2024 and 2023 are \$652.82 million and \$504.43 million, respectively. As of net position date, the maturities of the investments made with cash collateral on average exceed the maturities of the securities loans by approximately 66.56 days.

Implementation of Governmental Accounting Standards Board (GASB) Statements - GASB Statement No. 72, Fair Value Measurement and Application ("GASB 72") describes fair value as an exit price, requiring investments to be categorized under a fair value hierarchy prescribed by GASB. GASB 72 establishes a hierarchy of inputs used to measure fair value consisting of three levels based on market price observability. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are inputs, other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs, and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability. GASB 72 also contains note disclosure requirements regarding the hierarchy of valuation inputs and valuation techniques that were used for the fair value measurements.

GASB Statement No. 87, Leases, improves the usefulness of governmental financial statements to users by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. Management has evaluated all leases and determined there was no material impact as a result of adoption of GASB Statement No. 87.

GASB Statement No. 97, Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans, clarifies component unit criteria for a potential component unit in the absence of a governing board in determining financial accountability; limits the applicability of financial burden criteria in paragraph 7 of GASB Statement No. 84; and classifies Section 457 Deferred Compensation plans as either a pension plan or other employee benefit plan. The adoption of GASB Statement No. 97 did not have a significant impact on these financial statements.

GASB Statement No. 96, Subscription-Based Information Technology Arrangements (SBITAs), established uniform accounting and financial reporting requirements for SBITAs for government end users. The statement defines a SBITA as a contract that conveys control to the right to use another party's information technology software, alone or in combination with tangible capital assets (the underlying IT assets), as specified in the contract for a period of time in an exchange or exchange-like transaction. It establishes how a SBITA results in a right-to-use subscription asset and a corresponding subscription liability. The adoption of GASB Statement No. 96 did not have a significant impact on these financial statements.

GASB Statement No.100, Accounting changes and Error Corrections, statement prescribes the accounting and financial reporting for each type of accounting change and error correction. This Statement requires disclosure in notes to financial statements of descriptive information about accounting changes and error corrections. It also requires the information about the quantitative effects on beginning balances of each accounting change and error correction be disclosed in a tabular format to reconcile beginning balances as previously reported to beginning balances as restated. This statement also addresses how information that is affected by a change in accounting principle or error correction should be presented in required supplementary information and supplementary information. The adoption of GASB Statement No. 100 did not have a significant impact on these financial statements.

NOTE 3 - INVESTMENTS AND DEPOSITS

The Comptroller of the City of New York (the "Comptroller") acts as an investment advisor to BERS. In addition, BERS employs staff and independent investment consultants as an investment advisor. BERS utilizes several investment managers to manage the long-term debt and equity portfolios. The managers are regularly reviewed, with regard to both their investment performance and their adherence to investment guidelines.

The BERS investment policy statement was ratified by the Board of Trustees in January 2009 and amended in October 2011, January 2013, February 2015, June 2016, April 2020, November 2021 and December 2021. It addresses investment objectives, investment philosophy and strategy, monitoring and evaluating performance, risk management, security lending protocol and rebalancing investment mix. Assets may be invested in fixed income, equity and other vehicles as permitted by RSSL § 176-178(a) and Banking Law § 235, the New York City Administrative Code and the Legal Investments for New York Savings Banks list as published by the New York State Banking Department. Investments up to 35% of total System assets may be made in instruments not expressly permitted by the RSSL.

The System does not possess an investment risk policy statement, nor does it actively manage its assets to specified risk targets. Rather, investment risk management is an inherent function of the System's asset allocation process. QPP and TDA Program assets are diversified over a broad range of asset classes and encompass multiple investment strategies aimed at limiting concentration risk.

State Street Bank and Trust Company ("State Street") is the primary custodian for the fixed return fund. The variable return fund assets are held in custody at JPMorgan Chase Bank.

The information reflected in the credit ratings and in the years to maturity is derived from the Custodian's Risk and Performance Analytics Reporting System. Such information is prepared as a result of the Custodian's Risk Management Analysis.

Concentrations - In accordance with RSSL § 177, no investment in any individual company may represent more than 2% of the Plan's total net assets or 5% of the company's total outstanding shares. Exclusions apply for obligations of the United States, or those for which the faith of the United States is pledged to provide payment of the interest and principal.

Credit Risk - The possibility of a loss or default resulting from a borrower's inability to repay a loan or fulfill its contractual debt obligations. Portfolios other than U.S. Government and related portfolios, have credit rating limitations. Investment Grade portfolios are limited to mostly ratings, of BBB/Baa2 and above, except that they are also permitted a 10% maximum exposure to BB & B/Ba2 & B2 rated securities. While high yield non-investment grade managers primarily invest in BB & B/Ba2 & B2 rated securities, they can also invest up to 10% of their portfolio in securities rated CCC/Caa2. The quality ratings of the fund's investments, by percentage of the rated portfolio, as described by nationally recognized statistical rating organizations, at June 30, 2024 and 2023 are as follows:

Mood	y's (Qualit	y Ratings
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Investment Type Fixed Funds June 30, 2024	Aaa	Aa 1	Aa2	Aa3	A1	A2	A3	Baal	Baa2	Baa3	Bal	Ba2	Ba3	B1	B2	B3	Caa & Below	Not Rated	Total
U.S. government & agency	30.45%	-%	0.02%	0.12%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	1.43%	32.02%
Mortgage debt securities	18.44%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	18.44%
Corporate bonds	1.07%	0.06%	0.20%	0.26%	1.90%	1.50%	2.61%	2.42%	5.08%	3.68%	2.25%	3.23%	4.50%	4.21%	2.90%	2.14%	2.79%	3.44%	44.24%
Short term:																			
Commercial paper	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	0.95%	0.95%
Discount notes & T-Bills	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	0.87%	0.87%
Pooled fund	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	3.48%	3.48%
Portfolio	49.96%	0.06%	0.22%	0.38%	1.90%	1.50%	2.61%	2.42%	5.08%	3.68%	2.25%	3.23%	4.50%	4.21%	2.90%	2.14%	2.79%	10.17%	100.00%

Moody's Quality Ratings

Investment Type Fixed Funds June 30, 2023	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa 1	Baa2	Baa3	Bal	Ba2	Ba3	B1	B2	B3	Caa & Below	Not Rated	Total
U.S. government & agency	32.61%	-%	0.02%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	0.62%	33.24%
Mortgage debt securities	12.93%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	12.93%
Corporate bonds	0.93%	0.01%	0.24%	0.16%	2.14%	1.07%	1.82%	2.31%	2.82%	3.36%	3.32%	3.21%	6.34%	6.23%	4.29%	4.22%	3.27%	2.76%	48.52%
Short term:																			
Commercial paper	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%
Discount notes & T-Bills	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	0.88%	0.88%
Pooled fund	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	4.43%	4.43%
Portfolio	46.47%	0.01%	0.26%	0.16%	2.14%	1.07%	1.82%	2.31%	2.82%	3.36%	3.32%	3.21%	6.34%	6.23%	4.29%	4.22%	3.27%	8.69%	100.00%

The quality ratings of investments of the variable return fund, by percentage of the rated portfolio, as described by nationally recognized statistical rating organizations, at June 30, 2024 and 2023, are as follows:

									Mo	ody's Quality	Ratings									
Investment Type Variable Funds June 30, 2024	Aaa	Aa 1	Aa2	Aa3	Al	A2	А3	Baa 1	Baa2	Baa3	Bal	Ba2	Ba3	B 1	B2	В3	Caa 1	Caa2	Not Rated*	Total
Corporate bond	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%
Short term:																				
U.S. Treasury bills	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%
Money market	100.00%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	100.00%
Cash equivalent	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%
Portfolio	100.00%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	%	100.00%

								Mo	ody's Quality	Ratings									
A	A=1	A=2	A-2	A1	49	A2	D1	D9	D2	D1	D=9	D=2	DI	DO.	D2	Cara l	C==2	Not	Total
Add		AQZ							Daas				DI				Caaz		
-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%
-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%
100.00%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	%	100.00%
-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%
100.00%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	100.00%
	-% 100.00% -%	-% -% -% 100.00% -% -%	-% -% -% -% -% -% 100.00% -% -% -% -% -%	-% -% -% -% -% -% -% -% 100.00% -% -% -% -% -% -%	-% -% -% -% -% -% -% -% -% -% -% -% 100.00% -% -% -% -% -% -% -% -% -% -%	-% -% -% -% -% -% -% -% 100.00% -% -% -% -% -% -% -% -% -% -% -%	-% -% -% -% -% -% -% -% -% -% -% 100.00% -% -% -% -% -% -% -% -% -% -% -% -% -%	-% -% -% -% -% -% -% -% -% -% -% -% 100.00% -% -% -% -% -% -% -% -% -% -% -% -% -%	Aαα Aα1 Aα2 Aα3 A1 A2 A3 Bαα1 Bαα2 -% -% -% -% -% -% -% -% -% -% -% -% -% -% -% -% -% -% 100.00% -%	Aαα Aα1 Aα2 Aα3 A1 A2 A3 Bαα1 Bαα2 Bαα3 -%	-% -%<	Aαα Aα1 Aα2 Aα3 A1 A2 A3 Bαα1 Bαα2 Bαα3 Bα1 Bα2 -%	Aαα Aα1 Aα2 Aα3 A1 A2 A3 Bαα1 Bαα2 Bαα3 Bα1 Bα2 Bα3 -%	Aαα Aα1 Aα2 Aα3 A1 A2 A3 Bαα1 Bαα2 Bαα3 Bα1 Bα2 Bα3 B1 -%	Aαα Aα1 Aα2 Aα3 A1 A2 A3 Bαα1 Bαα2 Bαα3 Bα1 Bα2 Bα3 B1 B2 -%	Aαα Aα1 Aα2 Aα3 A1 A2 A3 Bαα1 Bα2 Bαα3 Bα1 Bα2 Bα3 B1 B2 B3 -%	Aαα Aα1 Aα2 Aα3 A1 A2 A3 Bαα1 Bαα2 Bαα3 Bα1 Bα2 Bα3 B1 B2 B3 Cαα1 -%	Aαα Aα1 Aα2 Aα3 A1 A2 A3 Bαα1 Bαα2 Bαα3 Bα1 Bα2 Bα3 B1 B2 B3 Cαα1 Cαα2 -% <td>Not Aaa Aa1 Aa2 Aa3 A1 A2 A3 Baa1 Baa2 Baa3 Ba1 Ba2 Ba3 B1 B2 B3 Caa1 Caa2 Ratel* -% -% -% -% -% -% -% -% -% -% -% -% -% -</td>	Not Aaa Aa1 Aa2 Aa3 A1 A2 A3 Baa1 Baa2 Baa3 Ba1 Ba2 Ba3 B1 B2 B3 Caa1 Caa2 Ratel* -% -% -% -% -% -% -% -% -% -% -% -% -% -

^{*}Certain prior year investment ratings have been reclassified to conform to the current year presentation. Money market funds, previously reported as not rated as of June 30, 2023 have been reclassified as Aaa to conform with the June 30, 2024 presentation.

Custodial Credit Risk - Deposits are exposed to custodial credit risk if they are uninsured and uncollateralized. Custodial credit risk is the risk that in the event of a failure of the counterparty or depository financial institution, the Funds will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are not registered in the name of the Funds and are held by either the counterparty or the counterparty's trust department or agent but not in the name of the Funds. Consistent with the Funds' investment policy, the investments are held by the Funds' custodian and registered in the name of the Funds. All of the Funds' deposits are insured by the Federal Deposit Insurance Corporation ("FDIC") are collateralized by securities held by a financial institution separate from the Funds' depository financial institution. However, the System's cash balances can exceed FDIC insured limits. Non-invested cash is swept into a State Street Short-Term Investment Intraday account, which is not FDIC insured.

Interest Rate Risk - The risk that the value of debt securities will be affected by fluctuations in market interest rates. Although there is no formal interest rate risk management policy, the duration of the portfolio, relative to the duration of the portfolio's benchmark, is monitored by the Comptroller's Bureau of Asset Management. The lengths of investment maturities for fixed return fund (in years), as shown by the percent of the rated portfolio, at June 30, 2024 and 2023 are as follows:

Years to Maturity		Inve	estment Maturities		
Investment Type June 30, 2024	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
Jule 30, 2024		Olie Teul	IGUIS	IGUIS	icii icuis
U.S. government & agency	32.03%	-%	19.97%	5.14%	6.92%
Mortgage debt securities	18.44	-	0.10	0.19	18.15
Corporate bonds	44.23	0.55	24.14	10.30	9.24
Short term:					
Commercial Paper	0.95	0.95	-	-	-
Discount Notes & T-Bills	0.87	0.87	-	-	-
Pooled fund	3.48	3.48			
Portfolio	100.00%	5.85%	44.21%	15.63%	34.31%
Years to Maturity		Inve	estment Maturities		
Investment Type June 30, 2023	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
U.S. government & agency	33.24%	- %	20.65%	6.43%	6.16%
Mortgage debt securities	12.93	-	0.10	0.21	12.62
Corporate bonds	48.52	0.55	28.30	11.90	7.77
Short term:					
Discounted Notes & T-bills	0.88	0.88	_	-	-
Pooled fund	4.43	4.43			
Portfolio	100.00%	5.86%	49.05%	18.53%	26.56%

The lengths of investment maturities (in years) of the variable return fund, as shown by the percent of the rated portfolio, at June 30, 2024 and 2023 are as follows:

Years to Maturity		Inv	estment Maturities		
Investment Type	Fair	Less Than	One to Five	Six to Ten	More Than
June 30, 2024	Value	One Year	Years	Years	Ten Years
Corporate bonds	-%	-%	-%	-%	-%
Short term:					
U.S. Treasury bills	-	-	-	-	-
Money market	100.00	100.00	-	-	-
Cash equivalent					
Portfolio	100.00%	100.00%	-%	-%	<u>-%</u>
Years to Maturity		Inv	estment Maturities		
Investment Type June 30, 2023	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
Corporate bonds	-%	-%	-%	-%	-%
Short term:					
U.S. Treasury bills	-	-	-	-	-
Money market	100.00	100.00	-	-	-
Cash equivalent					
Portfolio	_100.00%	100.00%	_%_	-%	_%

Foreign Currency Risk - Foreign currency risk is the risk that changes in the exchange rates will adversely impact the fair value of an investment. Currency risk is present in underlying portfolios that invest in foreign stocks and/or bonds. The currency markets are effective diversifiers in a total portfolio context; therefore, the System has numerous managers that invest globally. In general, currency exposure is viewed as a benefit for its diversification reasons and not as an inherent risk within the portfolio. The System has no formal risk policy.

In addition, the System has investments in foreign stocks and/or bonds denominated in foreign currencies. The System's foreign currency exposures as of June 30, 2024 and 2023 in the fixed return fund are as follows (amounts in thousands of U.S. dollars):

Trade Currency	June 30, 2024	June 30, 2023
Euro Currency	\$ 475,299	\$ 431,571
Japanese Yen	111,971	96,954
Hong Kong Dollar	109,853	135,934
New Taiwan Dollar	94,326	84,838
British Pound Sterling	82,628	84,515
Indian Rupee	80,674	82,112
Swiss Franc	53,200	48,345
South Korean Won	43,647	46,626
Australian Dollar	30,365	30,899
Canadian Dollar	28,701	31,810
Swedish Krona	26,985	20,680
Danish Krone	25,792	28,684
Brazilian Real	17,924	21,586
Chinese Yuan (Offshore)	1 <i>7</i> ,289	17,764
Singapore Dollar	16,350	19,767
South African Rand	9,287	14,256
UAE Dirham	8,034	6,468
Mexican Peso	<i>7</i> ,134	9,869
Turkish Lira	<i>7</i> ,098	1,636
Indonesian Rupiah	6,890	15,537
Chinese Renminbi	6,204	17,479
Norwegian Krone	6,102	<i>7</i> ,810
Thailand Baht	4,721	10,512
Polish Zloty	4,245	3,562
Malaysian Ringgit	3,608	3,190
Hungarian Forint	3,077	2,646
Qatari Rial	1,545	1,787
Kuwaiti Dinar	756	2,017
New Israeli Shekel	755	651
Philippine Peso	103	204
Egyptian Pound	89	77
Czech Koruna	79	5
Chilean Peso	73	203
Saudi Arabian Ryal	70	-
New Zealand Dollar	53	41
Peruvian Nuevo Sol	11	-
Colombian Peso	3	4
Total	\$ 1,284,941	\$ 1,280,039

The foreign currency exposures of the variable return funds as of June 30, 2024 and 2023 are as follows (amounts in thousands of U.S. dollars):

Trade Currency	June 30, 2024	June 30, 2023
Euro Currency	\$ 42,015	\$ 43,661
Japanese Yen	25,125	25,703
British Pound Sterling	21,639	20,196
Swiss Franc	12,359	11 <i>,7</i> 61
Hong Kong Dollar	10,998	11,242
Indian Rupee	10,275	<i>7</i> ,081
Taiwan Dollar	10,062	5,992
South Korean Won	9,264	8,701
Australian Dollar	5,664	6,311
Danish Krone	5,279	3,230
Canadian Dollar	4,182	3,380
Swedish Krona	3,769	3,753
South African Rand	3,232	2,636
Singapore Dollar	1,754	1,911
Brazilian Real	1, <i>7</i> 53	1,510
Mexican Nuevo Peso	1, <i>7</i> 50	1,724
Chinese Renminbi (Yuan)	1,702	1,380
Thailand Baht	1,442	1,288
UAE Dirham	1,424	1,025
Indonesian Rupiah	1,212	1,616
Norwegian Krone	1,095	816
Russian Ruble	767	482
Polish Zloty	658	398
Saudi Arabian Ryal	603	909
Egyptian Pound	462	465
New Zealand Dollar	283	188
Israeli Shekel	258	334
Malaysian Ringgit	254	224
Turkish Lira	156	88
Philippine Peso	149	53
Hungarian Forint	47	2
Chilean Peso	3	11
Peruvian Nuevo Sol	3	2
Chinese Yuan (Offshore)	1	1
Czech Koruna		1
Total	\$ 179,639	\$ 168,075

Securities Lending Transactions: Credit Risk - The quality ratings of investments held as collateral for Securities Lending at June 30, 2024 and 2023 are as follows:

Investment Type and Fair Value - Fixed Return Fund Securities Lending Transactions	_									Moody's Qua	lity Rat	ings							
June 30, 2024 (In thousands)		Aaa	A	a 3	A1		A2	A	13	Baa 1		Ba	ı	3	Caa		Ca	Not Rated	Total
U.S. government																			
Short term:																			
Reverse repurchase agreements	\$		\$ 3	301.885	\$ 19,299	\$	27,598	\$	-	\$ 9,341	\$	-	\$	-	\$	- \$		- \$ 208,050	
Money market		14,408		-	-		-		-	-		-		-		-		- 5,739	20,147
US agency		-		-	-		-		-	-		-		-		-		- 13,587	13,587
Cash or cash equivalent		-		66,656	-		-		-	-		-		-		-		-	66,656
Under/over invested cash collateral		-				_	-												(6)
Total	\$	14,408	\$ 3	368,541	\$ 19,299	\$	27,598	\$		\$ 9,341	\$		\$		\$	<u>·</u> §		- \$ 227,370	\$ 666,557
Percent of securities																			
lending portfolio		2.16%	55.2	9%	2.90%		4.14%	٠	%	1.40%		-%	ار	6	-%		-%	34.11%	100.00%
Investment Type and Fair Value - Fixed Return Fund																			
Securities Lending Transactions	_									Moody's Qua	lity Rat	ings							
June 30, 2023 (In thousands)		Aaa	A/	aa3	A1		A2	A		Baa		Ba		}	Caa		Ca	Not Rated	Total
U.S. government									13	Duu					Cuu		cu		
									13	Duu			•		cuu		Cu		
Short term:								-	13	Duu			·		Cuu		Cu		
	\$	-	\$ 2	231,023	\$ 69,038	\$	21,890			\$ 3,368	\$		\$	-		- \$			\$ 434,768
Short term: Reverse repurchase agreements Money market	\$	- 18,510	\$ 2	231,023	\$ 69,038	\$					-		·			- \$ -		- \$ 109,449 - 254	18,764
Short term: Reverse repurchase agreements Money market US agency	\$			-		\$	21,890			\$ 3,368	-		·	- - -		- \$ -		- \$ 109,449	18,764 10,799
Short term: Reverse repurchase agreements Money market US agency Cash or cash equivalent	\$	18,510		•		\$	21,890			\$ 3,368	-		·	- - -		- \$ - -		- \$ 109,449 - 254 - 10,799	18,764 10,799 51,590
Short term: Reverse repurchase agreements Money market US agency	\$	18,510 -		-		\$	21,890			\$ 3,368	-		·	- - - - -		- \$ - - -		- \$ 109,449 - 254 - 10,799	18,764 10,799
Short term: Reverse repurchase agreements Money market US agency Cash or cash equivalent	\$ 	18,510 - -		51,590		\$ 	21,890			\$ 3,368			\$	- - - - -		- \$ - - - - <u>-</u> <u>-</u>		- \$ 109,449 - 254 - 10,799	18,764 10,799 51,590
Short term: Reverse repurchase agreements Money market US agency Cash or cash equivalent Under/over invested cash collateral	\$ <u>\$</u>	18,510 - - -		51,590 -	-	_	21,890 - - - -	\$		\$ 3,368		- - - -	\$	- - - - -	\$	- \$ - - - - - - - - - - - - -		- \$ 109,449 - 254 - 10,799 - (24)	18,764 10,799 51,590 (24)

nvestment Type and	l Fair Valu	e - Variable	Return Fund
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Securities Lending Transactions June 30, 2024	ons Moody's Quality Ratings																								
(In thousands)																									
	Aaa	Aa 1	Aa	2	Aa3	A1	A2	!	A3	Baa 1		Baa2	Baa3	ı	Ba 1	Ba2	Ba		B1	B2		B3	Caa	Not Rated	Total
U.S. government	\$ 61,723	\$	- \$	- \$	-	\$ -	\$	-	\$ -	\$	- \$	-	\$ -	\$	-	\$	- \$	- \$	-	\$	- \$	-	\$ -	\$ -	\$ 61,723
Short term:																									
U.S. Treasury bills	547		-			-		-	-		-	-	-		-		-	-			-	-	-	-	547
Repurchase agreements	-		-	-	-	-		-	-		-	-	-		-		-	-	-		-	-	-	1,536	1,536
Uninvested	-		-	-	-	-		-	-		-	-	-		-		-	-	-		-	-	-	-	-
Total	\$ 62,270	\$	- \$	- \$	-	\$ -	\$	_	\$ -	\$	- \$	-	\$ -	\$	-	\$	- \$	- \$	-	\$	<u>-</u> \$		\$ -	\$ 1536	\$ 63,806
By percent	97.59%	-%	-%	i	-%	-%	-%		-%	-%		-%	-%		-%	-%	-%		-%	-%		-%	-%	2.41%	100.00%

Inve	stmer	ıt Ty	pe	and	Fair	Value	-	Variable	Return	Fund	
-		_		_							

June 30, 2023 (In thousands)		Moody's Quality Ratings																	
	Aaa	Aa 1	Aa2	Aa3	A1	A2	A3	Baa 1	Baa2	Baa3	Bal	Ba2	Ba	B 1	B2	В3	Caa	Not Rated	Total
U.S. government Short term:	\$ 41,448	\$	- \$	- \$ -	\$ -	\$	- \$ -	- \$	- \$	- \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,448
U.S. Treasury bills	53		-		-			-	-		-	-	-	-	-	-	-	-	53
Repurchase agreements	1,712		-		-			-	-		-	-	-	-	-	-	-	1,499	3,211
Uninvested Total	\$ 43,213	\$	- \$	\$ -	\$ -	ċ	\$ -		- \$	\$	<u>-</u>	<u>-</u>	<u>-</u>	\$ -	\$ -	\$ -	<u>-</u>	\$ 1,499	\$ 44,712
By percent	96.65%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	3.35%	100.00%

Interest Rate Risk - The lengths of investment maturities of the collateral for Securities Lending at June 30, 2024 and 2023 are as follows:

	Investment Maturities (in Years)											
Fixed Return Fund June 30, 2024 (In thousands)	Fair Value		Less than One Year			One to Five Years		Six to Ten Years		re than Years		
Short term:												
Tri Party Repo	\$	566,173	\$	566,173	\$	-	\$	-	\$	-		
Money market		20,147		20,147		-		-		-		
Cash or cash equivalent		66,656		66,656		-		-		-		
US agency		13,58 <i>7</i>		13,58 <i>7</i>		-		-		-		
Under/over invested cash Collateral		(6)		(6)				<u>-</u>		_		
Total	<u>\$</u>	666,557	\$	666,557	\$		\$	<u>-</u>	\$			
By percent		100.00%		100.00%		-%		-%		-%		

		Investment Maturities (in Years)											
Fixed Return Fund		Fair	ıir Less than		One to Five		Si	Six to Ten		re than			
June 30, 2023		Value		One Year		Years		Years	Ter	ı Years			
(In thousands)													
Short term:													
Tri Party Repo	\$	434,768	\$	434,768	\$	-	\$	-	\$	-			
Money market		18 <i>,7</i> 64		18 <i>,7</i> 64		-		-		-			
Cash or cash equivalent		51,590		51,590		-		-		-			
US agency		10, <i>7</i> 99		-		10, <i>7</i> 99		-		-			
Under/over invested cash Collateral		(24)		(24)		<u>-</u>							
Total	<u>\$</u>	515,897	\$	505,098	\$	10, <i>7</i> 99	\$		\$				
By percent		100.00%		97.91%		2.09%		-%		-%			

Years to Maturity	Investment Maturities (in Years)												
Variable Return Fund June 30, 2024 (In thousands)		Fair Valve		Less than One Year		ne to Five Years		Six to Ten Years		Nore than Ten Years			
U.S. government	\$	61,723	\$	4,472	\$	32,498	\$	12,231	\$	12,522			
Short term:													
Repurchase agreements		1,536		1,536		-		-		-			
U.S. Treasury & Money Market		547		547									
Total	\$	63,806	\$	6,555	\$	32,498	\$	12,231	\$	12,522			
By percent		100.00%		10.27%		50.93%		19.17%		19.63%			
Years to Maturity Variable Return Fund June 30, 2023		Fair Value		Inves Less than One Year		<u>Maturities (in</u> One to Five Years) Six to Ten Years		Nore than Ten Years			
(In thousands)													
U.S. government Short term:	\$	41,448	\$	3,942	\$	19,608	\$	9,083	\$	8,815			
Repurchase agreements		3,211		3,211		_		-		-			
U.S. Treasury		53		53				_					
T . I	ф	4 4 710	\$	7204	\$	19,608	ф	9,083	ф	8,815			
Total	<u> </u>	44,712	Φ	7,206	<u> </u>	19,006	<u>\$</u>	9,063	<u>\$</u>	0,013			

Rate of Return - For the years ended June 30, 2024 and 2023, the annual money-weighted rate of return on the System's fixed return fund investments, net of investment expense on the System's fixed return fund, was 10.51% and 8.53%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense adjusted for the changing amounts invested.

In Fiscal Year 2015, the System adopted GASB 72. GASB 72 was issued to address accounting and financial reporting issues related to fair value measurements.

The System categorizes its fair value measurements within the fair value hierarchy established by GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. The System has the following recurring fair value measurements as of June 30, 2024 and 2023:

GASB 72 - Disclosure Fixed Return Funds				
Investments - at fair value (In thousands)	Level 1	Level 2)24 Level 3	Total
Short-term investments:	LOVOI	LOVOI Z	LOVOI J	Total
Commercial paper	\$ -	\$ 25,000	\$ -	\$ 25,000
Short-term investment fund	· -	91,488	Ψ -	91,488
U.S. Treasury bills and discount notes	-	22,890	-	22,890
Debt (fixed income) securities:				
Bank loans	-	21,163	394	21,5 <i>57</i>
Corporate and other	-	1,123,448	8,379	1,131,827
Mortgage debt securities	-	476,764	-	476,764
Treasury inflation-protected securities	-	10,696	-	10,696
U.S. government and agency	-	832,533	-	832,533
Equity securities	3,851,480	-	5,958	3,857,438
Collective trust funds:				
Bank loans	-	-	183	183
Corporate and other	-	462	10, <i>7</i> 23	11,185
Domestic equity	61,33 <i>7</i>	-	124	61,461
International equity	2,655	-	1	2,656
Mortgage debt securities	<u> </u>	<u>8,926</u>	<u> </u>	8,926
Total investments in the fair				
value hierarchy	<u>\$ 3,915,472</u>	\$ 2,613,370	\$ 25,762	6,554,604
Investments measured at NAV				2,742,100
Total investments				\$9,296,704

GASB 72 Disclosure Fixed Return Funds					
Investments - at fair value	Level 1		023 Level 3	Total	
(In thousands)	Level I	Level Z	Level 3	IOTAI	
Short-term investments:	c	¢	¢	¢	
Commercial paper	\$ -	\$	\$ -	\$ -	
Short-term investment fund	-	101,179	-	101,179	
U.S. Treasury bills and agencies	-	20,03 <i>7</i>	-	20,037	
Debt (fixed income) securities:					
Bank loans	-	21,614	-	21,614	
Corporate and other	-	1,071,446	5,809	1,0 <i>77</i> ,255	
Mortgage debt securities	-	287,099	-	287,099	
Treasury inflation-protected securities	-	254,966	-	254,966	
U.S. government and agency	-	505,625	-	505,625	
Equity securities	3,790,273	-	2,773	3,793,046	
Collective trust funds:					
Bank loans	-	-	197	197	
Corporate and other	-	475	10, <i>7</i> 44	11,219	
Domestic equity	64,967	-	174	65,141	
International equity	2,563	-	-	2,563	
Mortgage debt securities	-	8,879	-	8,879	
Total investments in the fair					
value hierarchy	<u>\$3,857,803</u>	<u>\$2,271,320</u>	<u>\$ 19,697</u>	6,148,820	
Investments measured at NAV				2,350,056	
Total investments				\$8,498,876	

The below table summarizes the assets that measure fair market value using net asset value ("NAV") as a practical expedient (In thousands):

Asset	_ 	As of Jui), 2024 Unfunded Commitments*	_	As of June		2023 Unfunded ommitments*	Redemption Frequency (Ranges if Eligible)	Redemption Notice Period (Ranges if Eligible)
Infrastructure	\$	399,357	\$	346,623	\$	305,826	\$	264,443	N/A	N/A
Private equity		1,150,907		595, <i>7</i> 93		1,007,398		530,139	N/A	N/A
Private real estate Opportunistic		<i>7</i> 54,183		338,232		746,517		270,786	Quarterly	30 - 90 days
fixed income Fixed income investment		420,983		250,397		274,206		193,197	N/A	N/A
company		16,670	_	<u>-</u>		16,109		<u>-</u>	Monthly	15 days
	<u>\$</u>	2,742,100	<u>\$</u>	1,531,045	\$	2,350,056	<u>\$</u>	1,258,565		

^{*} Unfunded commitments include capital commitment amounts that the System is obligated to fund upon the occurrence of certain trigger events as defined in the relevant investments' partnership agreement.

Equity, Debt Securities and Short-Term Investments - Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets issued by pricing vendors for these securities. Debt, equity securities, and shortterm investments classified in Level 2 of the fair value hierarchy are valued using prices determined by the use of matrix pricing techniques maintained by the various pricing vendors for these securities. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Debt and equity securities classified in Level 3 of the fair value hierarchy are securities whose stated market price is unobservable by the marketplace; many of these securities are priced by the issuers or industry groups for these securities. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by the System's custodian bank.

Collective Trust Funds - Collective trust funds are separately managed accounts which are owned 100% by The City's pension systems. The investments underlying the collective trust funds are presented as Level 1, Level 2 or Level 3 based on their respective fair value hierarchy classifications.

Alternative Investments - Alternative investments include Private Equity, Real Estate, Opportunistic Fixed Income, Infrastructure Investments, and a Fixed Income Investment Company. These are investments for which exchange quotations are not readily available and are valued at estimated fair value by the General Partner ("GP").

Alternative investments are measured at fair value using the NAV as a practical expedient and are not classified in the fair value hierarchy. The fair value quantities presented in the table below align with the amounts shown in the entity's financial statements.

Fair value is determined by the GP or the fund administrator using one or more valuation methodologies outlined in GASB 72, depending upon the availability of data required by each methodology. In some cases, the GP may use multiple approaches to estimate a valuation range.

Because of the subjective nature of estimated fair value of the private investments, such value may differ significantly from the values that would have been used had a ready market existed for these investments. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will generally be liquidated within 10 years but in some cases can take longer.

Certain alternative investments are not fully funded upon subscribing to the investment. The GP can draw down or call for capital as the fund goes into more investments or when the need arises such as expenses associated with the partnership. The residual balance of uncalled capital is also known as unfunded commitments which are restricted to the maximum amount of the limited partners' total committed amount.

The total unfunded commitments for the alternative investments as of June 30, 2024 and 2023 amounted to \$1.52 billion and \$1.26 billion, respectively.

GASB 72 - Disclosure				
Variable Return Funds		202	24	
(In thousands)	Level 1	Level 2	Level 3	Total
Variable return funds:				
Short-term investments	\$ -	\$ 6,833	\$ 1	\$ 6,834
Equities	886,344	13, <i>7</i> 44	8	900,096
Total	\$ 886,344	\$ 20,577	\$ 9	\$ 906,930
GASB 72 - Disclosure				
Variable Return Funds		202	23	
(In thousands)	Level 1	Level 2	Level 3	Total
Variable return funds:				
Short-term investments	\$ -	\$ 5,447	\$ -	\$ 5,447
Equities	<i>7</i> 50,326	12,465	61	<i>7</i> 62,852
Total	<u>\$ 750,326</u>	\$ 1 <i>7</i> ,912	\$ 61	\$ 768,299

Level 1 - Valued using prices quoted in active markets.

Level 2 - Valued using a matrix pricing technique: based on relationship to benchmark quoted prices.

Level 3 - Valued using discounted cash flow techniques.

NOTE 4 - CONTRIBUTIONS AND ACTUARIAL ASSUMPTIONS

The financial objective of the QPP is to fund members' retirement benefits during their active service and to establish employer contribution rates which, expressed as a percentage of annualized covered payroll, will remain approximately level from year to year. The Employer contributes amounts that, together with member contributions and investment income, would ultimately be sufficient to accumulate assets to pay benefits when due.

Contributions to the TDA program are made on a voluntary basis by certain members of the QPP.

Member Contributions

- Members who joined the QPP prior to July 1, 1973 ("Tier 1") contribute on the basis of a normal rate of contribution which is assigned by the QPP at membership, and which is dependent upon age and actuarial tables in effect at the time of membership. Tier 1 members can also make Increased Take Home Pay ("ITHP") contributions, for which they can receive an additional annuity after retirement.
- Members who joined after July 1, 1973 and before July 27, 1976 ("Tier 2") also contribute on the basis of a normal rate of contribution which is assigned by the QPP at membership, and which is dependent upon age and actuarial tables in effect at the time of membership. Note that the actuarial tables are different in Tier 2. Tier 2 members can also make ITHP contributions, for which they can receive an additional annuity after retirement.
- Members who joined after July 27, 1976 and before April 1, 2012 ("Tier 4") contribute 3% of salary until the earlier of the 10th anniversary of their membership date, or upon the completion of 10 years of credited service, except members of the Chapter 504 55/27 plan contribute Basic Member Contributions for the first 27 years of credited service. Certain Tier 4 members are enrolled in special early retirement plans and must, therefore, also make Additional Member Contributions ("AMC"), depending on the specific plan.
- Members who joined on or after April 1, 2012 ("Tier 6") are required to make Basic Member Contributions ("BMC") until they separate from service or until they retire. The BMC rate is dependent on annual wages earned during a plan year and ranges from 3% for salaries less than \$45,000 to 6% for salaries greater than \$100,000. Certain Tier 6 members are enrolled in special early retirement plans and must, therefore, also make Additional Member Contributions ("AMC"), depending on the specific plan.
- For members of Tier 6 who earned certain forms of overtime and extracurricular compensation during 2020 through 2023, these earnings are excluded from the salary used to determine their Tier 6 BMC Contribution Rates for the period from 2023 through 2024.

Employer Contributions - Actuarially required contributions ("Actuarial Contributions") to the QPP, determined by the System's Chief Actuary of the Office of the Actuary (the "Actuary") in accordance with State statutes and City laws, are generally funded by the Employer within the appropriate fiscal year.

NOTE 5 - QPP NET PENSION LIABILITY

The components of the net pension liability of the Employers at June 30, 2024 and 2023 were as follows:

(In thousands)	2024	2023
Total pension liability	\$ 7,028,577	\$ 6,222,502
Fiduciary net position*	6,848,121	6,149,484
Employers' net pension liability	<u>\$ 180,456</u>	<u>\$ 73,018</u>
Fiduciary net position as a percentage of the total		
pension liability	97.43%	98.83%

^{*}Such amounts represent the preliminary Systems' fiduciary net position and may differ from the final Systems' fiduciary net position.

The total pension liability as of June 30, 2024 and 2023 was calculated from the actuarial valuations as of June 30, 2023 (Preliminary) and June 30, 2022 (Preliminary), respectively, that were rolled forward to develop the total pension liability to the respective fiscal year end. The following actuarial assumptions were applied to all periods included in the measurement:

Projected Salary Increases In general, merit and promotion increase plus assumed General Wage Increases

of 3.0% per annum.

Investment Rate of Return 7.0% per annum, net of Investment Expenses.

COLAs 1.5% per annum for AutoCOLA.

2.5% per annum for Escalation.

The above assumptions were developed assuming a long-term Consumer Price Inflation assumption of 2.5% per annum.

Pursuant to Section 96 of the New York City Charter, studies of the actuarial assumptions used to value liabilities of the five actuarially-funded New York City Retirement System ("NYCRS") are conducted every two years. The most recent of these studies was performed by Bolton, Inc. and included experience through June 30, 2017. Milliman is performing the current experience study that covers the period through June 30, 2021.

On January 24, 2019, the Actuary issued a Report titled "Proposed Changes in Actuarial Assumptions and Methods used in Determining Employer Contributions for Fiscal Years Beginning on and After July 1, 2018 for the New York City Board of Education Retirement System." The actuarial assumptions and methods described in that report are referred to as the "2019 A&M."

On July 16, 2021, the Actuary issued a memorandum titled "Proposed Changes to Actuarial Assumptions and Methods." The actuarial assumptions and methods described in that memorandum amend certain assumptions and methods from the 2019 A&M. This revised set of actuarial assumptions and methods are referred to as the "Revised 2021 A&M."

The June 30, 2023 total pension liability was calculated from the Preliminary June 30, 2022 actuarial valuation, which was based on the Revised 2021 A&M.

The June 30, 2024 total pension liability was calculated from the Preliminary June 30, 2023 actuarial valuation (adjusted for Chapter 56 of the Laws of 2023 and certain other post-valuation refinements), which was based on the Revised 2021 A&M.

The Entry Age Normal ("EAN") cost method of funding is utilized by the System's Actuary to calculate the contribution required of the Employer.

Under this method, the Present Value ("PV") of Future Benefits ("PVFB") of each individual included in the actuarial valuation is allocated on a level basis over the earnings (or service) of the individual between entry age and assumed exit age(s). The Employer portion of this PVFB allocated to a valuation year is the Normal Cost. The portion of this PVFB not provided for at a valuation date by the PV of Future Normal Costs or future member contributions is the Accrued Liability ("AL").

The excess, if any, of the AL over the Actuarial Value of Asset ("AVA") is the Unfunded Accrued Liability ("UAL").

Under this method, actuarial gains and losses, as they occur, reduce and increase the UAL and are explicitly identified and amortized.

Increases or decreases in obligations due to benefit changes, actuarial assumption changes, and actuarial method changes are also explicitly identified and amortized.

Expected Rate of Return on Investments

The long-term expected rate of return on QPP investments was determined using a building-block method in which best-estimate ranges of expected real rates of return (i.e., expected returns, net of QPP investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocations and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table as of June 30, 2024 and 2023:

_	As of June	30, 2024	As of June 30, 2023		
Asset Class	Target Asset Allocation	Long-Term Expected Real Rate of Return	Target Asset Allocation	Long-Term Expected Real Rate of Return	
Public markets					
U.S. public market equities	34.0%	6.3%	31.0%	6.6%	
Developed public market equities	9.0	6.4%	10.0	6.9%	
Emerging public market equities	4.0	7.6%	6.0	8.4%	
Fixed income	28.0	2.0%	27.0	2.0%	
Private markets (alternative investments)					
Private equity	8.0	9.5%	9.0	9.6%	
Private real estate	8.0	3.2%	8.0	4.7%	
Infrastructure	4.0	5.7%	4.0	5.4%	
Opportunistic-fixed income	5.0	5.9%	5.0	6.0%	
Total _	100.0%		100.0%		

Discount Rate

The discount rate used to measure the total pension liability was 7%. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the rates applicable to the current Tier for each member and that Employer contributions will be made at rates as determined by the Actuary. Based on those assumptions, the QPP's fiduciary net position was projected to be available to make all projected future benefit payments of current active and non-active QPP members. Therefore, the long-term expected rate of return on QPP investments was applied to all periods of projected benefit payments to determine the total pension liability.

The following presents the net pension liability of the Employers, calculated using the discount rate of 7.0%, as well as what the Employers' net pension liability would be if it were calculated using a discount rate that is one-percentage point lower (6.0%) or one-percentage point higher (8.0%) than the current rate as of June 30, 2024 and 2023:

(In thousands)	1% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)	
Employers' net pension liability - June 30, 2024	<u>\$ 1,646,706</u>	<u>\$ 180,456</u>	<u>\$ (854,277)</u>	
Employers' net pension liability - June 30, 2023	\$ 802,436	<u>\$ 73,018</u>	<u>\$ (541,890)</u>	

NOTE 6 - MEMBER LOANS

Members of the QPP are permitted to borrow up to 75% of their employee contribution account balances, including accumulated interest, subject to the limitations of Section 72 of the IRC. The balance of QPP member loans receivable on June 30, 2024 and 2023 is \$55.18 million and \$50.85 million, respectively. When a member withdraws from the QPP with an outstanding QPP loan balance, this outstanding QPP loan balance will be deducted from the refund of the member's contribution balance. When a member retires with an outstanding QPP loan balance, the member's retirement benefit will be reduced by the actuarial value of the amount of the outstanding QPP loan balance, unless this balance is paid off.

Members of the TDA Program are permitted to borrow up to 75% of their TDA Program account balances, including accumulated interest, subject to the limitations of Section 72 of the IRC. The balance of TDA Program member loans receivable at June 30, 2024 and 2023 is \$45.30 million and \$43.35 million, respectively.

NOTE 7 - RELATED PARTIES

The Comptroller has been appointed by law as custodian for the assets of the QPP and the TDA Program. QPP fixed return fund securities are held by certain banks under custodial agreements with the Comptroller. The Comptroller, the Financial Information Services Agency ("FISA"), and the Office of Payroll Administration ("OPA") also provides cash receipt and cash disbursement services to the System. Actuarial services are provided to the System by the New York City Office of the Actuary. The City's Corporation Counsel provides legal services to the System. Other administrative services are also provided by The City. Costs of \$3.49 million and \$3.22 million were incurred on behalf of the System by other City agencies, primarily the Comptroller's Office for 2024 and 2023, respectively. The fixed return fund assets of the QPP are co-invested with those of the TDA Program. The variable return fund assets of the QPP are co-invested with those of the TDA Program and TRS (see Note 2). TRS holds the assets of the variable return fund.

NOTE 8 - ADMINISTRATIVE EXPENSES

In Fiscal Years 2024 and 2023, as per Chapter 307 of the New York State Laws of 2002, the System provided BERS with corpus funding for administrative expenses in the amount of \$40.54 million and \$37.02 million, respectively.

In August 2019, the System entered into a sub-sublease agreement for office space with a duration of six years and seven months, entailing a total commitment of approximately \$11.18 million over the lease term. Rent expense for the year ending June 30, 2024, amounted to \$1.99 million under this lease agreement.

Capital assets are recorded at their original cost and are systematically depreciated using a straight-line method over their estimated useful lives. The ERP system was capitalized at \$54.01 million. As of June 30, 2024, the accumulated amortization stands at \$22.61 million.

In accordance with GASB 96, government entities engaged in SBITA (Software Business-Related Intangible Asset) agreements with software vendors are required to report both a subscription asset and a corresponding liability on their financial statements. As of June 30, 2024, the SBITA Assets are valued at \$3.13 million, with amortization amounting to \$2.03 million.

NOTE 9 - CONTINGENT LIABILITIES AND OTHER MATTERS

Contingent Liabilities - The System has claims pending against it and has been named as a defendant in lawsuits and also has certain other contingent liabilities. Management of the System, on the advice of legal counsel, believes that such proceedings and contingencies will not have a material effect on the net position of the System or changes in the net position of the System. Under the existing State statutes and City laws that govern the functioning of the System, increases in the obligations of the System to members and beneficiaries ordinarily result in increases in the obligations of the New York City Board of Education to the System.

Actuarial Audit - Pursuant to Section 96 of the New York City Charter, studies of the actuarial assumptions used to value liabilities of the five actuarially-funded NYCRS are conducted every two years.

Revisions to Actuarial Assumptions and Methods - In accordance with the Administrative Code of the City of New York ("ACNY") and with appropriate practice, the Boards of Trustees of the five actuarially-funded NYCRS are to periodically review and adopt actuarial assumptions as proposed by the Actuary for use in the determination of Employer Contributions.

The most recently completed study was published by Bolton, Inc., dated June 2019. Bolton analyzed experience for the four and 10-year periods ended June 30, 2017 and made recommendations with respect to the actuarial assumptions and methods based on their analysis. Based in part on these recommendations, the Actuary proposed new assumptions and methods for use in determining Employer Contributions for Fiscal Years beginning on and after July 1, 2018. These assumptions and methods have been adopted by the Board of Trustees during Fiscal Year 2019.

Previously, Gabriel, Roeder, Smith & Company published their study in October 2015.

New York State Legislation (only significant laws since Fiscal Year 2012 included)

Chapter 18 of the Laws of 2012 ("Chapter 18/12") placed certain limitations on the Tier 3 and Tier 4 benefits available to participants hired on and after April 1, 2012 in most New York State PERS, including BERS. These changes are sometimes referred to as Tier 6.

Chapter 3 of the Laws of 2013 ("Chapter 3/13") implemented changes in the actuarial procedures for determining Employer Contributions beginning Fiscal Year 2012. In particular, Chapter 3/13 continued the One-Year Lag Methodology ("OYLM"), employed the Entry Age Actuarial Cost Method ("EAACM"), established an Actuarial Interest Rate ("AIR") assumption of 7.0% per annum, net of investment expenses, and defined the amortization of Unfunded Actuarial Accrued Liabilities ("UAAL").

Chapter 489 of the Laws of 2013 extended the Notice of Participation filing deadline to September 11, 2014 for vested members to file a sworn statement indicating participation in the World Trade Center Rescue, Recovery and Clean-up Operations.

Chapter 427 of the Laws of 2014 ("Chapter 427/14") provides non-contributory retirement service credit for members called to active military duty on or after September 11, 2001 and prior to January 1, 2006 who did not receive their full salary from a participating employer and are otherwise eligible to receive retirement service credit for such service. Such member would not be required to make member contributions to receive such credit.

Chapter 510 of the Laws of 2015 ("Chapter 510/15") clarifies for Tier 6 the definition of multiple employers for the purpose of exclusion of wages and changes the Plan year for contributions from plan year April 1 to March 31 to plan year January 1 to December 31.

Chapter 41 of the Laws of 2016 was enacted on May 31, 2016. This amendment removes the specified periods of time, medal requirements, and theaters of operation in which military service would had to have been rendered for a service purchase pursuant to RSSL § 1000. Accordingly, for a member to be eligible to purchase service credit pursuant to RSSL § 1000 for premembership military service, the member need only have been honorably discharged from the military; all other requirements of RSSL § 1000 remain the same. This law is not retroactive and does not permit retired members to purchase service credit.

Chapter 326 of the Laws of 2016, enacted on September 11, 2016, extends the deadline to file a Notice of Participation in the World Trade Center Rescue, Recovery and Clean-up Operations to September 11, 2018. Proper filing of a Notice of Participation is a requirement for a member to be eligible for a World Trade Center disability or death benefit.

Chapter 438 of the Laws of 2016, enacted on November 14, 2016, amends Retirement and Social Security Law Section 43 to eliminate restrictions upon transferring between public retirement systems.

Chapter 71 of the Laws of 2017, enacted on June 29, 2017, continues for Fiscal Year 2019, the Actuarial Interest Rate assumption of 7.0% per annum used to determine employer contributions to the New York City Pension Funds and Retirement Systems. This act also extends through Fiscal Year 2019, the interest rate of 8.25% per annum to credit interest on Tier 1 and Tier 2 member contributions and Increased-Take-Home-Pay ("ITHP") Reserves.

Chapter 266 of 2018 extends the time for members or eligible beneficiaries to file a Notice of Participation in World Trade Center Rescue, Recovery, and Cleanup Operations to September 11, 2022.

Chapter 59 of the Laws of 2019 revises the composition of the Board of Education of The City of New York, and, therefore, the BERS Board of Trustees, to include one additional mayoral appointee and one member to be elected by community district education council presidents. This provision took effect on July 1, 2020.

Chapter 589 of the Laws of 2019 increases the amount of money a retiree may earn in a position of public service in the year 2020 and thereafter to \$35,000 from \$30,000.

Chapter 76 of the Laws of 2019 extends for two fiscal years, until June 30, 2021, the 7% rate of interest used by the Chief Actuary for BERS in valuing the retirement system liabilities for the purpose of computing the amount of Employer contributions. The bill also extends for two fiscal years the rate of interest to be paid into certain constituent funds of The City retirement systems and the 8.25% per annum rate to be credited on AMCs and ITHP reserves for Tier 1 and Tier 2 members.

Chapter 89 of the Laws of 2020 provides death benefits to statutory beneficiaries of members whose death was a result of or was contributed to by the coronavirus disease ("COVID-19"). This law provides an Accidental Death Benefit to the eligible beneficiaries of a member or a retiree who retired after March 1, 2020, where such member reported for work outside their home and contracted COVID-19 within 45 days after reporting for work, and whose death was caused by COVID-19 or where COVID-19 contributed to such member's death. Amounts payable are reduced by payments of any ordinary death benefits or option benefit paid to another statutory beneficiary.

Chapter 78 of the Laws of 2021 establishes a COVID-19 public employee death benefit for individuals who reported to their usual place of employment or an alternate worksite at the direction of their employer on or after March 1, 2020 and such individual contracted COVID-19 within 45 days of reporting to such workplace as confirmed by a laboratory test or by a licensed physician and such individual died on or before December 31, 2022.

Chapter 391 of the Laws of 2021 extends for two fiscal years until June 30, 2023, the 7% rate of interest used by the Chief Actuary for BERS in valuing the retirement system liabilities for the purpose of computing the amount of Employer contributions. The bill also extends for two fiscal years the rate of interest to be paid into certain constituent funds of The City retirement systems and the 8.25% per annum rate to be credited on AMCs and ITHP reserves for Tier 1 and Tier 2 members.

Chapter 417 of the Laws of 2021 authorizes political subdivisions to permit any public body to hold meetings remotely and without in-person access during the COVID-19 state disaster emergency until the expiration or termination of the disaster emergency.

Chapter 424 of the Laws of 2021 expands the definition of a member for World Trade Center purposes to include certain professionals who were in qualifying employment in a qualifying period for a qualifying employer, irrespective of whether such person was a participant in such system at that time, provided they purchased service credit for a period of time that includes some or all of the qualifying period in accordance with applicable law.

Chapter 425 of the Laws of 2021 provides for the electronic submission of a notice that a member of a retirement system participated in World Trade Center rescue, recovery or cleanup operations for a qualifying period.

Chapter 481 of the Laws of 2021 requires certain records to be discussed at an open meeting to be made available to the public at least twenty-four hours prior to the meeting upon request.

Chapter 525 of the Laws of 2021 places family workers, family assistants, family associates, and parent program assistants under the jurisdiction of BERS instead of TRS and provides that the membership of paraprofessionals in TRS is mandatory.

Chapter 561 of the Laws of 2021 extends the time for members or eligible beneficiaries to file a Notice of Participation in World Trade Center Rescue, Recovery, and Cleanup Operations to September 11, 2026.

Chapter 587 of the Laws of 2021 requires a public body that maintains a regularly and routinely updated website and utilizes a high-speed internet connection to post the minutes of meetings within two weeks.

Chapter 56 of the Laws of 2022 enacted into law major components of legislation necessary to implement the state education, labor, housing and family assistance budget for the 2022-2023 state fiscal year and including some reform of the retirement law. This law provides that all BERS members, including Tier 6 members, now become vested with 5 years of credited service; suspends earnings limitations for retirees from April 9, 2022 through June 30, 2023; and revises the Tier 6 contribution rate determination process to disregard overtime between April 1, 2022 and April 1, 2024.

Chapter 173 of the Laws of 2022 extended the filing time for the Oath of Office for Public Officers who failed to file their oath of office within the statutory 30-day period from January 1, 2022 through March 31, 2022.

Chapter 364 of the Laws of 2022 - Provides that as of August 15, 2022, the Board of Education shall consist of 23 voting members: 5 members elected by the Community Education Councils (one from each borough), 1 appointed by each Borough President, and 13 appointed by the Mayor. This chapter law further provides that the Chancellor of Schools and the Comptroller of the City of New York as ex officio non-voting members. As a result, the BERS Board of Trustees now consists of 27 members. See also Chapter 71 of the Laws of 2023, below.

Chapter 482 of the Laws of 2022 - Amends the Freedom of Information Law (FOIL) to provide that the home address of a retiree or beneficiary of a public New York City or State retirement system shall be exempt from disclosure under the FOIL.

Chapter 561 of the Laws of 2022 - Extends the deadline for members who participated in the World Trade Center rescue, recovery and cleanup operations to file a Notice of Participation until September 11, 2026.

Chapter 775 of the Laws of 2022 - Increases the portion of the assets of a public New York City or State retirement system that may be invested in miscellaneous investments ("the basket clause") from 25% to 35%.

Chapter 783 of the Laws of 2022 - Extends the COVID-19 Accidental Death Benefit established by Chapter 89 of 2020 to cover members who die on or before December 31, 2024.

Chapter 58 of the Laws of 2023 - Amends the Open Meetings Law to provide that a public body may adopt a written procedure to allow for a member to attend a meeting through videoconferencing, if that member has a disability that prevents the member from attending this meeting in person. Such attendance counts towards quorum for a meeting of the public body.

Chapter 71 of the Laws of 2023 - Postpones the effective date of Chapter 364 of the Laws of 2022 from August 15, 2022 to January 15, 2023.

Chapter 184 of the Laws of 2023 - Extends for two fiscal years, until June 30, 2025, the 7% rate of interest used by the Chief Actuary for BERS in valuing the retirement system liabilities for the purpose of computing the amount of employer contributions. The bill also extends for two fiscal years the rate of interest to be paid into certain constituent funds of the City retirement systems and the 8.25% per annum rate to be credited on AMCs and ITHP reserves for Tier 1 and Tier 2 members.

Chapter 708 of the Laws of 2023 - Exempts certain Tier 4 carpenter titles who are participants in the 57/5 Plan from making the Physically Taxing Additional Member Contributions (AMCs) if their membership date makes it impossible for them to benefit from the early retirement provisions of their physically taxing titles. Members affected by this legislation would also be entitled to a refund of the Physically Taxing AMCs previously paid plus interest.

Chapter 711 of the Laws of 2023 - Permits members of the New York City Teachers' Retirement System, the New York City Employees' Retirement System, or the New York City Board of Education Retirement System who are eligible to join any other New York City Retirement due to a separate, concurrent eligible employment with a participating employer to join the New York City Retirement System applicable to the second employment, provided such benefits in the first system of membership are suspended during their active membership in the subsequent retirement system.

Chapter 716 of the Laws of 2023 - Ensures continued compliance with the Federal Older Workers' Benefit Protection Act by amending Tier 2, 3, and 4/6 ordinary death benefit provisions to ensure that, on an actuarial basis, the costs of providing such benefits to older members are no less than the costs of providing such benefits to younger members.

Chapter 717 of the Laws of 2023 - Requires a transfer of reserves to transfer a membership between certain New York City and State retirement systems when the member has ten or more years of service credit.

Chapter 721 of the Laws of 2023 - Provides for the automatic enrollment of certain new and existing employees of the City of New York eligible to join BERS unless they timely opt out of membership.

Chapter 55 of the Laws of 2024 enacted into law major components of legislation necessary to implement the state public protection and general government budget for the 2024-2025 state fiscal year, including some reform of the retirement law. This law extends the retiree earnings limitation waiver for school employees by one year to June 30, 2025. In addition, this law extends the revised Tier 6 contribution rate determination process for an additional two plan years to December 31, 2026.

Chapter 56 of the Laws of 2024 enacted into law major components of legislation necessary to implement the state education, labor, housing and family assistance budget for the 2024-2025 state fiscal year and including some reform of the retirement law. This law reduces the number of years used to calculate the Final Average Salary from 5 years to 3 years, for Tier 6 members of BERS. The law does not make changes to the 4-year lookback period for affected Tier 6 members. In addition, Chapter 56 provides that as of July 1, 2024, the Board of Education shall consist of 24 voting members: 1 appointed by each Borough President, 5 members elected by the Community Education Councils (one from each borough), 1 independent member who will serve as the chair of the Board, and 13 appointed by the Mayor. As a result, the BERS Board of Trustees now consists of 28 Members.

The "SECURE 2.0" Act

The SECURE 2.0 Act of 2022 was signed into law by the President on December 29, 2022, as Division T of the Consolidated Appropriations Act of 2023. It contains several provisions that apply to BERS, the most important of which are the following:

- Effective January 1, 2023, the required beginning date for Required Minimum Distributions (RMDs) is increased from 72 to 73. Effective January 1, 2025, it will be further increased to 75.
- Effective January 1, 2025, higher age-based catch-up limits will apply to TDA participants at ages 60, 61, 62, and 63. b)
- Some leeway will be given to plans to choose not to recover pension overpayments resulting from plan administration errors.
- Effective January 1, 2023, the excise tax for failure to receive an RMD is reduced from 50% to 25% of the calculated d) RMD amount.
- Effective January 1, 2024, Roth contributions are no longer subject to RMD rules. e)
- Effective January 1, 2024, age-based catch-ups for employees who earned above \$145,000 in the previous year (to be indexed for inflation) can only be made on a Roth basis. The IRS has issued regulations suspending enforcement of this provision until January 1, 2026.
- Effective January 1, 2023, plans have the option to permit hardship distributions on self-certification (without requiring supporting documentation).
- Effective January 1, 2024, plans have the option to permit hardship distributions to include earnings (as well as contributions).

Required Supplimentary Information (Unaudited) Qualified Pension Plan Schedule 1

SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS June 30, $\,$

(In thousands)

(In thousands)										
Total and the Pakitan	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Total pension liability: Service cost	\$ 179,575	\$ 175,411	\$ 179,402	\$ 175,281	\$ 166,792	\$ 168,501	\$ 176,110	\$ 168,625 \$	153,107 \$	147,898
Interest	447,033			405,690		366,084		346,510	320,315	299,592
Changes of benefit terms	22,024		15,863	400,070	007,704	000,004	000,777	040,010	020,010	277,072
Differences between expected and actual experience	534,937	_		38,132	(46,574)	152,160	(164,587)	19,938	(75,907)	50,148
Changes of assumptions	-	(= -,== -,	(,,	(853)		(314,503)		-	183,677	-
Benefit payments/withdrawals	(377,494)	(359,271)	(325,679)	(302,336)	(296,047)	(280,463)	(261,574)	(262,432)	(240,727)	(223,244)
Net change in total pension liability	806,075	222,002	224,445	315,914	194,075	91,779	100,948	272,641	340,465	274,394
Total pension liability - beginning	6,222,502	6,000,500	5,776,055	5,460,141	5,266,066	5,174,287	5,073,339	4,800,698	4,460,233	4,185,839
Total pension liability - ending (a)	7,028,577	6,222,502	6,000,500	5,776,055	5,460,141	5,266,066	5,174,287	5,073,339	4,800,698	4,460,233
Plan fiduciary net position:										
Employer contributions	247,721	233,546	262,404	182,983	257,503	269,637	318,643	288,233	265,532	258,099
Member contributions	56,552	49,810	49,591	48,125	49,766	46,304	40,846	39,821	38,581	39,564
Net investment income	868,593	676,092	(803,664)	1,889, <i>75</i> 1	365,767	406,879	565,577	862,510	164,144	177,166
Payment of interest on TDA program fixed return funds	(220,785)	(201,361)	(191,054)	(171,806)	(155,749)	(141,695)	(127,972)	(106,554)	(94,789)	(85,104)
Benefit payments and withdrawals	(377,494)	(359,271)	(325,679)	(302,336)	(296,047)	(280,463)	(261,574)	(262,432)	(240,727)	(223,244)
Administrative expenses	(40,250)	(36,717)	(35,566)	(25,175)	(22,207)	(17,357)	(13,212)	(15,486)	(12,818)	(10,956)
Other	164,300	(88,699)	(124,188)	239,808	(7,975)	35,624	51,024	(122,954)	(157,499)	(52,021)
Net change in plan fiduciary net position	698,637	273,400	(1,168,156)	1,861,350	191,058	318,929	573,332	683,138	(37,576)	103,504
Plan fiduciary net position - beginning*	6,149,484	5,876,084	7,044,240	5,182,890	4,991,832	4,672,903	4,099,571	3,416,433	3,454,009	3,350,505
Plan fiduciary net position - ending (b)	6,848,121	6,149,484	5,876,084	7,044,240	5,182,890	4,991,832	4,672,903	4,099,571	3,416,433	3,454,009
BERS's net pension liability - ending (a)-(b)	\$ 180,456	\$ 73,018	\$ 124,416	\$ (1,268,185)	\$ 277,251	\$ 274,234	\$ 501,384	\$ 973,768 \$	1,384,265 \$	1,006,224
Plan fiduciary net position as a percentage of										
the total pension liability	97.43%	98.83%	97.93%	121.96%	94.92%	94.79%	90.31%	80.81%	71.17%	77.44%
,										
Covered payroll ¹	<u>\$ 1,467,906</u>	\$ 1,427,145	\$ 1,484,264	\$ 1,476,598	\$ 1,353,266	\$ 1,264,079	\$ 1,102,184	<u>\$ 1,052,171</u> <u>\$</u>	1,008,056	1,016,822
BERS's net pension liability as percentage of covered payroll	12.29%	5.12%	8.38%	-85.89%	20.49%	21.69%	45.49%	92.55%	137.32%	98.96%

^{*}FY 2015 Plan fiduciary net position - beginning was revised from the prior year.

¹ Projected employee payroll at time 1.0 under previous roll-forward methodology through 2018. Actual employee payroll at valuation date (time = 0) beginning in 2019.

Required Supplimentary Information (Unaudited) Qualified Pension Plan Schedule 2

SCHEDULE OF EMPLOYER CONTRIBUTIONS Fiscal years ended June 30, (In thousands)

		2024	2023	:	2022		2021	2020	2019	2018	2017	2	2016	2015
Actuarially determined contribution	\$	247,721	\$ 233,546	\$	262,404	\$	182,983	\$ 257,503	\$ 269,637	\$ 318,643	\$ 288,233	\$ 2	265,532	\$ 258,099
Contributions in relation to the actuarially determined contribution		247,721	233,546	:	262,404		182,983	257,503	269,637	318,643	288,233	2	265,532	258,099
Contribution deficiency (excess)	\$	_	\$ -	\$		\$		\$ 	\$ -	\$ 	\$ 	\$	<u>-</u>	\$ -
Covered payroll ¹	\$	1,467,906	\$ 1,427,145	\$ 1,4	484,264	\$	1,476,598	\$ 1,353,266	\$ 1,264,079	\$ 1,102,184	\$ 1,052,171	\$ 1,0	008,056	\$ 1,016,822
Contributions as a percentage of covered-employee payroll	_	16.88%	 16.36%		17.68%	_	12.39%	 19.03%	 21.33%	 28.91%	27.39%		26.34%	25.38%

¹ Projected employee payroll at time 1.0 under previous roll-forward methodology through 2018. Actual employee payroll at valuation date (time = 0) beginning in 2019.

NOTES TO SCHEDULE

The above actuarially determined contributions were developed using a One-Year Lag Methodology, under which the actuarial valuation determines the Employer contribution for the second following fiscal year (e.g., fiscal year 2024 contributions were determined using an actuarial valuation as of June 30, 2022). The methods and assumptions used to determine the actuarially determined contributions are as follows:

- 1. As of June 30, 2014 valuation, the AVA is constrained to be within a corridor of 80% to 120% of the fair value.
- ² Developed using a long-term Consumer Price Inflation assumption of 2.5% per year.
- 3. As of June 30, 2019, applies mortality improvement scale MP-2020 published by the Society of Actuaries to post-retirement mortality, active ordinary death mortality rates, and pre-commencement mortality rates for terminated vesteds. Prior to June 30, 2019, MP-2018 was applied to post-retirement mortality. Prior to June 30, 2017, MP-2015 was applied to post-retirement mortality. Prior to June 30, 2014, Scale AA was applied to post-retirement mortality.

		<u></u>	<u> </u>		<u> </u>	<u></u>			<u></u>	<u> </u>
Valuation Dates	June 30, 2022	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013
Actuarial cost method	Entry age	Entry age	Entry age	Entry age	Entry age					
Amortization method for unfunded										
actuarial accrued liabilities:										
Initial unfunded	Increasing dollar	Increasing dollar	Increasing dollar	Increasing dollar	Increasing dollar					
Post-2010 unfundeds	Level dollar	Level dollar	Level dollar	Level dollar	Level dollar					
Remaining amortization period:										
Initial unfunded	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	16 years (closed)	17 years (closed)	18 years (closed)	19 years (closed)
2010 ERI	O year (closed)	0 year (closed)	0 year (closed)	O year (closed)	O year (closed)	year (closed)	0 year (closed)	1 year (closed)	2 years (closed)	3 year s(closed)
2011 Actuarial gain/loss	4 years (closed)	5 years (closed)	6 years (closed)	7 years (closed)	8 years (closed)	9 years (closed)	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)
2012 Actuarial gain/loss	5 years (closed)	6 years (closed)	7 years (closed)	8 years (closed)	9 years (closed)	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)
2013 Actuarial gain/loss	6 years (closed)	7 years (closed)	8 years (closed)	9 years (closed)	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)
2014 Actuarial gain/loss	7 years (closed)	8 years (closed)	9 years (closed)	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	NA
2015 Actuarial gain/loss	8 years (closed)	9 years (closed)	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	NA	NA	NA
2016 Actuarial gain/loss	9 years (closed)	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	NA NA	NA NA	NA NA
2017 Actuarial gain/loss 2017 Assumption change	10 years (closed) 15 years (closed)	11 years (closed) 16 years (closed)	12 years (closed) 17 years (closed)	13 years (closed) 18 years (closed)	14 years (closed) 19 years (closed)	15 years (closed) 20 years (closed)	NA NA	NA NA	NA NA	NA NA
2017 Assumption change	15 years (closed)	16 years (closed)	17 years (closed)	18 years (closed)	19 years (closed)	20 years (closed)	NA NA	NA NA	NA NA	NA NA
2018 Actuarial gain/loss	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	NA	NA NA	NA NA	NA NA	NA
2018 Method change	16 years (closed)	17 years (closed)	18 years (closed)	19 years (closed)	20 years (closed)	NA	NA NA	NA NA	NA NA	NA NA
2019 Actuarial gain/loss	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	NA	NA	NA	NA	NA	NA
2019 Method change	17 years (closed)	18 years (closed)	19 years (closed)	20 years (closed)	NA	NA	NA	NA	NA	NA
2019 Assumption change	17 years (closed)	18 years (closed)	19 years (closed)	20 years (closed)	NA	NA	NA	NA)	NA	NA
2020 Actuarial gain/loss	13 years (closed)	14 years (closed)	15 years (closed)	NA	NA	NA	NA	NA	NA	NA
2020 Method change	18 years (closed)	19 years (closed)	20 years (closed)	NA	NA	NA	NA	NA	NA	NA
2020 Plan change	5 years (closed)	6 years (closed)	7 years (closed)	NA	NA	NA	NA	NA	NA	NA
2021 Actuarial gain/loss	14 years (closed)	15 years (closed)	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA
2021 Plan change 2022 Actuarial gain/loss	12 years (closed) 15 years (closed)	13 years (closed) NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
2022 Action in gain, 1033	15 yeurs (closeu)	IVA	INA.	140	IVA	INA	INA	INA	INA	INA
Actuarial Assets Valuation	Five-year moving average	Five-year moving average	Five-year moving average	Modified six-year moving	Modified six-year moving	Modified six-year moving	Modified six-year moving	Modified six-year moving	Modified six-year moving	Modified six-year moving
	, ,	,	, ,	,	, ,	, ,	, ,	, ,	, ,	
method ¹	of fair values with a	of fair values with a	of fair values with a	average of fair values	average of fair values	average of fair values	average of fair values	average of fair values	average of fair values	average of fair values
	"Market Value Restart"	"Market Value Restart"	"Market Value Restart"	with a "Market Value	with a "Market Value	with a "Market Value	with a "Market Value	with a "Market Value	with a "Market Value	with a "Market Value
	as of June 30, 2019.	as of June 30, 2019.	as of June 30, 2019.	Restart" as of June 30, 2011.	Restart" as of June 30, 2011.	Restart" as of June 30, 2011.	Restart" as of June 30, 2011.	Restart" as of June 30, 2011.	Restart" as of June 30, 2011.	Restart" as of June 30, 2011.
				The June 30, 2010 AVA	The June 30, 2010 AVA	The June 30, 2010 AVA	The June 30, 2010 AVA	The June 30, 2010 AVA	The June 30, 2010 AVA	The June 30, 2010 AVA
				is defined to recognize	is defined to recognize	is defined to recognize	is defined to recognize	is defined to recognize	is defined to recognize	is defined to recognize
				Fiscal Year 2010	Fiscal Year 2010	Fiscal Year 2010	Fiscal Year 2010	Fiscal Year 2010	Fiscal Year 2010	Fiscal Year 2010
			•	investment performance.	investment performance.	investment performance.	investment performance.	investment performance.	investment performance.	investment performance.
Actuarial assumptions:	7.0% per annum,	7.0% per annum,	7.0% per annum,	7.0% per annum,	7.0% per annum,					
Assumed rate of return ²	net of investment expenses.	net of investment expenses.	net of investment expenses.	net of investment expenses.	net of investment expenses.					
Post-retirement mortality ³	Tables adopted by Board	Tables adopted by Board of	Tables adopted by Board of	Tables adopted by Board of	Tables adopted by Board of	Tables adopted by Board of				
	of Trustees during Fiscal	Trustees during Fiscal	Trustees during Fiscal	Trustees during Fiscal	Trustees during Fiscal	Trustees during Fiscal	Trustees during Fiscal	Trustees during Fiscal	Trustees during Fiscal	Trustees during Fiscal
	Year 2019	Year 2016	Year 2016	Year 2016	Year 2012					
Active service: withdrawal,	Tables and sell to the	Tables adeata II D. I f	Tables adapted U. D. J. C.	Tables adouted by De and of	Tables adams II D. I. C.	Tables adeats II D. I. C.	Tables advanta III D. I. C.	Tables adams II D I C	Tables adapted U. D. J. C.	Tables advantable Dorot
death, disability, service	Tables adopted by Board of	Tables adopted by Board of	Tables adopted by Board of	Tables adopted by Board of	Tables adopted by Board of					
	Trustees during Fiscal	Trustees during Fiscal	Trustees during Fiscal	Trustees during Fiscal	Trustees during Fiscal					
retirement ³	Year 2019	Year 2012	Year 2012	Year 2012	Year 2012					
Salary increases ²	In general, merit and promotion	In general, merit and promotion	n In general, merit and promotion	In general, merit and promotion	In general, merit and promotic	on In general, merit and promotio	n In general, merit and promotion	In general, merit and promotio	n In general, merit and promotion	n In general, merit and promotic
	increases plus assumed general	-		increases plus assumed general	-		ıl increases plus assumed general	• •	ıl increases plus assumed genera	• •
	,	,	,				•	•	•	
	increases of 3.0% per year.	increases of 3.0% per year.	increases of 3.0% per year.	increases of 3.0% per year.	increases of 3.0% per year.					
Cost of living adjustment 2	1.59/	1 59/ [1 59/	1.59/	1.69/ [1.69/ [1.5% per annum for Auto	1 59/	1 59/ [1.5% per annum for Auto
Cost-of-living adjustments ²	1.5% per annum for Auto	'	1.5% per annum for Auto	1.5% per annum for Auto	•					
	COLA. 2.5% per annum	COLA. 2.5% per annum	COLA. 2.5% per annum	COLA. 2.5% per annum	COLA. 2.5% per annum					
	for Escalation.	for Escalation	for Escalation.	for Escalation.	for Escalation.					

See Report of Independent Certified Public Accountants.

SCHEDULE OF INVESTMENT RETURNS

The following table displays annual money-weighted rate of return from fixed investments for each of the past ten fiscal years:

Fiscal Year Ended	Money-Weighted Rate of Return
June 30, 2024	10.51%
June 30, 2023	8.53%
June 30, 2022	(9.01%)
June 30, 2021	27.97%
June 30, 2020	5.75%
June 30, 2019	7.00%
June 30, 2018	10.31%
June 30, 2017	15.33%
June 30, 2016	0.20%
June 30, 2015	3.15%

See Report of Independent Certified Public Accountants.

SCHEDULE OF INVESTMENT EXPENSES

•	FUND MANAGER	CATEGORY	AMOUNT (in \$)
1	Fixed Investment Expenses (net)		
	Actis	Alternative Investment - Infrastructure	\$1,085,533
	Ardian	Alternative Investment - Infrastructure	1,267,737
	Axium Infrastructure	Alternative Investment - Infrastructure	120,797
	Basalt Infrastructure Partners IV A	Alternative Investment - Infrastructure	809,923
	BIF	Alternative Investment - Infrastructure	6,692
	BlackRock	Alternative Investment - Infrastructure	328,329
	Brookfield Asset Management	Alternative Investment - Infrastructure	726,758
	DIF Infrastructure	Alternative Investment - Infrastructure	819,697
	EIG Credit Management	Alternative Investment - Infrastructure	171,152
	EQT Partners	Alternative Investment - Infrastructure	2,052,259
	Global Infrastructure Management	Alternative Investment - Infrastructure	777,204
	Industry Funds Management	Alternative Investment - Infrastructure	476,066
	Infravia Capital Partners	Alternative Investment - Infrastructure	698,280
	KKR	Alternative Investment - Infrastructure	350,723
	Stonepeak Infrastructure Partners	Alternative Investment - Infrastructure	327,025
	400 Capital Management	Alternative Investment - OFI	527,130
	Apollo Global Management	Alternative Investment - OFI	436,641
	Ares Management	Alternative Investment - OFI	307,424
	Blackstone Green	Alternative Investment - OFI	207,098
	Brightwood Capital	Alternative Investment - OFI	4,804,687
	CarVal Centre Street	Alternative Investment - OFI	<i>7</i> 41,078
	Charlesbank	Alternative Investment - OFI	199,167
	Crestline	Alternative Investment - OFI	333,165
	Golden Tree	Alternative Investment - OFI	29,377
	ICG Strategic Equity	Alternative Investment - OFI	255,468
	KKR	Alternative Investment - OFI	360,179
	KLCP	Alternative Investment - OFI	497,529
	Maranon Center Street	Alternative Investment - OFI	360,866
	Marathon Asset Management Limited	Alternative Investment - OFI	243,400
	Oak Hill Advisors	Alternative Investment - OFI	1,089,955
	Torchlight Investors	Alternative Investment - OFI	1,243,135
	American Security Partners	Alternative Investment - Private Equity	518,921
	Amulet Capital	Alternative Investment - Private Equity	92,148
	Apax Partners	Alternative Investment - Private Equity	1,066,710
	Apollo Global Management	Alternative Investment - Private Equity	1,269,042
	Ardian	Alternative Investment - Private Equity	713,985
	Ares Management	Alternative Investment - Private Equity	69,808
	ASF	Alternative Investment - Private Equity	63,214
	Base 10 Advancement	Alternative Investment - Private Equity	658,205
	BC Partners	Alternative Investment - Private Equity	137,756
	Bridgepoint Capital	Alternative Investment - Private Equity	869,126

Additional Supplimentary Information Qualified Pension Plan and Tax Deferred Annuity Program | Fiscal Year Ended June 30, 2024 Schedule 4 (Cont'd)

FUND MANAGER	CATEGORY	AMOUNT (in \$)
Fixed Investment Expenses (net)		
Carlyle Group	Alternative Investment - Private Equity	205,075
Centerbridge Partners	Alternative Investment - Private Equity	27,330
Clayton Dubilier Rice	Alternative Investment - Private Equity	<i>7</i> 44,215
Clearlake Capital Group	Alternative Investment - Private Equity	1,004,695
Crestview Partners	Alternative Investment - Private Equity	721,386
CVC Capital Partners	Alternative Investment - Private Equity	2,081,350
EQT Partners	Alternative Investment - Private Equity	1,362,746
FTV Capital	Alternative Investment - Private Equity	714,893
Grain Management	Alternative Investment - Private Equity	220,314
Green Equity	Alternative Investment - Private Equity	13,974
HarbourVest Partners	Alternative Investment - Private Equity	83,157
Heartwood Partners	Alternative Investment - Private Equity	211,127
Hg Capital	Alternative Investment - Private Equity	611,875
ICG Strategic Equity	Alternative Investment - Private Equity	1,589,841
ICV Partners	Alternative Investment - Private Equity	27,319
Insight Partners	Alternative Investment - Private Equity	444,372
Integrum Capital Partners	Alternative Investment - Private Equity	38,796
KKR	Alternative Investment - Private Equity	1,524,973
Landmark Partners	Alternative Investment - Private Equity	491,500
Lee Equity Partners	Alternative Investment - Private Equity	45,421
Leonard Green & Partners	Alternative Investment - Private Equity	1,395,516
Lexington Partners	Alternative Investment - Private Equity	813,753
Lightbay Investment Partners	Alternative Investment - Private Equity	117,482
Lindsay Goldberg	Alternative Investment - Private Equity	257,867
Mesirow Financial	Alternative Investment - Private Equity	289,145
Mill City Capital	Alternative Investment - Private Equity	1,351
Neuberger Berman Group	Alternative Investment - Private Equity	154,643
New 2ND Capital	Alternative Investment - Private Equity	(364,038)
New Mainstream Capital	Alternative Investment - Private Equity	29,681
Nordic Capital	Alternative Investment - Private Equity	627,031
One Rock Capital Partners	Alternative Investment - Private Equity	375,783
Palladium Equity Partners	Alternative Investment - Private Equity	492,488
Patriot Financial Partners	Alternative Investment - Private Equity	80,282
Permira	Alternative Investment - Private Equity	562,363
Platinum Equity	Alternative Investment - Private Equity	311,477
Providence Strategic Growth	Alternative Investment - Private Equity	536,441
Reverence Capital Partners	Alternative Investment - Private Equity	304,338
Siris Capital Group	Alternative Investment - Private Equity	201,496
Stellex Capital Management	Alternative Investment - Private Equity	928,119
The Raine Group	Alternative Investment - Private Equity	458,644

FUND MANAGER	CATEGORY	AMOUNT (in \$)
Fixed Investment Expenses (net)		
The Vistria Group	Alternative Investment - Private Equity	131,710
Thoma Bravo	Alternative Investment - Private Equity	61,635
TPG Capital	Alternative Investment - Private Equity	329,734
Valor Equity Partners	Alternative Investment - Private Equity	240,049
Vista Equity Partners	Alternative Investment - Private Equity	2,230,384
Warburg Pincus	Alternative Investment - Private Equity	2,374,721
WCAS	Alternative Investment - Private Equity	8,734
Webster Capital	Alternative Investment - Private Equity	(3,141)
Welsh Carson Anderson & Stowe	Alternative Investment - Private Equity	1,239,728
Aermont Capital	Alternative Investment - Real Estate	762,060
Almanac Realty Investors	Alternative Investment - Real Estate	605,047
Artemis Real Estate Partners	Alternative Investment - Real Estate	721,261
Basis Management Group	Alternative Investment - Real Estate	675,468
Bentall GreenOak	Alternative Investment - Real Estate	90,721
Blackstone Green	Alternative Investment - Real Estate	60
Brookfield Asset Management	Alternative Investment - Real Estate	992,722
Carlyle Group	Alternative Investment - Real Estate	351,475
Clarion Partners	Alternative Investment - Real Estate	1,525,022
Cortland Partners	Alternative Investment - Real Estate	431,348
DivcoWest Real Estate Investments	Alternative Investment - Real Estate	1,177,215
DRA Advisors	Alternative Investment - Real Estate	138,169
EQT Partners	Alternative Investment - Real Estate	1,317,726
Exeter Property Group	Alternative Investment - Real Estate	1,611,977
Franklin Templeton Institutional	Alternative Investment - Real Estate	57,337
H/2 Capital Partners	Alternative Investment - Real Estate	413,932
Harrison Street Real Estate Capital	Alternative Investment - Real Estate	944,717
Heitman Capital Management	Alternative Investment - Real Estate	253,054
Jamestown	Alternative Investment - Real Estate	240,828
KKR	Alternative Investment - Real Estate	812,978
Lasalle Investment Management	Alternative Investment - Real Estate	967,287
Lone Star	Alternative Investment - Real Estate	35,001
Mesirow Financial	Alternative Investment - Real Estate	175,000
Metlife	Alternative Investment - Real Estate	421,906
Prudential Financial	Alternative Investment - Real Estate	59,776
Related Fund Management	Alternative Investment - Real Estate	111,601
Rialto Capital Management	Alternative Investment - Real Estate	6 <i>7</i> 1,159
RREEF America	Alternative Investment - Real Estate	332,619
The Blackstone Group	Alternative Investment - Real Estate	1,280,611
The Hudson Companies	Alternative Investment - Real Estate	5,649
Tristan Capital Partners	Alternative Investment - Real Estate	815,652

Additional Supplimentary Information Qualified Pension Plan and Tax Deferred Annuity Program | Fiscal Year Ended June 30, 2024 Schedule 4 (Cont'd)

FUND MANAGER	CATEGORY	AMOUNT (in \$)
Fixed Investment Expenses (net)		
UBS Asset Management	Alternative Investment - Real Estate	159, <i>7</i> 12
USAA Real Estate	Alternative Investment - Real Estate	147,705
Vanbarton Group	Alternative Investment - Real Estate	556,637
Westbrook Partners	Alternative Investment - Real Estate	370,949
RBC Global Asset Management	CTF - Fixed Income - Mortgage	17,418
CFSB PPAR FNMA	CTF - Fixed Income - Mortgage	3
ECLF PPAR FNMA	CTF - Fixed Income - Mortgage	17
NCBCI PPAR GNMA	CTF - Fixed Income - Mortgage	7
Barings	CTF - Fixed Income - Other	104
BlackRock	CTF-Domestic Equity	7,548
Acadian Asset Management	CTF-International Equity	639
Baillie Gifford	CTF-International Equity	282
BlackRock	CTF-International Equity	6,490
Sprucegrove Investment Management	CTF-International Equity	<i>7</i> 11
Altravue Capital	Domestic Equity	15,869
BlackRock	Domestic Equity	35,279
Bridge City Capital	Domestic Equity	11,072
Dean Capital Management	Domestic Equity	13,440
Essex Investment Management Company	Domestic Equity	15,335
Lisanti Capital Growth	Domestic Equity	6,067
Nicholas Investment Partners	Domestic Equity	8,935
QSV	Domestic Equity	14,777
State Street Global Advisors	Domestic Equity	38,349
Wasatch Advisors	Domestic Equity	1,022,518
Wellington Management Company	Domestic Equity	691,750
Cash Account	Fixed Income - Cash	15,748
New Century	Fixed Income - Government	84,083
State Street Global Advisors	Fixed Income - Government	70,890
AFL-CIO Housing Investment Trust	Fixed Income - Mortgage	53,165
BlackRock	Fixed Income - Mortgage	149,772
Semper	Fixed Income - Mortgage	87,066
Integrity-Credit	Fixed Income - Other	92,000
Mackay Shields	Fixed Income - Other	906,507
Nomura Corporate Research and Asset Management	Fixed Income - Other	1,046,007
Pugh Capital Management	Fixed Income - Other	303,676
T. Rowe Price Associates	Fixed Income - Other	371,928
State Street Global Advisors	Fixed Income - TIPS	7,558
Acadian Asset Management	International Equity	4,340,293
Algert Global	International Equity	114,395
ARGA Investment Management	International Equity	60,055

FUND MANAGER	CATEGORY	AMOUNT (in \$)
Fixed Investment Expenses (net)		
Aubrey Capital Management	International Equity	45,950
Baillie Gifford	International Equity	843,858
Dundas Global Investors	International Equity	868
Fiera Capital Corporation	International Equity	456,971
Foresight Global Investors	International Equity	49,527
Haven	International Equity	42,107
JP Morgan Asset Management	International Equity	2,128,564
Martin Investment Management	International Equity	36,764
Morgan Stanley Investment Management	International Equity	358,275
North of South Capital	International Equity	87,505
Transition-WorldxUS	International Equity	931
Osmosis Investment Management	International Equity	52,678
Redwood Investments	International Equity	46,014
Sprucegrove Investment Management	International Equity	807,989
Xponance	International Equity	24,570
NYC Office of Comptroller-BAM	Investment Support	498,102
	Sub total	87,789,965
Legal Fees		
Cox Castle Nicholson LLP		6,157
Day Pltney LLP		5,829
Foley & Lardner LLC		8,863
Foster Pepper PLLC		31,020
Morgan Lewis Bockius LLP		27,332
Pillsbury Winthrop Shaw Pittman LLP		10,291
Reinhart Boerner Van Dueren		48,455
Seward Kissel LLP		13,503
	Sub total	151,450
Consultant Fees		
Msci IPD		6,151
THE BURGISS GROUP LLC		1,071
Msci Esg Research LLC		3,810
Msci Barra LLC		44,397
	Sub total	55,429
Variable Investment Expenses		
Qualified Pension Plan		463,744
Tax-Deferred Annuity		4,966,009
Investment Expenses FY 2024		\$ 93,426,597

SCHEDULE OF ADMINISTRATIVE EXPENSES

EXPENSE TYPE	AMOUNT (in \$)
1 ADMINISTRATIVE EXPENSES (QPP):	
Consumable Supplies and Materials	\$ 192,578
Contractual Services	4,804,660
Equipment costs	85,815
General Services	5,150,696
Salaries paid to Plan Personnel	22,164,460
Sub-Total	32,398,209
2 ADMINISTRATIVE EXPENSES (TDA):	298,593
Sub-Total	298,593
3 Amortization costs:	7,851,575
Sub-Total	7,851,575
T.	<u> </u>
Total Administrative Expenses for FY 2024:	\$ 40,548,377

The schedule shows total expenses paid by BERS. Other administrative expenses of \$ 3,486,660 were paid on BERS' behalf by other City agencies under Regulation 85 of the New York State Superintendent of Insurance Regulations.

SCHEDULE OF DIRECT PAYMENTS TO CONSULTANTS

INDIVIDUAL OR FIRM NAME	NATURE OF SERVICES	AMOUNT (in \$)
The Switzer Group Inc. 475 Park Avenue South New York, New York 10016	Architectural Consultant	12,748
Baker Tilly Virchow Krause, LLP 2801 Via Fortuna, Suite 300 Austin, TX 78746	Internal Audit Service Consultant	166,507
Aksia TorreyCove Capital Partners LLC 10180 Barnes Canyon Road, Suite 200 San Diego, CA 92121	Investment Consultant	233,336
Segal Marco Advisors 333 West 34th Street New York, NY 10001	Investment Consultant	236,196
CEM Benchmarking 372 Bay Street, Suite 1000 Toronto, Ontario M5H 2W9	Pension Benchmarking Services	24,000
Groom Law Group, Chartered Department 0589 Washington, DC 20073	Legal Consultant	65,838
Total Consulting Fees for FY 2024		\$ 738,625



INVESTMENT

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Nurture your savings like a tree; with time, it will flourish and bear fruit.



INTRODUCTION

The investment section presents the following:

- Investment report for FY 2024, prepared by Segal Marco Advisors, investment consultant for BERS.
- The investment schedules following the investment report supplement the investment information presented in the financial section and the investment report as presented by the investment consultant.

Schedules are presented for the following categories

- a. Consolidated investment performance
- b. Asset Pie: focusing on the current fiscal year asset composition
- c. Asset Allocation: presents 10-year comparison of the invested assets
- d. Investment Holdings
- e. Management fees and brokers commission
- f. Investment Summary

The investment section has been prepared based on data provided by:

- The Comptroller of the City of New York through BAM;
- Teachers' Retirement System of The City of New York;
- Segal Marco, independent investment advisor for BERS;
- · Custodians of investments; and the
- Investment managers.

Basis of presentation of investment performance:

The return information is calculated using "a time weighted rate of return" based on the market value of the portfolio.





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To: Board of Education Retirement System (BERS) of the City of New York

Segal Marco Advisors (Vanessa Vargas Guijarro and Billy Welsh) From:

Date: September 30, 2024

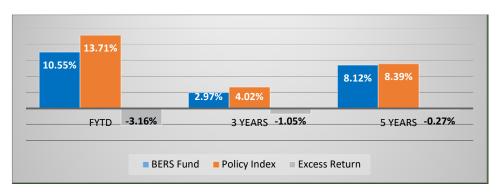
Re: Report of Fiscal Year 2024 Investment Activity

Dear Members of the Board of Education Retirement System of the City of New York:

Fund Summary of Investment Performance

The Board of Education Retirement System ("BERS") Total Fund returned +10.55%, net of fees, for the Fiscal Year (FY) ending June 2024, compared to +13.71% for the BERS Policy Benchmark¹ against which it is measured. Gross performance for the FY ranked in the 34th percentile of the Wilshire public plans with assets greater than \$1 billion peer group. The Fund increased in value and ended the FY at \$9.31 billion (compared to \$8.49 billion at the end of the prior FY).

A pension fund/plan is a long-term investment established to pay participants' benefits. Over the long term, the expected return used for the actuarial valuation of benefits is 7%. However, the Fund/Plan is not expected to outperform this benchmark every year. Over the 5-year period ending June 30, 2024, the Fund/Plan has averaged a +8.12% annual net return, versus +8.39% for the BERS Policy Benchmark. The 5-year performance ranks in the top third of the public funds' peer group.



¹ The Board of Education Policy Benchmark is a custom index representing the weighted average return of the benchmarks for each major investment program in the Fund. The Policy Benchmark as of 6/30/24 consisted of: 29.33% Russell 3000, 8.94% MSCI World ex USA IMI Net, 3.98% MSCI Emerging Markets, 12.54% Russell 3000 + 300 b.p. per annum, 8.07% NFI - ODCE Net + 100bps, 4.32% CPI + 4%, 2.93% FTSE US Government Bond 1-3 Years Years Index, 5.99% Bloomberg US Mortgage Backed Securities, 5.85% NYC Custom IGC Benchmark, 6.29% Bloomberg U.S. HY - 2% Issuer Cap., 3.00% Bloomberg Global Inflation Linked: U.S. TIPS, 4.43% OFI - JPMGHY / CSFB 50/50 Blend Plus 300 b.p. per annum, 0.50% ICE BofA US 3-Month Treasury Bill.

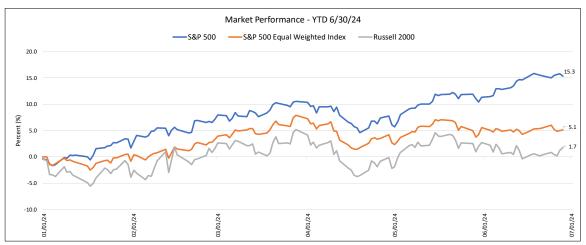
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Public Capital Markets Commentary

The BERS Fund/Plan is diversified across U.S. and non-U.S. markets. Global economies and labor markets remained resilient despite the headwinds from elevated inflation and higher borrowing costs that have been seen in over 15 years. While many areas of the market have seen some relief in -terms of inflation, housing has remained persistently stubborn due to limited supply driven by higher building costs and borrowing costs.

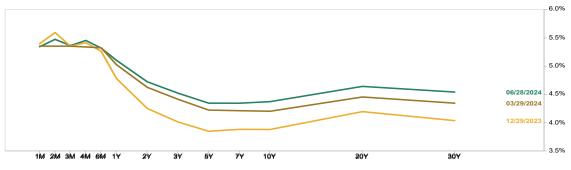
U.S. equities continue to rise amidst favorable corporate earnings and the likelihood of moderate slowdown rather than a recession. The FY return of U.S. public markets in large cap was driven by the seven largest companies (also knowns as the magnificent 7: Alphabet, Amazon, Apple, Meta Platforms, Microsoft, NVIDIA and Tesla), which made up nearly half of the return in large cap stocks. U.S. small cap equities, non-US developed, and emerging market equities saw returns in the lower double digits.



Source: FactSet as of 6/30/2024

Global markets have remained resilient against a backdrop of global macro-economic issues such as higher inflation, increased borrowing costs and global conflicts (Israel and Hamas, and Russia and Ukraine). Fixed income sectors were positive except for long-bonds. High yield continued to fair well as recession fears have waned.

United States Treasury Yield Curve

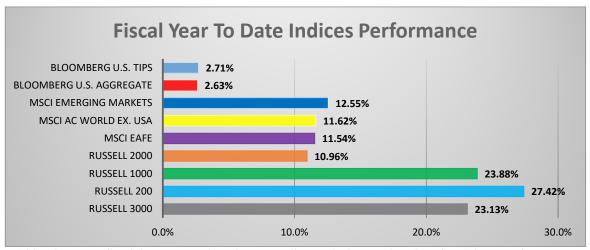


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The U.S. stock market, as measured by the Russell 3000 Index, returned +23.12% for the FY. The doubledigit return comes on the heels of moderating inflation and a resilient economy with continued strong corporate earnings. Of note should be that most U.S. equity returns have been attributed to the returns of the largest seven companies (Alphabet, Amazon, Apple, Meta Platforms, Microsoft, NVIDIA and Tesla) in the Russell 3000 Index. GDP ended June 30, 2024, at 2.8%, which compared favorably to the 2.1% figure at June 30, 2023.

Non-U.S. developed market equities also experienced positive performance during the FY. The non-U.S. equity market, as measured by the benchmark MSCI EAFE Index, returned +11.54% for FY 2024, led by Italy, Sweden, and Australia.

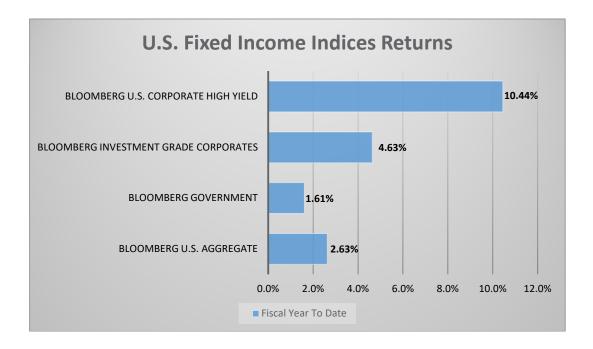
Emerging markets were also positive for the FY, slightly outpacing developing markets. India was a top performer as investors showed favor over the likes of China and Brazil, amid a slowdown in China driven by housing troubles. The emerging market asset class, as measured by the MSCI Emerging Markets Index, returned +12.55% for the FY.



Within the U.S. fixed income market, lower-quality and shorter duration fixed income investments outpaced non-spread and longer duration fixed income investments for the fiscal year to date period. For the start of the 2024 calendar year, the Federal Reserve did not raise rates and held its interest rate at a range of 5.25-5.50%. The Federal Reserve has been focused on ensuring inflation continues its downward (albeit persistently slow) trajectory towards their 2.0% target, while also being mindful of other key economic data. Throughout the FY, near-term rates (3 month) remained relatively unchanged from June to June whereas longer 10-, 20- and 30-year rates increased over 0.50%, leading to poorer performance in longerterm maturity bonds.

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BERS Fund Description

The Trustees establish an Investment Policy and asset allocation target after considering the long-term growth prospects of a diversified portfolio of investments and the expected costs of administering participants' benefits. Asset allocation refers to the percentages of the BERS Fund/Plan assets that are in stocks, bonds, and private markets investments (also referred as alternatives and real assets investments). In order to participate in the performance of the broad markets while keeping expenses contained, the Fund/Plan invests in passive or indexed strategies for much of its U.S. public equity allocation. For BERS, diversification and the focus on low investment expenses and fees are critical for long-term planning.

The approved asset allocation implementation plan continues to commit assets to private equity, real estate, and private infrastructure investments, while reducing U.S. equities and developed market non-U.S. equities. During the first half of the FY, the Trustees adopted a new long-term asset allocation target mix. Broad changes to Total Equity, Total Fixed Income, Total Alternatives and Real Assets remained very similar, while structural changes within each broad segment were more pronounced. Underlying changes included eliminating Inflation Linked Bonds, reducing High Yield Bonds, Non-US Developed Equity and Private Equity and increases to Core Fixed Income and US Equity as well as establishing a target for Cash and Cash Equivalents.

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Through Board Policy or by statute, certain securities are prohibited from inclusion in the BERS public market investment portfolio. These include:

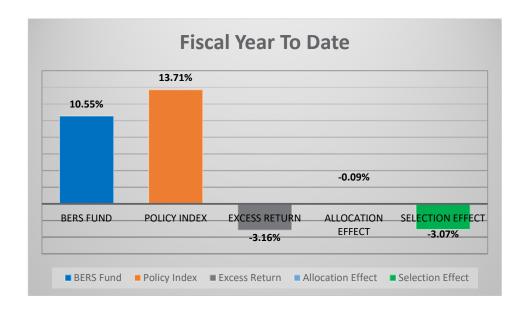
- Fossil fuel reserve owners: certain companies that own proven fossil fuel reserves (oil, gas and coal).
- Thermal coal: companies that earn more than 50% of their revenues from thermal coal.
- Civilian firearm manufacturers: companies that earn more than 5% of their revenues from the manufacture of civilian firearms.
- For-profit prisons: companies that derive at least 20% of their revenue from the operation of incarceration facilities.
- Iran/Sudan: companies that are not compliant with U.N. sanctions on Iran and Sudan.
- Russia: companies that are domiciled in Russia.

The Fund/Plan's target asset mix is shown in the graph depicted above. Over the long-term, which is the framework for considering the term structure of the Plans' liabilities, we expect the asset allocation will provide asset base growth to meet benefit payments, while protecting principal through diversification.

During this most recent FY, the Fund/Plan's U.S., emerging markets equities and fixed income allocations performed well on a relative and absolute basis while the non-U.S. equity and private equity allocations, while doing well on an absolute basis, underperformed their benchmarks on a relative basis. The attribution of returns is shown in the chart below. The most significant cause of relative underperformance can be explained due to the private equity composite, which had a difficult time keeping up with the Russell 3000 Index +3% on a trailing 1-year fiscal basis. Over longer-time periods (10 years), the underperformance gap is negligible, particularly for such a challenging benchmark. Overall, the BERS Fund/Plan underperformed the Policy Index by 3.16% for the FY. The manager selection effect was -3.07%, The comparison is based on the FY return of +10.55% for the BERS Fund versus the +13.71% FY return for the Policy Index.

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The diversified holdings of the BERS Fund/Plan have been a contributor to its long-term success. As of June 30, 2024, the Fund was underweight U.S. equities and overweight private equity. The Fund/Plan has investments across public and private equity, fixed income/credit, infrastructure, and real estate markets. Pension funds investors such as the BERS Fund/Plan have long-term investment horizons over which benefits will be paid. Therefore, BERS and many of its peers diversify a portion of assets to less liquid, private investments with higher expected returns where the invested capital is not needed for benefit payments over at least a 5 to 7-year period. These private market investments respond differently to shortterm moves in stocks, interest rates, and inflation.

The U.S. passive managers outpaced their cap weighted benchmarks primarily due to investment implementation differences (divestments), while the active manager in U.S. mid cap stocks was below its benchmark and the active manager in U.S. small cap stocks was ahead of its benchmark. The resulting U.S. equity composite outperformed (+23.33% vs. +23.13% for the index). World ex-U.S. equity active managers collectively underperformed the benchmark with a +6.31% return versus a +10.76% return for the benchmark. Within World ex-U.S., both large cap managers underperformed their benchmark, while small cap outperformed their benchmark. Global equity strategies added value returning +19.46% versus +19.38% for the MSCI AC World Index. Emerging markets equity strategies outperformed the benchmark returning +17.86% versus +12.55% for the MSCI Emerging Markets Index. The total fixed income (excluding OFI) return was +5.15%, comparing favorably to the Bloomberg U.S. Aggregate Index return of +2.63%. High yield was a main driver within public fixed income with a return of 10.1%...

As part of our ongoing monitoring, we review the manager contributions and the structure of the Fund/Plan to achieve the expected levels of returns on a net of fees basis. The Fund/Plan's current level of diversification into alternative assets overall had a negative impact in FY 2024 (relative to the policy index), as private equity notably underperformed its benchmark, the NYC Russell 3000 +3% (lagged return). However, private real estate and private infrastructure outperformed their respective benchmarks. Aside from private equity, relative to its specific benchmark, private real estate and infrastructure investments have added value to the Fund/Plan over longer periods and continue to be important strategic allocations.

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Market conditions and Fund/Plan performance will continue to be monitored closely to accomplish the goal of providing promised benefits to participants.

Sincerely,

Vanessa Vargas Guijarro

Vice President & Senior Consultant

William "Billy" Welsh

Vice President & Senior Consultant

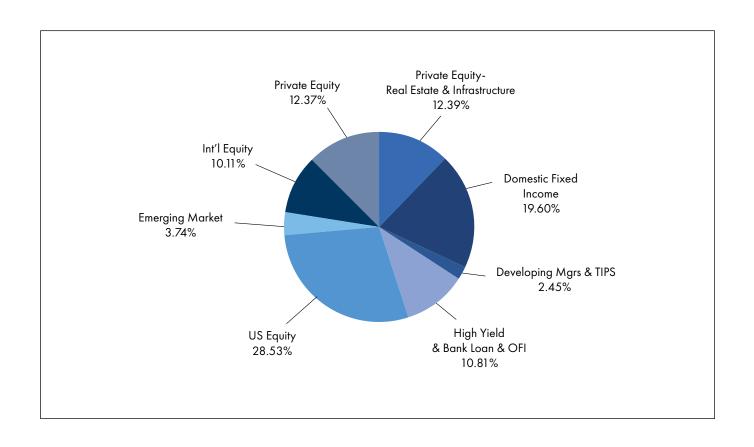
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Qualified Pension Plan and Tax Deferred Annuity Program Schedule of Investment Returns (Fixed) | Annualized Investment Results (Unaudited) Fiscal Year Ended June 30, 2024

	3 Mos	6 Mos	1 Yr	3 Yrs	5 Yrs	10 Yrs
	Apr-24	Jan-24	Jul-23	Jul-21	Jul-19	Jul-14
	Jun-24	Jun-24	Jun-24	Jun-24	Jun-24	Jun-24
	%	%	%	%	%	%
Total Equity	1.88	7.06	12.62	4.41	10.92	9.77
Domestic Equity Russell 3000 Index	2.95	13.27	23.33	7.47	13.79	11.97
	3.22	13.56	23.13	8.05	14.14	12.15
Total World ex-USA Equity	(0.92)	3.02	6.31	(4.59)	6.38	5.41
NYC Developed Equity Benchmark	(0.73)	4.41	10.76	1.97	6.29	4.22
Total Emerging Markets	5.41	9.26	17.86	(3.23)	3.47	3.33
MSCI Emerging Markets	5.00	7.49	12.55	(5.07)	3.10	2.79
International Fund of Funds	(0.15)	4.41	10.64	0.16	6.57	
MSCI ACWI EX USA IMI NET	0.92	5.28	11.57	0.19	5.62	
Total Global Equity	0.52	10.71	19.46	2.16	11.96	-
MSCI AC World (Daily Const)	2.87	11.30	19.38	5.43	10.76	
Private Equity Russell 3K + 300bps	2.16	2.68	5.40	10.49	16.32	15.29
	10.81	25.07	33.09	13.05	17.73	15.67
Real Estate	(0.74)	(3.86)	(6.72)	6.05	5.69	8.70
NCREIF NFI-ODCE NET + 100 BP	(0.41)	(2.74)	(9.09)	2.03	3.29	6.52
Infrastructure	2.56	4.83	9.51	10.06	11.25	11.44
CPI + 4%	1.25	3.40	7.09	9.17	8.34	6.92
Total Fixed Income	0.76	1.38	5.91	(0.33)	2.23	2.69
Structured Fixed Income NYC Custom Structured Index - BERS	0.25	(0.30)	3.21	(2.75)	0.38	1.83
	0.08	(0.73)	2.67	(2.98)	0.55	2.03
Core FI - Developing Mgrs Bloomberg US Aggregate	0.28 0.07	(0.51) (0.71)	2.99 2.63	(2.88) (3.02)	-	-
TIPS	0.92	0.82	2.72	(1.33)	2.08	1.96
BBG BARC GBL INF - LK: US TIPS (DLY)	0.79	0.70	2.71	(1.33)	2.07	1.91
Targeted Investments BERS Custom Benchmark	0.44	0.50	3.91	(1.91)	0.49	2.17
	0.36	(0.21)	3.07	(2.08)	0.15	1.54
High Yield	1.24	2.80	10.21	2.34	4.65	4.39
High Yield Custom Benchmark	1.09	2.58	10.43	1.64	3.90	4.16
Opportunistic Fixed Income Opportunistic Fixed Income JPMGHY	2.62 2.36	6.07 5.58	11.63 14.55	7.94 7.16		-
Short-term Investments	1.40	2.70	5.50	3.08	2.14	1.58
Total Portfolio	1.52	5.27	10.55	2.97	8.12	7.59
BERS Policy Benchmark	2.61	7.73	13.71	4.02	8.39	7.50

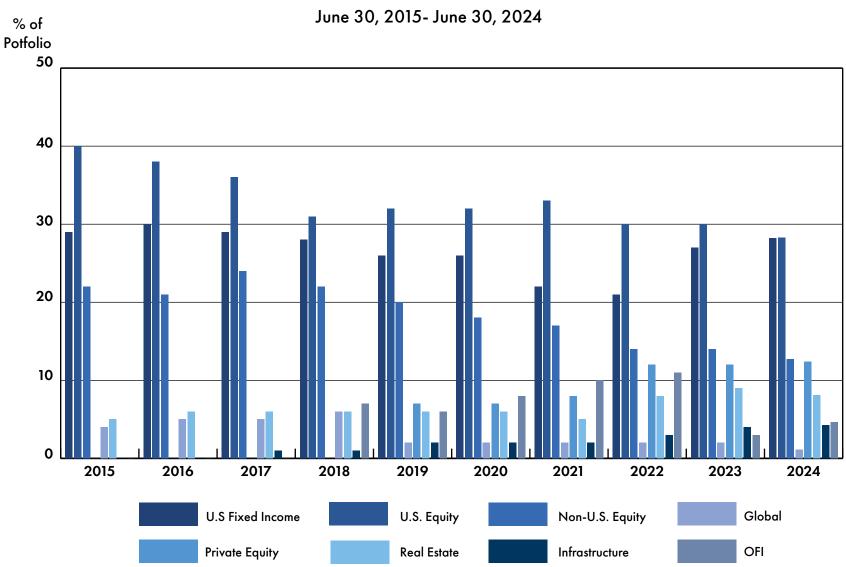
Yield data were obtained from the NYCBERS Performance Overview as of June 30, 2024

These returns are calculated using a time weighted rate of return based on the market value of the portfolio, for time periods greater than one year the returns are annualized.



Years	Domestic Fixed Income	Developing Mgrs & TIPS	High Yield & Bank Loan & OFI	US Equity	Emerging Market	Int'l Equity	Private Equity	Private Equity- Real Estate & Infrastructure
6/30/2015	20.67	3.16	5.48	40.15	4.94	17.06	4.07	4.47
6/30/2016	19.50	5.00	5.50	37.00	5.00	17.00	4.97	6.03
6/30/2017	20.37	4.81	6.00	36.49	<i>7</i> .98	12.76	5.01	6.58
6/30/2018	22.87	4.73	7.11	30.74	7.54	14.24	5.91	6.86
6/30/2019	20.99	4.69	6.42	32.12	6.97	14.92	6.55	7.34
6/30/2020	21.78	4.20	7.49	32.42	6.17	13.59	6.70	7.65
6/30/2021	17.17	4.97	10.03	33.15	6.02	13.23	8.19	7.24
6/30/2022	15.76	5.09	11.27	29.65	4.86	10.69	11.70	10.98
6/30/2023	13.43	4.35	12.16	29.89	5.05	10.85	11.86	12.41
6/30/2024	19.60	2.45	10.81	28.53	3.74	10.11	12.37	12.39

NYC BOARD OF EDUCATION
RETIREMENT SYSTEM
ASSET ALLOCATION
June 30, 2015- June 30, 2024



	NAME OF EQUITY SECURITIES	COST	FAIR VALUE
1	MICROSOFT CORP	\$ 44,212,684	\$ 172,086,477
2	APPLE INC	36,496,888	154,727,771
3	NVIDIA CORP	9,014,520	147,225,830
4	AMAZON.COM INC	40,714,405	93,455,700
5	META PLATFORMS INC CLASS A	20,672,133	59,229,715
6	ALPHABET INC CL A	17,699,548	52,267,578
7	ALPHABET INC CL C	16,936,303	52,027,266
8	TAIWAN SEMICONDUCTOR MANUFAC	25,447,254	40,957,263
9	BERKSHIRE HATHAWAY INC CL B	20,909,584	39,775,277
10	ELI LILLY & CO	5,323,743	38,637,997
11	BROADCOM INC	8,219,148	36,248,051
12	JPMORGAN CHASE & CO	16,130,318	29,156,790
13	TESLA INC	10,898,710	27,645,815
14	UNITEDHEALTH GROUP INC	13,557,311	26,340,964
15	SPOTIFY TECHNOLOGY SA	12,045,858	25,039,187
16	ASML HOLDING NV	6,296,170	24,967,538
17	VISA INC CLASS A SHARES	11,719,209	23,284,501
18	MASTERCARD INC. A	10,037,849	22,300,197
19	PROCTER & GAMBLE CO	12,154,661	20,791,464
20	TENCENT HOLDINGS LTD	20,010,006	20,136,194
21	JOHNSON & JOHNSON	17,942,604	19,415,164
22	COSTCO WHOLESALE CORP	5,398,381	19,100,125
23	FERRARI NV	3,649,567	17,618,105
24	MERCADOLIBRE INC	8,408,114	17,153,809
25	HOME DEPOT INC	8,945,366	16,634,021
26	MERCK & CO. INC.	7,923,470	16,377,626
27	WALMART INC	7,467,602	15,447,563
28	ABBVIE INC	9,389,346	15,145,731
29	ADYEN NV	16,187,720	14,687,917
30	NETFLIX INC	6,540,071	14,499,797
31	AIA GROUP LTD	16,070,422	14,239,421
32	BANK OF AMERICA CORP	10,940,122	14,073,012
33	ADOBE INC	6,195,270	14,048,496
34	ATLAS COPCO AB A SHS	5,814,01 <i>7</i>	13,936,833
35	ADVANCED MICRO DEVICES	4,431,515	13,371,944
36	SALESFORCE INC	7,541,062	13,342,719
37	PEPSICO INC	9,564,382	13,168,341
38	COCA COLA CO	9,744,378	13,033,992
39	ORACLE CORP	4,610,668	12,543,502
40	LINDE PLC	8,539,525	12,305,988
41	SERVICENOW INC	4,116,258	12,162,705
42	UBER TECHNOLOGIES INC	5,272,688	11,489,400
43	WIX.COM LTD	5,860,607	11,469,265
44	ARGENX SE	6,952,899	11,415,627
45	QUALCOMM INC	3,662,614	11,157,267
46	THERMO FISHER SCIENTIFIC INC	5,110,578	11,056,682
47	WELLS FARGO & CO	9,529,977	10,734,505
48	CISCO SYSTEMS INC	9,819,063	10,421,699
49	WISETECH GLOBAL LTD	3,324,907	10,323,449
50	WALT DISNEY CO	10,515,868	10,199,367
	NOTE: Full listing of holdings can be obtained at		
	NYC Board of Education Retirement System		
	55 Water Street, 50th Floor, New York, NY 10041		

Qualified Pension Plan and Tax Deferred Annuity Program List of 50 Largest Debt Securities Holding (Fixed) Fiscal Year Ended June 30, 2024

NAME OF DEBT SECURITIES	INTEREST RATE	MATURITY DATE	PAR VALUE	FAIR VALUE
1 FNMA POOL FS7252	5.00%	11/01/2053	\$ 39,901,502	\$ 38,568,393
2 FNMA POOL MA5271	5.50%	02/01/2054	16,658,320	16,432,766
3 FED HM IN PC POOL SD8257	4.50%	10/01/2052	11,642,217	10,984,432
4 US TREASURY N/B	2.50%	12/31/2026	5,000,000	9,218,400
5 US TREASURY N/B	9.25%	10/15/2026	4,500,000	8,991,900
6 GNMA II TBA 30 YR 3	3.00%	07/15/2054	10,157,629	8,849,022
7 FNMA POOL MA4413	2.00%	09/01/2051	10,841,324	8,510,765
8 FED HM IN PC POOL SD7553	3.00%	03/01/2052	9,493,343	8,214, <i>77</i> 9
9 US TREASURY N/B	4.25%	02/15/2054	8,260,000	7,865,089
10 GNMA II TBA 30 YR 3.5	3.50%	07/15/2054	8,741,200	7,847,937
11 FED HM LN PC POOL SD7552	2.50%	01/01/2052	8,919,278	7,409,512
12 US TREASURY N/B	3.63%	03/31/2030	7,525,000	7,245,145
13 US TREASURY N/B	3.88%	08/15/2033	7,505,000	7,220,035
14 FED HM IN PC POOL SD4977	5.00%	11/01/2053	7,359,096	<i>7</i> ,113,155
15 GNMA II TBA 30 YR 2.5	2.50%	07/15/2054	8,260,584	6,943,103
16 FNMA TBA 30 YR 3	3.00%	07/15/2054	8,089,000	6,880,099
17 GNMA II TBA 30 YR 5.5	5.50%	07/15/2054	6,794,000	6,740,327
18 US TREASURY N/B	4.50%	11/15/2025	6,750,000	6,709,163
19 US TREASURY N/B	3.75%	02/28/2027	3,500,000	6,530,230
20 US TREASURY N/B	4.38%	11/30/2028	6,500,000	6,498,960
21 GNMA II TBA 30 YR 2	2.00%	07/15/2054	7,987,000	6,462,601
22 US TREASURY N/B	3.75%	11/15/2043	7,255,000	6,412,187
23 US TREASURY N/B	4.50%	11/15/2033	6,350,000	6,408,547
24 GNMA II TBA 30 YR 5	5.00%	07/15/2054	6,387,000	6,218,766
25 US TREASURY N/B	4.25%	01/31/2026	6,250,000	6,189,938
26 US TREASURY N/B	0.88%	11/15/2030	7,625,000	6,167,634
27 US TREASURY N/B	4.25%	01/31/2026	6,200,000	6,140,418
28 US TREASURY N/B	4.25%	12/31/2025	6,000,000	5,942,580
29 US TREASURY N/B	4.00%	01/15/2027	6,000,000	5,912,820
30 US TREASURY N/B	4.00%	01/31/2029	6,000,000	5,907,660
31 US TREASURY N/B	2.25%	11/15/2025	5,950,000	5,737,347
32 US TREASURY N/B	4.88%	11/30/2025	5,700,000	5,693,559
33 FNMA TBA 15 YR 1.5	1.50%	07/15/2039	6,591,700	5,634,849
34 FNMA POOL MA4512	2.50%	01/01/2052	6,802,020	5,560,039
35 US TREASURY N/B	5.00%	10/31/2025	5,500,000	5,500,660
36 US TREASURY N/B	5.00%	09/30/2025	5,500,000	5,497,635
37 US TREASURY N/B	4.88%	11/30/2025	5,500,000	5,493,785
38 US TREASURY N/B	1.63%	05/15/2031	6,475,000	5,434,468
39 FNMA POOL FS0316	1.50%	11/01/2041	6,623,207	5,337,907
40 FNMA POOL FM8210	3.00%	04/01/2050	6,087,353	5,270,612
41 US TREASURY N/B	4.88%	04/30/2026	5,250,000	5,257,770
42 US TREASURY N/B	4.88%	10/31/2030	5,075,000	5,218,318
43 US TREASURY N/B	0.50%	02/28/2026	5,600,000	5,214,552
44 US TREASURY N/B	0.25%	09/30/2025	5,500,000	5,185,895
45 US TREASURY N/B	3.88%	01/15/2026	5,200,000	5,121,792
46 FNMA TBA 30 YR 3.5	3.50%	07/15/2054	5,744,970	5,084,298
47 US TREASURY N/B	3.75%	05/31/2030	5,250,000	5,084,100
48 FNMA POOL MA4398	2.00%	08/01/2051	6,469,297	5,082,797
49 US TREASURY N/B	1.25%	11/30/2026	5,500,000	5,079,525
50 US TREASURY N/B	5.00%	10/31/2025	5,000,000	5,000,600
NOTE: Full listing of holdings can be obtained at		• •	•	. ,

NOTE: Full listing of holdings can be obtained at NYC Board of Education Retirement System 55 Water Street, 50th Floor, New York, NY 10041

FUND MANAGER	CATEGORY	ASSET UNDER MANAGEMENT AS OF 06/30/24 (in \$)	MANAGEMENT FEES (in \$)
Actis	Alternative Investment - Infrastructure	11,465,481	1,085,533
Ardian	Alternative Investment - Infrastructure	39,308,531	1,002,230
Ardian Infrastructure Fund VI B	Alternative Investment - Infrastructure	2,892,951	264,872
Axium Infrastructure	Alternative Investment - Infrastructure	14,328,790	120,739
Basalt Infrastructure Partners IV A	Alternative Investment - Infrastructure	7,920,754	809,923
BIF	Alternative Investment - Infrastructure	2,924,133	6,197
BlackRock	Alternative Investment - Infrastructure	26,228,855	328,329
Brookfield Asset Management	Alternative Investment - Infrastructure	57,863,095	726,758
DIF Infrastructure	Alternative Investment - Infrastructure	13,628,203	816,492
EIG Credit Management	Alternative Investment - Infrastructure	561,362	1 <i>7</i> 1,152
EQT Partners	Alternative Investment - Infrastructure	63,809,855	2,051,740
Global Infrastructure Management	Alternative Investment - Infrastructure	36,505,600	777,204
Industry Funds Management	Alternative Investment - Infrastructure	31,678,233	476,066
Infravia Capital Partners	Alternative Investment - Infrastructure	19,567,081	696,633
KKR	Alternative Investment - Infrastructure	40,607,091	350,723
Stonepeak Infrastructure Partners	Alternative Investment - Infrastructure	23,837,440	327,025
400 Capital Management	Alternative Investment - OFI	47,734,916	527,130
Apollo Global Management	Alternative Investment - OFI	19,369,500	436,641
Ares Management	Alternative Investment - OFI	31,057,560	307,424
Blackstone Green	Alternative Investment - OFI	3,822,371	207,098
Brightwood Capital	Alternative Investment - OFI	21,087,580	4,804,687
CarVal Centre Street	Alternative Investment - OFI	19,492,258	<i>7</i> 41,078
Charlesbank	Alternative Investment - OFI	7,168,487	199,167
Crestline	Alternative Investment - OFI	18,535,108	333,165
Golden Tree	Alternative Investment - OFI	15,214,174	29,300
ICG Strategic Equity	Alternative Investment - OFI	31,907,589	255,468
KKR	Alternative Investment - OFI	22,581,513	360,179
KLCP	Alternative Investment - OFI	32,126,823	497,529
Maranon Center Street	Alternative Investment - OFI	32,829,836	360,866
Marathon Asset Management Limited	Alternative Investment - OFI	29,170,680	243,400
Oak Hill Advisors	Alternative Investment - OFI	60,692,481	1,089,955
Torchlight Investors	Alternative Investment - OFI	37,190,620	1,243,135
American Security Partners	Alternative Investment - Private Equity	6,653,035	518,921
Amulet Capital	Alternative Investment - Private Equity	440,698	92,148
Apax Partners	Alternative Investment - Private Equity	24,624,817	1,066,710
Apollo Global Management	Alternative Investment - Private Equity	42,268,213	1,269,042
Ardian	Alternative Investment - Private Equity	33,550,097	<i>7</i> 13,985
Ares Management	Alternative Investment - Private Equity	9,978,393	69,808
ASF	Alternative Investment - Private Equity	3,877,000	63,214
Base 10 Advancement	Alternative Investment - Private Equity	4,772,149	658,205

Qualified Pension Plan and Tax Deferred Annuity Program Schedule of Investment Management Fees (Fixed) Fiscal Year Ended June 30, 2024 (Cont'd)

FUND MANAGER	CATEGORY	ASSET UNDER MANAGEMENT AS OF 06/30/24 (in \$)	MANAGEMENT FEES (in \$)
BC Partners	Alternative Investment - Private Equity	19,528,624	137,095
Bridgepoint Capital	Alternative Investment - Private Equity	34,041,189	867,921
Carlyle Group	Alternative Investment - Private Equity	6,571,762	205,075
Centerbridge Partners	Alternative Investment - Private Equity	2,315,449	27,330
Clayton Dubilier Rice	Alternative Investment - Private Equity	4,858,411	744,215
Clearlake Capital Group	Alternative Investment - Private Equity	35,055,253	1,004,695
Crestview Partners	Alternative Investment - Private Equity	21,781,196	<i>7</i> 21,386
CVC Capital Partners	Alternative Investment - Private Equity	62,209,918	2,078,739
EQT Partners	Alternative Investment - Private Equity	66,298, <i>7</i> 18	1,361,155
FTV Capital	Alternative Investment - Private Equity	30,812,739	714,893
Grain Management	Alternative Investment - Private Equity	17,016,712	220,314
Green Equity	Alternative Investment - Private Equity	3,447,362	13,974
HarbourVest Partners	Alternative Investment - Private Equity	21,315,607	83,157
Heartwood Partners	Alternative Investment - Private Equity	2,032,291	211,127
Hg Capital	Alternative Investment - Private Equity	8,635,026	611,486
ICG Strategic Equity	Alternative Investment - Private Equity	46,023,296	1,589,841
ICV Partners	Alternative Investment - Private Equity	3,328,575	27,319
Insight Partners	Alternative Investment - Private Equity	22,037,026	444,372
Integrum Capital Partners	Alternative Investment - Private Equity	1,525,355	38,796
KKR	Alternative Investment - Private Equity	68,877,157	1,524,973
Landmark Partners	Alternative Investment - Private Equity	6,598,827	491,500
Lee Equity Partners	Alternative Investment - Private Equity	673,446	45,421
Leonard Green & Partners	Alternative Investment - Private Equity	14,112,638	1,395,516
Lexington Partners	Alternative Investment - Private Equity	41,444,048	813,753
Lightbay Investment Partners	Alternative Investment - Private Equity	418,862	117,482
Lindsay Goldberg	Alternative Investment - Private Equity	9,946,104	257,867
Mesirow Financial	Alternative Investment - Private Equity	26,525,933	289,145
Mill City Capital	Alternative Investment - Private Equity	737,301	1,351
Neuberger Berman Group	Alternative Investment - Private Equity	19,006,644	154,643
New 2ND Capital	Alternative Investment - Private Equity	1,979,151	(364,038)
New Mainstream Capital	Alternative Investment - Private Equity	3,081,549	29,681
Nordic Capital	Alternative Investment - Private Equity	5,455,053	626,517
One Rock Capital Partners	Alternative Investment - Private Equity	32,547,164	375,783
Palladium Equity Partners	Alternative Investment - Private Equity	9,980,377	492,488
Patriot Financial Partners	Alternative Investment - Private Equity	4,274,534	80,282
Permira	Alternative Investment - Private Equity	7,237,104	561,669
Platinum Equity	Alternative Investment - Private Equity	27,639,162	311,477
Providence Strategic Growth	Alternative Investment - Private Equity	19,158,180	536,441
Reverence Capital Partners	Alternative Investment - Private Equity	21,078,285	304,338
Siris Capital Group	Alternative Investment - Private Equity	15,870,358	201,496

FUND MANAGER	CATEGORY	ASSET UNDER MANAGEMENT AS OF 06/30/24 (in \$)	MANAGEMENT FEES (in \$)
Stellex Capital Management	Alternative Investment - Private Equity	25,438,251	928,119
The Raine Group	Alternative Investment - Private Equity	12,826,818	458,644
The Vistria Group	Alternative Investment - Private Equity	15,467,206	131, <i>7</i> 10
Thoma Bravo	Alternative Investment - Private Equity	21,893,360	61,635
TPG Capital	Alternative Investment - Private Equity	15,045,005	329,734
Valor Equity Partners	Alternative Investment - Private Equity	21,708,159	240,049
Vista Equity Partners	Alternative Investment - Private Equity	83,410,133	2,229,728
Warburg Pincus	Alternative Investment - Private Equity	56,507,053	2,374,721
WCAS	Alternative Investment - Private Equity	409,489	8,734
Webster Capital	Alternative Investment - Private Equity	22,811	(3,141)
Welsh Carson Anderson & Stowe	Alternative Investment - Private Equity	27,067,173	1,239,728
Aermont Capital	Alternative Investment - Real Estate	10,113,129	<i>7</i> 61, <i>7</i> 13
Almanac Realty Investors	Alternative Investment - Real Estate	19,880,797	605,047
Artemis Real Estate Partners	Alternative Investment - Real Estate	16,243,373	<i>7</i> 21,261
Basis Management Group	Alternative Investment - Real Estate	15,932,811	675,468
Bentall GreenOak	Alternative Investment - Real Estate	5,603,946	90,721
Blackstone Green	Alternative Investment - Real Estate	1,132,542	60
Brookfield Asset Management	Alternative Investment - Real Estate	70,662,556	992,722
Carlyle Group	Alternative Investment - Real Estate	5,514,591	351,475
Clarion Partners	Alternative Investment - Real Estate	48,239,845	1,525,022
Cortland Partners	Alternative Investment - Real Estate	13,693,225	431,348
DivcoWest Real Estate Investments	Alternative Investment - Real Estate	11,329,922	1,177,215
DRA Advisors	Alternative Investment - Real Estate	4,996,118	138,169
EQT Partners	Alternative Investment - Real Estate	21,860,595	1,317,726
Exeter Property Group	Alternative Investment - Real Estate	39,472,070	1,611,977
Franklin Templeton Institutional	Alternative Investment - Real Estate	219,657	57,337
H/2 Capital Partners	Alternative Investment - Real Estate	15,805,032	413,932
Harrison Street Real Estate Capital	Alternative Investment - Real Estate	84,012,719	944,717
Heitman Capital Management	Alternative Investment - Real Estate	26,722,059	253,054
Jamestown	Alternative Investment - Real Estate	2,040,574	240,828
KKR	Alternative Investment - Real Estate	40,434,444	812,978
Lasalle Investment Management	Alternative Investment - Real Estate	66,693,382	967,287
Lone Star	Alternative Investment - Real Estate	2,541,738	35,001
Mesirow Financial	Alternative Investment - Real Estate	26,561,781	175,000
Metlife	Alternative Investment - Real Estate	19,797,195	421,906
Prudential Financial	Alternative Investment - Real Estate	2,551,260	59,776
Related Fund Management	Alternative Investment - Real Estate	2,518,790	111,601
Rialto Capital Management	Alternative Investment - Real Estate	20,739,023	671,159
RREEF America	Alternative Investment - Real Estate	46,712,733	332,619
The Blackstone Group	Alternative Investment - Real Estate	42,472,463	1,280,611

Qualified Pension Plan and Tax Deferred Annuity Program Schedule of Investment Management Fees (Fixed) Fiscal Year Ended June 30, 2024 (Cont'd)

FUND MANAGER	CATEGORY	ASSET UNDER MANAGEMENT AS OF 06/30/24 (in \$)	MANAGEMENT FEES (in \$)
The Hudson Companies	Alternative Investment - Real Estate	4,840,235	5,649
Tristan Capital Partners	Alternative Investment - Real Estate	8,034,201	815,643
UBS Asset Management	Alternative Investment - Real Estate	18,796,248	159, <i>7</i> 12
USAA Real Estate	Alternative Investment - Real Estate	22,895,988	147,705
Vanbarton Group	Alternative Investment - Real Estate	4,276,455	556,637
Westbrook Partners	Alternative Investment - Real Estate	9,233,031	370,949
RBC Global Asset Management	CTF - Fixed Income - Mortgage	9,389,922	17,399
BlackRock	CTF-Domestic Equity	61,331,729	2,845
BlackRock	CTF-International Equity	1,806, <i>7</i> 46	456
Altravue Capital	Domestic Equity	3,629,872	15,869
BlackRock	Domestic Equity	1,512,628,866	29,065
Bridge City Capital	Domestic Equity	2,383,493	11,072
Dean Capital Management	Domestic Equity	2,724,664	13,436
Essex Investment Management Company	Domestic Equity	3,211,465	15,235
Lisanti Capital Growth	Domestic Equity	1,389,730	6,020
Nicholas Investment Partners	Domestic Equity	2,017,980	8,924
QSV	Domestic Equity	2,883,688	13,770
State Street Global Advisors	Domestic Equity	787,174,168	38,349
Wasatch Advisors	Domestic Equity	65,588,390	1,022,518
Wellington Management Company	Domestic Equity	212,451,632	690,577
New Century	Fixed Income - Government	33,246,682	84,083
State Street Global Advisors	Fixed Income - Government	738,640,080	70,867
AFL-CIO Housing Investment Trust	Fixed Income - Mortgage	16,669,953	53,165
BlackRock-Mortgages	Fixed Income - Mortgage	424,477,165	137,207
Semper-Mortgages - Bivium	Fixed Income - Mortgage	34,838,169	87,066
Integrity-Credit	Fixed Income - Other	36,983,526	92,000
Mackay Shields	Fixed Income - Other	289,271,074	905,593
Nomura Corporate Research and	Fixed Income - Other	287,448,170	1,042,622
Asset Management			
Pugh Capital Management	Fixed Income - Other	217,676,955	303,615
T. Rowe Price Associates	Fixed Income - Other	438,313,695	363,636
State Street Global Advisors	Fixed Income - TIPS	10,423,119	7,558
Acadian Asset Management	International Equity	337,172,281	1,169,603
Algert Global	International Equity	16,861,549	69,661
ARGA Investment Management	International Equity	12,605,765	39,334
Aubrey Capital Management	International Equity	13,287,846	32,478
Baillie Gifford	International Equity	304,668,157	731,285
Dundas Global Investors	International Equity	-	29
Fiera Capital Corporation	International Equity	53,118,923	430,763
Foresight Global Investors	International Equity	16,691,937	40,340

FUND MANAGER	CATEGORY	ASSET UNDER MANAGEMENT AS OF 06/30/24 (in \$)	MANAGEMENT FEES (in \$)
Haven	International Equity	12,949,712	31,486
JP Morgan Asset Management	International Equity	107,566,207	894,736
Martin Investment Management	International Equity	11,065,321	29,258
Morgan Stanley Investment Management	International Equity	51,351,839	324,994
North of South Capital	International Equity	15,658,953	37,590
Osmosis Investment Management	International Equity	10,520,058	32,330
Redwood Investments	International Equity	12,926,436	34,239
Sprucegrove Investment Management	International Equity	301,115,391	602,962
Xponance	International Equity	9,479,745	10,500

Qualified Pension Plan and Tax Deferred Annuity Program Schedule of Payments of Commissions to Brokers (Fixed) Fiscal Year Ended June 30, 2024 (Cont'd)

INDIVIDUAL OR BROKERAGE FIRM	# OF SHARES	COMMISSION PAID (in \$)	COMMISSION PER SHARE (in \$)
ABEL NOSER	7,182	287	0.0400
ABN AMRO CLEARING BANK N.V.	1,505	73	0.0485
ABSA BANKLIMITED	609	8	0.0133
ACADEMY SECURITIES INC	38,400	286	0.0074
ACUMEN CAPITAL PARTNERS	575	11	0.0184
AGORA CORRETORA DE TITULOS E VALORES MOB	156,701	353	0.0023
ALLEN & COMPANY LLC	2,103	42	0.0200
ARQAAM SECURITIES LLC	311, <i>7</i> 67	948	0.0030
AXIS CAPITAL LIMITED	7,409	96	0.0130
B.RILEY & CO., LLC	20,679	414	0.0200
BANCO ITAU SA	559,032	3,428	0.0061
BANCO PACTUAL S.A.	21,363	103	0.0048
BANCO S3 MEXICO SA	114,566	539	0.0047
BANCO SANTANDER (BRASIL) S.A.	156,991	591	0.0038
BANCO SANTANDER CENTRAL HISPANO	16,661	306	0.0183
BANCROFT CAPITAL LLC	1,000	8	0.0080
BANK OF AMERICA CORPORATION	34,375	78	0.0023
BANK OF AMERICA INTL NY UNITED STATES	25,904	91	0.0035
BARCLAYS CAPITAL	857,324	1,365	0.0016
BARCLAYS CAPITAL INC	19,329	338	0.0175
BARCLAYS CAPITAL INC./LE	111,301	1,232	0.0111
BARCLAYS CAPITAL LE	835,126	4,320	0.0052
BARRENJOEY MARKETS PTY LIMITED	15,429	17	0.0011
BATLIVALA & KARANI SECS INDIA PVT. LTD	212	25	0.1200
BERNSTEIN INSTITUTIONAL SERVICES LLC	33,972	441	0.0130
BERNSTEINAUTONOMOUS LLP	128,372	10,387	0.0809
BMO CAPITAL MARKETS	48,899	1,286	0.0263
BMO CAPITAL MARKETS LIMITED	104	0	0.0008
BMO NESBITT BURNS INC	60,917	499	0.0082
BNP PARIBAS ARBITRAGE	52,644	595	0.0113
BNP PARIBAS PRIME BROKERAGE ACTING AGENT	6,388	192	0.0300
BNP PARIBAS PRIME BROKERAGE, INC.	209,547	524	0.0025
BNP PARIBAS SECURITIES (ASIA) LTD.	357,003	245	0.0007
BNP PARIBAS SECURITIES INDIA PRIVATE LIM	51,341	576	0.0112
BNP PARIBAS SECURITIES SERVICES	4,653,396	6,210	0.0013
BOFA SECURITIES, INC	566,291	3,603	0.0064
BOFA SECURITIES, INC.	940,911	10,249	0.0109
BRADESCO S.A. CTVM	1,057,554	2,431	0.0023
BTG PACTUAL CASA DE BOLSA	216,012	1,525	0.0071

INDIVIDUAL OR BROKERAGE FIRM	# OF SHARES	COMMISSION PAID (in \$)	COMMISSION PER SHARE (in \$)
BTG PACTUAL CHILE S.A. CORREDORES DE BOL	837,670	116	0.0001
BTIG, LLC	191,189	4,210	0.0220
CABRERA CAPITAL MARKETS	<i>57</i> 1,500	2,818	0.0049
CACEIS BANK	15,497	797	0.0514
CANACCORD GENUITY INC.	135,246	3,034	0.0224
CANACCORDGENUITY CORP.	3,757	63	0.0168
CANACCORDGENUITY LLC	6,428	140	0.0218
CANADIAN IMPERIAL BANK OF COMMERCE	108,204	140	0.0013
CANTOR FITZGERALD & CO.	46,914	1,515	0.0323
CANTOR FITZGERALD AND CO	7,262	54	0.0075
CARNEGIE A S	21,780	1,599	0.0734
CARNEGIE INVESTMENT BANK AB	319,247	1,330	0.0042
CGS INTERNATIONAL SECURITIES HONG KONG L	125,800	220	0.0017
CGS INTERNATIONAL SECURITIES SINGAPORE P	1,519,500	777	0.0005
CHINA INTERNATIONAL CAPITAL CO	516,390	792	0.0015
CIBC WORLD MKTS INC	6,265	91	0.0145
CIMB SECURITIES LTD., KOREA BRANCH	4,500	216	0.0480
CITATION GROUP	6,502	109	0.0167
CITIBANK CANADA	48,109	430	0.0089
CITIBANK MEXICO	161,645	260	0.0016
CITIBANK N.A.	93,901	555	0.0059
CITIGROUP GLOBAL MARKETS INC	242,609	2,859	0.0118
CITIGROUP GLOBAL MARKETS INC.	100,635	1,460	0.0145
CITIGROUPGLBL MARKTET KOERA SECS LTD	12,495	1,076	0.0861
CITIGROUPGLOBAL MARKETS BRASIL CCTVM SA	59,785	85	0.0014
CITIGROUPGLOBAL MARKETS EUROPE AG	148,404	4,545	0.0306
CITIGROUPGLOBAL MARKETS INC	13,887,285	5,402	0.0004
CITIGROUPGLOBAL MARKETS INC.	82,992	316	0.0038
CITIGROUPGLOBAL MARKETS INDIA	85,184	1,804	0.0212
CITIGROUPGLOBAL MARKETS LIMITED	6,777,272	18,628	0.0027
CITIGROUPGLOBAL MARKETS TAIWAN	312,010	199	0.0006
CLKING	49,129	1,678	0.0342
CL SECURITIES TAIWAN COMPANY LIMITED	170,000	3,069	0.0181
CLSA AMERICAS	753	4	0.0050
CLSA AUSTRALIA PTY LTD	632,583	397	0.0006
CLSA LIMITED	53,141,310	18,001	0.0003
CLSA SECURITIES KOREA LTD.	332,063	3,585	0.0108
CLSA SECURITIES MALAYSIA SDN BHD	956,281	262	0.0003
CLSA SINGAPORE PTE LTD.	4,573,843	8,081	0.0018

Qualified Pension Plan and Tax Deferred Annuity Program Schedule of Payments of Commissions to Brokers (Fixed) Fiscal Year Ended June 30, 2024 (Cont'd)

INDIVIDUAL OR BROKERAGE FIRM	# OF SHARES	COMMISSION PAID (in \$)	COMMISSION PER SHARE (in \$)
COMPASS POINT	4,209	142	0.0337
CORMARK SECURITIES INC	7,423	89	0.0120
COWEN AND COMPANY, LLC	231,550	3,694	0.0160
CRAIG-HALLUM	28,297	900	0.0318
CREDIT LYONNAIS SECURITIES INDIA	3,080,541	11,866	0.0039
CREDIT SUISSE FIRST BOSTON (EUROPE)	8,436	424	0.0502
DAIWA CAPITAL MARKETS AMERICA INC.	959,631	22,530	0.0235
DAIWA SECURITIES (HK) LTD.	199,655	114	0.0006
DAIWA SECURITIES COMPANY LTD	3,780	217	0.0575
DAIWA SECURITIES SB CAPITAL MARKETS	501, <i>7</i> 63	1, <i>7</i> 81	0.0035
DAIWA SECURITIES SMBC CATHY CO	8,000	67	0.0084
DANSKE BANK A.S.	1,149	99	0.0858
DAVIDSON D.A. & COMPANY INC.	5,790	192	0.0332
DBS VICKERS SECURITIES (SINGAPORE)	1,786,600	6,432	0.0036
DREXEL HAMILTON LLC	305	2	0.0075
DSP MERRILL LYNCH LTD	181,410	1,897	0.0105
efg hermes international securities brok	1,416,153	3,417	0.0024
EUROCLEAR BANK S.A / N.V	54,099	685	0.0127
EVERCORE ISI	55,129	1,101	0.0200
EXANE S.A.	1	0	0.2200
FIDELITY CAPITAL MARKETS	4,358	130	0.0299
FIDELITY CLEARING CANADA	11,669	107	0.0092
FIDELITY CLEARING CANADA ULC	135,000	12,301	0.0911
FIRST REPUBLIC SECURITIES COMPANY LLC	165	7	0.0400
FLOW CORRETORA DE MERCADORIAS LTDA.	9,600	27	0.0028
GOLDMAN SACHS (ASIA) L.L.C.	2,537,166	4,240	0.0017
GOLDMAN SACHS (ASIA) LLC	114,545	1,319	0.0115
GOLDMAN SACHS (INDIA)	633,388	3,570	0.0056
GOLDMAN SACHS & CO LLC	19,714,934	60,700	0.0031
GOLDMAN SACHS DO BRASIL CORRETORA	22,174	118	0.0053
GOLDMAN SACHS INTERNATIONAL	1,234,202	18,008	0.0146
GUZMAN & CO	50,514	71	0.0014
HANWHA SECURITIES SEOUL	2,255	153	0.0680
HONGKONG AND SHAGHAI BANKING CORPO	472,000	79	0.0002
HONGKONG AND SHANGHAI BANKING CORPORATIO	363,191	2,168	0.0060
HSBC BANKPLC	4,277,971	8,314	0.0019
HSBC BROKERAGE (USA) INC.	21,839	218	0.0100
HSBC SECURITIES (USA) INC.	40,495,040	16,447	0.0004
HSBC SECURITIES (USA), INC.	2,007	16	0.0080

INDIVIDUAL OR BROKERAGE FIRM	# OF SHARES	COMMISSION PAID (in \$)	COMMISSION PER SHARE (in \$)
HSBC SECURITIES INDIA HOLDINGS	1,487,395	4,406	0.0030
ICBCFS LLC	912	31	0.0337
ICICI SECURITIES LIMITED	5,349,992	16,861	0.0032
INSTINET	198,778	3,603	0.0181
INSTINET AUSTRALIA CLEARING SRVC PTY LTD	1,286,712	1,115	0.0009
INSTINET CANADA	57,231	238	0.0042
INSTINET EUROPE LIMITED	53,026	3,790	0.0715
INSTINET LLC	672,265	1,025	0.0015
INSTINET PACIFIC LIMITED	41,913,060	17,571	0.0004
INSTINET SINGAPORE SERVICES PT	63,867	51	0.0008
INSTINET U.K. LTD	8,755,496	27,498	0.0031
INVESTEC BANK PLC	185,648	509	0.0027
J P MORGAN INDIA PRIVATE LTD	3,042,438	10,445	0.0034
J P MORGAN SECURITIES INC	4,350,106	5,928	0.0014
J.P. MORGAN SECURITIES LIMITED	142,871	635	0.0044
J.P. MORGAN SECURITIES LLC	270,572	3,766	0.0139
J.P. MORGAN SECURITIES PLC	6,399,481	27,479	0.0043
J.P.MORGAN SECURITIES(FAR EAST)LTD SEOUL	213,530	2,696	0.0126
JANNEY MONTGOMERY SCOTT INC.	15,242	305	0.0200
JEFFERIESHONG KONG LIMITED	241,600	323	0.0013
JEFFERIESINDIA PRIVATE LIMITED	486,151	6,368	0.0131
JEFFERIESINTERNATIONAL LTD	420,882	4,747	0.0113
JEFFERIESLLC	2,172,040	13,777	0.0063
JMP SECURITIES	1,168	47	0.0400
JOH. BERENBERG, GOSSLER & CO. KG	55,616	2,144	0.0385
JONESTRADING INSTITUTIONAL SERVICES LLC	85,920	1,989	0.0232
JONESTRADING INSTITUTIONAL SERVICES, LLC	11,889	42	0.0035
JP MORGANSECURITIES AUSTRALIA LTD	1,276,200	793	0.0006
JP MORGANSECURITIES SINGAPORE	2,669,900	2,056	0.0008
JPMORGAN SECURITIES(ASIA PACIFIC)LTD	37,866,297	10,761	0.0003
KEEFE BRUYETTE & WOODS INC	18,435	301	0.0163
KEYBANC CAPITAL MARKETS INC	31,119	926	0.0298
KIM ENG SECURITIES (HK) LTD.	527,500	151	0.0003
KIM ENG SECURITIES, P.T.	96,600	9	0.0001
KOREA INVESTMENT AND SECURITIES CO., LTD	11,112	310	0.0279
KOTAK SECURITIES LTD	50,293	919	0.0183
LEERINK PARTNERS LLC	52,431	1,398	0.0267
LIQUIDNET INC	158,171	3,454	0.0218
LIQUIDNETASIA LIMITED	400,550	181	0.0005

Qualified Pension Plan and Tax Deferred Annuity Program Schedule of Payments of Commissions to Brokers (Fixed) Fiscal Year Ended June 30, 2024 (Cont'd)

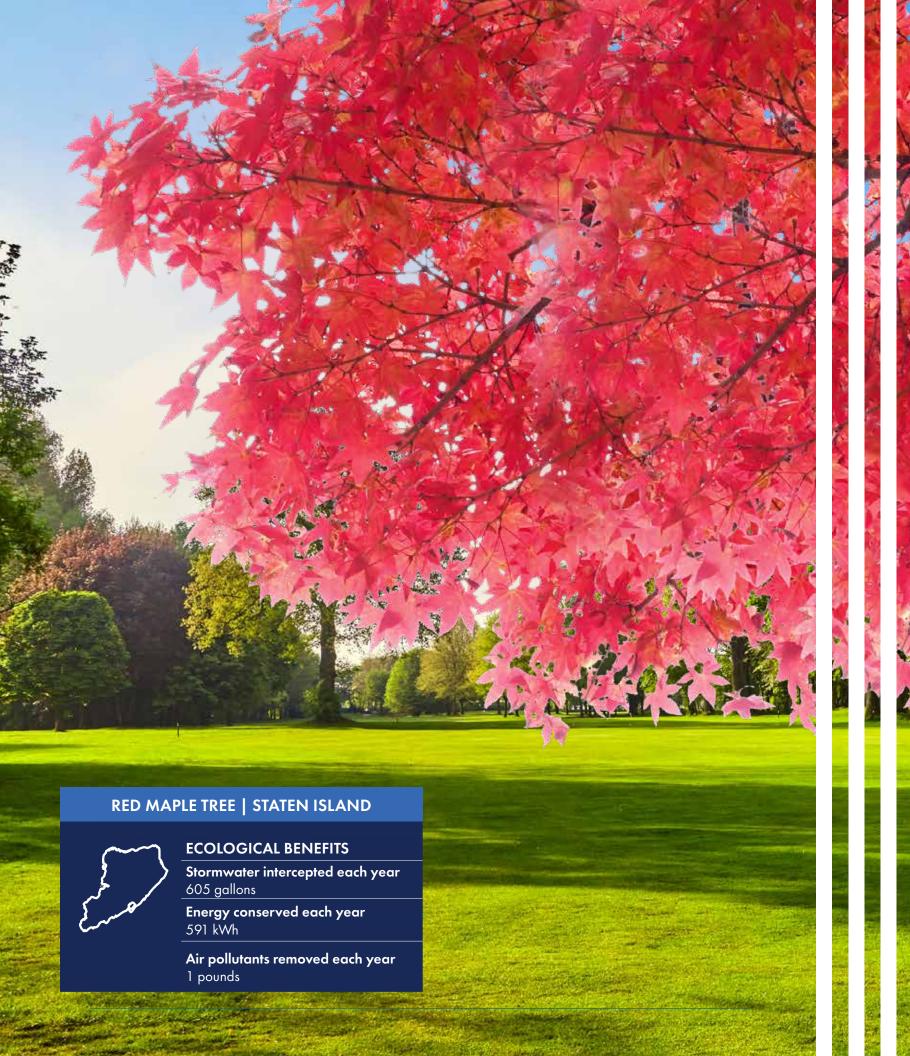
INDIVIDUAL OR BROKERAGE FIRM	# OF SHARES	COMMISSION PAID (in \$)	COMMISSION PER SHARE (in \$)
LIQUIDNETCANADA INC	21,400	257	0.0120
LIQUIDNETEUROPE LIMITED	<i>7</i> 3,111	490	0.0067
LOOP CAPITAL MARKETS	443,420	5,181	0.0117
LUMINEX TRADING AND ANALYTICS	8,042	40	0.0050
LUMINEX TRADING AND ANALYTICS LLC	36	0	0.0100
MACQUARIEBANK LIMITED	1,212,696	1,342	0.0011
MACQUARIECAPITAL (EUROPE) LTD	4,684	34	0.0072
MACQUARIECAPITAL (USA) INC	315,484	837	0.0027
MACQUARIECAPITAL SECURITIES S	3,540,678	4,167	0.0012
MACQUARIESEC NZ LTD	2,204	3	0.0015
MACQUARIESECURITIES (INDIA) PVT LTD	32,954	451	0.0137
MACQUARIESECURITIES (SINGAPORE)	226,078	116	0.0005
MACQUARIESECURITIES KOREA LIMITED	17,810	465	0.0261
MACQUARIESECURITIES LIMITED	154,000	624	0.0040
MERRILL LYNCH CANADA INC	300	9	0.0300
MERRILL LYNCH INTERNATIONAL	3,464,274	8,511	0.0025
MERRILL LYNCH, PIERCE FENNER SMITH	4,624	231	0.0500
MIRABAUD SECURITIES LLP	559	216	0.3862
MIRAE ASSET SEC USA	1,436	50	0.0351
MISCHLER FINANCIAL GROUP	7,727	58	0.0075
MISCHLER FINANCIAL GROUP, INC-EQUITIES	410	16	0.0400
MIZUHO SECURITIES USA INC	59,633	1,725	0.0289
MIZUHO SECURITIES USA INC.	23,256	724	0.0311
MKM PARTNERS LLC	866	35	0.0400
morgan stanley and co international	107,809	1,515	0.0141
MORGAN STANLEY AND CO. INTERNATIONAL PLC	3,731,289	7,779	0.0021
MORGAN STANLEY CO INCORPORATED	18,014,609	26,981	0.0015
MORGAN STANLEY INDIA COMPANY PVT LTD	2,654,430	5,443	0.0021
MORGAN STANLEY TAIWAN LIMITED	2,997,940	6,541	0.0022
MOTILAL OSWAL SECURITIES LIMITED	137,547	2,495	0.0181
national bank financial inc	6,695	67	0.0100
NATIONAL FINANCIAL SERVICES CORPORATION	104,865	2,097	0.0200
NATIONAL FINANCIAL SERVICES LLC	6,567	37	0.0056
NEEDHAM AND COMPANY LLC	30,539	1,048	0.0343
NESBITT BURNS	1,471	44	0.0300
NOMURA FINANCIAL ADVISORY & SEC INDIA	147,560	768	0.0052
NOMURA FINANCIAL INVESTMENT KOREA CO LTD	8,378	163	0.0194
NOMURA SECURITIES CO LTD	276,000	371	0.0013
NORTH SOUTH CAPITAL LLC	4,525	181	0.0400

INDIVIDUAL OR BROKERAGE FIRM	# OF SHARES	COMMISSION PAID (in \$)	COMMISSION PER SHARE (in \$)
NORTHLAND SECURITIES INC.	4,804	144	0.0300
NUVAMA WEALTH MANAGEMENT LTD	31,146	275	0.0088
OPPENHEIMER & CO. INC.	22,664	759	0.0335
PAREL	4,819	314	0.0652
PENSERRA SECURITIES	768,554	14,620	0.0190
PENSERRA SECURITIES LLC	334,840	920	0.0027
PERSHING LLC	2,053,467	24,323	0.0118
PERSHING SECURITIES LIMITED	479,133	9,680	0.0202
PETERS AND CO LIMITED	961	12	0.0129
PGM GLOBAL INC.	198,087	6,288	0.0317
PIPER JAFFRAY & CO.	84,867	2,507	0.0295
PIPER, JAFFRAY AND HOPWOOD	312,475	1,176	0.0038
PT. MANDIRI SEKURITAS	1,220,200	110	0.0001
raymond James and associates	88,358	3,516	0.0398
raymond James and associates inc	47,946	1,229	0.0256
RAYMOND JAMES LTD	5,464	134	0.0245
RBC CAPITAL MARKETS LLC	200,132	3,127	0.0156
RBC CAPITAL MARKETS, LLC	283,123	4,128	0.0146
RBC DOMINION SECURITIES INC.	67,692	762	0.0113
RBC DOMINION SECURITIES INC. TORONTO	845	6	0.0075
REDBURN (EUROPE) LIMITED	3,357	398	0.1186
REDBURN (USA) LLC	89,605	2,771	0.0309
RF SECURITIES CLEARING LP	2,830	36	0.0126
ROBERT W.BAIRD CO.INCORPORATED	310,626	7,273	0.0234
ROSENBLATT SECURITIES INC.	765	31	0.0400
ROTH CAPITAL PARTNERS LLC	12,190	432	0.0354
ROYAL BANK OF CANADA EUROPE LTD	173,062	7,623	0.0441
SAMSUNG SECURITIES CO LTD	8,842	588	0.0665
SANFORD C BERNSTEIN CO LLC	121,568	1,746	0.0144
SANFORD C. BERNSTEIN (HONG KONG) LIMITED	53,205	57	0.0011
SANFORD C. BERNSTEIN AND CO. LLC	392,527	3,595	0.0092
SCOTIA CAPITAL INC	12,821	111	0.0086
SCOTIAMCLEOD (U.S.A.) INC.	10,527	78	0.0074
SEAPORT GROUP SECURITIES, LLC	650	13	0.0200
SG AMERICAS SECURITIES LLC	4,342	44	0.0102
SINOPAC SECURITIES CORPORATION	216,700	962	0.0044
SMBC SECURITIES INC	31,709	232	0.0073
SOCIETE GENERALE	990,822	6,251	0.0063
STATE STREET GLOBAL MARKETS, LLC	64,624	1,820	0.0282

Qualified Pension Plan and Tax Deferred Annuity Program Schedule of Payments of Commissions to Brokers (Fixed) Fiscal Year Ended June 30, 2024 (Cont'd)

INDIVIDUAL OR BROKERAGE FIRM	# OF SHARES	COMMISSION PAID (in \$)	COMMISSION PER SHARE (in \$)
STEPHENS INC	16,009	526	0.0328
STIFEL NICOLAUS & CO INC	44,718	1,301	0.0291
STRATEGAS SECURITIES LLC	12,231	322	0.0263
SUNTRUST CAPITAL MARKETS, INC.	14,340	543	0.0378
TELSEY ADVISORY GROUP	14,294	589	0.0412
THE BANK OF NEW YORK MELLON	186,557	784	0.0042
THE BENCHMARK COMPANY, LLC	7,035	287	0.0407
TIGRESS FINANCIAL PARTNERS LLC	429	9	0.0200
TORONTO DOMINION SECURITIES INC	1,463	18	0.0124
UBS AG	7,755,015	20,165	0.0026
ubs ag london branch	64,109	441	0.0069
UBS SECURITIES ASIA LTD	12,869,130	9,468	0.0007
ubs securities canada inc	37,073	141	0.0038
UBS SECURITIES HONG KONG LIMITED	564,300	293	0.0005
UBS SECURITIES INDIA PRIVATE LTD	215,658	1,642	0.0076
UBS SECURITIES LLC	957,464	7,234	0.0076
UBS SECURITIES PTE.LTD	839,000	3,203	0.0038
UBS SECURITIES PTE.LTD., SEOUL	116,821	689	0.0059
UOB KAY HIAN PTE LIMITED	65,600	298	0.0045
VALEURS MOBILIERES DESJARDINS	488	5	0.0103
VIRTU AMERICAS	301,263	764	0.0025
VIRTU AMERICAS LLC	237,093	5,485	0.0231
VIRTU ITG HONG KONG LIMITED	16, <i>747</i>	435	0.0260
VIRTU ITGEUROPE LIMITED	3,287	306	0.0930
WACHOVIA SECURITIES INTERNATIONAL LTD	135,054	59	0.0004
WEDBUSH MORGAN SECURITIES	6,572	115	0.0175
WELLS FARGO SECURITIES LLC	2,118	15	0.0071
WELLS FARGO SECURITIES, LLC	65,555	2,274	0.0347
WILLIAM BLAIR & COMPANY L.L.C	100,190	3,943	0.0394
WILLIAMS CAPITAL GROUP LP (THE)	33,169	231	0.0070
WOOD AND COMPANY	87,005	408	0.0047
WOOD GUNDY INC.	7,556	66	0.0087
XP INVESTIMENTOS CCTVM SA	3,629,427	6,444	0.0018
YUANTA SECURITIES CO., LTD.	67	0	0.0007

TYPE OF INVESTMENTS	FAIR VALUE	PERCENTAGES
Short Term Investments	\$ 146,212	1.34%
Debt Securities	2,473,377	22.62
Equity Securities	4,757,534	43.51
Alternative Investments	2,742,100	25.08
Collective Trust Funds		
Fixed Income	11,368	0.10
Domestic Equity	61,461	0.56
International Equity	2,656	0.02
Mortgage Debt Security	8,926	0.08
Total Collective Trust Funds	84,411	0.77
Collateral From Securities Lending:	730,364	6.68
Total Investments	\$ 10,933,998	100.00%



ACTUARIAL

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A well-tended tree and a robust retirement plan both stand tall against the winds of uncertainty.



OFFICE OF THE ACTUARY

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MAREK TYSZKIEWICZ **CHIEF ACTUARY**

December 2, 2024

Board of Trustees New York City Board of Education Retirement System 55 Water Street, 50th Floor New York, NY 10041

Re: Actuarial Information for the Annual Comprehensive Financial Report (ACFR) for the Fiscal Year Ended June 30, 2024

Dear Members of the Board of Trustees:

The financial objective of the New York City Board of Education Retirement System - Qualified Pension Plan (BERS-QPP or the Plan) is to fund members' retirement benefits during their active service by establishing employer normal contribution rates that, expressed as a percentage of active member annualized covered payroll, would remain approximately level over the future working lifetimes of those active members and, together with member contributions and investment income, are intended to ultimately be sufficient to accumulate assets to pay benefits when due.

An actuarial valuation of the Plan is performed annually as of the second June 30 preceding each fiscal year to determine the Employer Contributions to be paid for that fiscal year (i.e., the June 30, 2022 actuarial valuation is used to determine Fiscal Year 2024 Employer Contributions (Actuarial Contributions)).

The funding policy of the City of New York (the City) is to contribute statutorily-required contributions (Statutory Contributions) and these contributions are generally funded by the City within the appropriate fiscal year.

For Fiscal Year 2024, the Actuarial Contributions to BERS, are equal to those recommended by the Actuary of the New York City Retirement Systems and Pension Funds (the Actuary) and represent the Statutory Contributions.

Pursuant to the Governmental Accounting Standards Board (GASB) Statement No. 67 (GASB67) and Statement No. 68 (GASB68), on September 20, 2024, the Office of the Actuary (OA) published the "Fiscal Year 2024 GASB 67/68 Report for the City of New York and the New York City Retirement Systems" (the Fiscal Year 2024 GASB67/68 Report). Appendix C of the Fiscal Year 2024 GASB67/68 Report contains information developed in accordance with GASB67 for BERS.

Board of Trustees New York City Board of Education Retirement System December 2, 2024 Page 2

Actuarial Assumptions and Methods

The assumptions and methods used for the June 30, 2022 valuation were presented in the memorandum titled "Proposed Changes to Actuarial Assumptions and Methods (Revised 2021 A&M)" dated July 16, 2021 and were adopted by the Board of Trustees at the September 23, 2021 Board meeting. These actuarial assumptions and methods used for funding purposes meet the parameters set forth by the Actuarial Standards of Practice (ASOPs).

Benefits, Financial Information, and Census Data

The June 30, 2022 and June 30, 2021 actuarial valuations are based upon the census data as of those dates submitted by the Plan's administrative staff and the employers' payroll facilities. A summary of the census data used in the June 30, 2022 actuarial valuation is included in this ACFR. A summary of the census data used in the June 30, 2021 actuarial valuation of the Plan is available in the Fiscal Year 2023 Annual Comprehensive Financial Report.

Consistent with the Actuarial Standards of Practice, the Office of the Actuary has reviewed the census data and financial information for consistency and reasonability but has not audited it. The accuracy of the results and calculations presented are dependent on the accuracy of this census data and financial information. To the extent any such data or information provided is materially inaccurate or incomplete, the results contained herein will require revision.

A summary of the benefits available under the terms of the Plan is shown in the Introductory Section of this ACFR. The benefits under the Plan are unchanged from the prior valuation.

Note that this valuation does not reflect unknown potential future claims from Gulino vs. Department of Education, 96 Civ. 8414(KMW).

Funded Status

The funded status of the Plan is usually expressed by the relationship of assets to liabilities.

With respect to the funded status of the Plan, included in the Actuarial Section of the ACFR is a schedule of funded status based on the Entry Age Normal cost method (Table 11).

Also included in the Actuarial Section of the ACFR is a Solvency Test (i.e., Comparative Summary of Accrued Liabilities Funded by Actuarial Value of Assets) (Table 12), as prescribed by the Government Finance Officers Association (GFOA). This Solvency Test represents an alternative approach to describing progress toward funding objectives.

Board of Trustees New York City Board of Education Retirement System December 2, 2024 Page 3

Presentation Style and Sources of Information

The actuarial information herein is believed to be presented in a manner consistent with the requirements of the GFOA and, where applicable, with GASB67.

The following items in the Actuarial Section of the ACFR were prepared by the OA:

- Summary of Actuarial Assumptions and Methods in Effect for the June 30, 2022 Actuarial Valuation.
- Summary of Active Member Valuation Data.
- Summary of Plan Membership Data.
- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls.
- Actuarial and Statutory Contribution History.
- Funded Status Based on Entry Age Normal Cost Method.
- Comparative Summary of Accrued Liabilities Funded by Actuarial Value of Assets -Solvency Test.
- Contributions.

The following items in the Financial Section of the ACFR were also prepared by the OA:

- Membership Data.
- Net Pension Liability.
- Actuarial Assumptions and Methods.
- Schedule of Changes in Employers' Net Pension Liability and Related Ratios.
- Schedule of Employer Contributions.

If you have any questions about the information in this Actuarial Section or the actuarial information presented elsewhere in this ACFR, please do not hesitate to contact Crage Lu, Edward Hue, or me.

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Acknowledgement of Qualification

I, Marek Tyszkiewicz, am the Chief Actuary for, and independent of, the New York City Retirement Systems and Pension Funds. I am an Associate of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. To the best of my knowledge, the results contained herein have been prepared in accordance with generally accepted actuarial principles and procedures and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

Respectfully submitted,
March Tysophienricz
Marek Tyszkiewicz, ASA, MAAA
Chief Actuary

MT/eh

Att.

Dolores Capone, ASA, EA – New York City Office of the Actuary CC: Edward Hue, EA - New York City Office of the Actuary Crage Lu, ASA – New York City Office of the Actuary Sanford Rich - New York City Board of Education Retirement System Keith Snow, Esg. – New York City Office of the Actuary Chithra Subramaniam - New York City Board of Education Retirement System

- 1. Pursuant to Section 96 of the New York City Charter, studies of the actuarial assumptions used to value liabilities of the five actuarially-funded New York City Retirement Systems (NYCRS) are conducted every two years.
 - Also, in accordance with the Administrative Code of the City of New York (ACCNY), the Boards of Trustees of the five actuarially-funded NYCRS are to periodically review and adopt actuarial assumptions as proposed by the Actuary for use in the determination of Employer Contributions.
 - The Actuary issued a memorandum titled, "Proposed Changes to Actuarial Assumptions and Methods (Revised 2021 A&M)" dated July 16, 2021. The actuarial assumptions and methods described in that memorandum were adopted by the Board of Trustees at the September 23, 2021 Board meeting and are referred to as the "Revised 2021 A&M." These actuarial assumptions and methods are effective beginning with Fiscal Year 2021.
- 2. The Actuarial Interest Rate (AIR) assumption is 7.0% per annum, net of investment expenses (4.0% per annum for benefits payable under the Variable Annuity Program).
- Active service tables are used to estimate various withdrawals from active service. Probabilities are shown in 3. Table 1 for members withdrawing from active service for service retirement, Table 2 for members terminating from active service, and Tables 3 and 4 for members withdrawing from active service due to disability or death, respectively. Mortality improvement scale MP-2020, published by the Society of Actuaries, is applied to probabilities of ordinary death for actives and pre-commencement mortality for deferred vesteds.
- The service retiree mortality, disabled retiree mortality, and beneficiary mortality base tables are projected from 2012 4. using mortality improvement scale MP-2020. The base tables are also multiplied by adjustment factors to convert from lives-weighted to amounts-weighted tables to reflect socioeconomic effects on mortality. Base table probabilities for service and disability pensioners are shown in Tables 5a and 5b respectively, and for beneficiaries in Table 5c.
- A salary scale is used to estimate salaries at termination, retirement, or death. Percentage increases are shown in 5. Table 6. The salary scale includes a General Wage Increase (GWI) assumption of 3.0% per annum.
- The economic assumptions (i.e., the assumed investment return rate, GWI rate, and Cost-of-Living Adjustments (COLA)) 6. were developed assuming a long-term Consumer Price Inflation (CPI) assumption of 2.5% per annum. The assumption is 1.5% per annum for AutoCOLA and 2.5% per annum for escalation.
- The valuation assumes a closed group of members. 7.
- The Actuary reset the Actuarial Value of Assets (AVA) to the Market Value of Assets (MVA) as of June 30, 2019. 8.
 - Beginning with the June 30, 2020 actuarial valuation, the asset smoothing method recognizes investment returns greater or less than expected over a period of five years, phasing these gains and losses in AVA at a rate of 20% per year.

The expected investment return is derived using the AIR of 7%, beginning-of-fiscal-year MVA, and net cash flows which are assumed to occur midyear.

The AVA is further constrained to be within a corridor of 80% to 120% of the Market Value of Assets.

Beginning with the June 30, 2018 actuarial valuation, the Actuarial Value of Assets is determined by re-characterizing the interest credited on TDA Fixed Fund account balances as investment income instead of as a cash disbursement.

9. The Entry Age Normal (EAN) cost method of funding is used by the Actuary to calculate Employer Contributions.

Under this method, the Present Value (PV) of Future Benefits (PVFB) of each individual included in the actuarial valuation is allocated on a level basis over the expected earnings (or service) of the individual between entry age and the assumed exit age(s). The employer portion of this PVFB allocated to a valuation year is the Normal Cost. The portion of this PVFB not provided for at a valuation date by the PV of Future Normal Costs or future member contributions is the Accrued Liability (AL).

The excess, if any, of the AL over the AVA is the Unfunded Accrued Liability (UAL).

Under this method, actuarial gains and losses, as they occur, reduce and increase the UAL, respectively, and are explicitly identified and amortized.

Increases or decreases in obligations due to benefit changes, actuarial assumption changes, and actuarial method changes are also explicitly identified and amortized.

The explicit UALs that are developed under EAN each year are financed over fixed periods.

Under EAN, the Normal Cost as a percentage of pay remains stable by individual and changes gradually over time for the entire plan as the characteristics of the group changes (e.g., more Tier 6 active members decrease the average Normal Cost as a percentage of pay).

- 10. The Employer Contribution for a fiscal year is increased by the interest-adjusted amount of administrative expenses paid from BERS during the second prior fiscal year.
- 11. The One-Year Lag Methodology (OYLM) uses a June 30, XX valuation date to determine Fiscal Year XX+2 employer contributions as follows:
 - a. Normal Cost

The normal cost as of July 1, XX (calculated in the June 30, XX valuation) is rolled forward with the assumed AIR of 7.0% to the mid-point of Fiscal Year XX+2 (i.e., December 31, XX+1).

b. Administrative Expenses

A reimbursement for administrative expenses deducted from plan assets during the year ending June 30, XX is rolled forward with the assumed AIR of 7.0% to the mid-point of Fiscal Year XX+2.

UAL Payments c.

New amortization bases for gains and losses, method and assumption changes, and any benefit improvements are established each year XX such that the UAL as of June 30, XX is equal to the sum of the:

- 1) Outstanding prior amortization bases;
- 2) Unpaid prior year normal cost with interest;
- 3) Unreimbursed administrative expenses with interest, and
- 4) New Amortization Bases

The UAL payment is the sum of the payments on the amortization bases scheduled for Fiscal Year XX+2.

- Excess Benefit Plan: The valuation excludes liabilities and costs, if any, associated with benefits in excess of the Internal 12. Revenue Code Section 415 limitation.
- TDA Fixed Fund Normal Cost: A cost is added to each year's Normal Cost for providing a guaranteed 8.25% return 13. on the TDA Fixed Fund for non-UFT members.
- 14. Additional Assumptions used for the TDA fixed fund:
 - Active TDA members would contribute the currently elected percentage of compensation to the TDA fixed fund. a.
 - TDA members would transfer 25% of their TDA variable fund to the TDA fixed fund. b.
 - Active members in the QPP who have not joined the TDA would join and contribute 1% of pay to the TDA fixed c. fund.
 - The probability that a member elects 4% per year withdrawals from the TDA fixed fund starting from the later of d. age 60 and the age at termination is 25%.
 - The probability that a member elects required minimum distributions from the TDA fixed fund starting from the e. later of age 72 and the age at termination is 75%.
 - f. The probability that a member elects a lump sum of the TDA fixed fund and the probability that a member elects to annuitize the TDA fixed fund is 0%.

Table 1 PROBABILITIES OF SERVICE RETIREMENT

Reduced Service Retirement		Probabilities For Me	vice Retirement embers Who Did Not Retirement Program	Unreduced Service Retirement Probabilities For Members Who Elected an Improved Retirement Program		
Age	Kenremeni	Year 1	Ultimate	Year 1	Ultimate	
55	2.50%	15.00%	0.00%	35.00%	0.00%	
56	2.50%	15.00%	6.50%	35.00%	12.00%	
57	2.50%	15.00%	6.50%	35.00%	12.00%	
58	2.50%	15.00%	6.50%	35.00%	12.00%	
59	3.75%	15.00%	6.50%	35.00%	12.00%	
60	5.00%	15.00%	6.50%	35.00%	12.00%	
61	6.25%	15.00%	10.00%	35.00%	12.00%	
62	7.50%1	20.00%/15.00%²	10.00%	50.00%	20.00%	
63	0.00%	15.00%/20.00%3	10.00%	35.00%	15.00%	
64	0.00%	15.00%	10.00%	35.00%	15.00%	
65	0.00%	20.00%	15.00%	50.00%	20.00%	
66	0.00%	15.00%	10.00%	35.00%	15.00%	
67	0.00%	15.00%	10.00%	35.00%	15.00%	
68	0.00%	15.00%	10.00%	35.00%	15.00%	
69	0.00%	15.00%	10.00%	35.00%	15.00%	
70	0.00%	20.00%	20.00%	35.00%	15.00%	
<i>7</i> 1	0.00%	20.00%	20.00%	35.00%	15.00%	
72	0.00%	20.00%	20.00%	35.00%	15.00%	
73	0.00%	20.00%	20.00%	35.00%	15.00%	
74	0.00%	20.00%	20.00%	'35.00%	15.00%	
75	0.00%	20.00%	20.00%	35.00%	15.00%	
76	0.00%	20.00%	20.00%	35.00%	15.00%	
77	0.00%	20.00%	20.00%	35.00%	15.00%	
78	0.00%	20.00%	20.00%	35.00%	15.00%	
79	0.00%	20.00%	20.00%	35.00%	15.00%	
80+	NA	100.00%	100.00%	100.00%	100.00%	

 $^{^{\}rm 1}$ 7.50% only applies to Tier 6 members; 0.00% otherwise.

 $^{^2}$ 20.00% for Tier 1, 2, & 4 members and 15.00% for Tier 6 members.

 $^{^{\}scriptscriptstyle 3}$ 15.00% for Tier 1, 2, & 4 members and 20.00% for Tier 6 members.

Table 2
PROBABILITIES OF TERMINATION

Years of Service	Males	Females
0	8.40%	5.60%
1	7.70%	5.30%
2	7.20%	5.00%
3	6.70%	4.70%
4	6.20%	4.50%
5	5.70%	4.20%
6	5.20%	3.90%
7	4.70%	3.60%
8	4.30%	3.30%
9	3.90%	3.00%
10	3.50%	2.80%
11	3.20%	2.60%
12	2.90%	2.50%
13	2.60%	2.40%
14	2.30%	2.20%
15	2.10%	2.10%
16	1.90%	1.90%
17	1.80%	1.80%
18	1.70%	1.70%
19	1.50%	1.50%
20+	1.40%	1.40%

Table 3 PROBABILITIES OF DISABILITY RETIREMENT

	Ordinary Disability		Accidente	Accidental Disability		
Δ	Males	Females	Males	Females		
Age						
15 16	0.20%	0.20%	0.030%	0.025% 0.025%		
17	0.20% 0.20%	0.20% 0.20%	0.030%	0.025%		
18	0.20%	0.20%	0.030%	0.025%		
19	0.20%	0.20%	0.030%	0.025%		
20	0.20%	0.20%	0.030%	0.025%		
21	0.20%	0.20%	0.030%	0.025%		
22	0.20%	0.20%	0.030%	0.025%		
23	0.20%	0.20%	0.030%	0.025%		
24	0.20%	0.20%	0.030%	0.025%		
25 26	0.20% 0.20%	0.20% 0.20%	0.030%	0.025% 0.025%		
27	0.20%	0.20%	0.030%	0.025%		
28	0.20%	0.20%	0.030%	0.025%		
29	0.20%	0.20%	0.030%	0.025%		
30	0.20%	0.20%	0.030%	0.025%		
31	0.22%	0.20%	0.030%	0.025%		
32	0.24%	0.20%	0.030%	0.025%		
33	0.26%	0.20%	0.030%	0.025%		
34	0.28%	0.20%	0.030%	0.025%		
35	0.30%	0.20%	0.030%	0.025%		
36 37	0.32% 0.34%	0.21% 0.22%	0.030%	0.025%		
38	0.34%	0.23%	0.030%	0.025% 0.025%		
39	0.38%	0.24%	0.030%	0.025%		
40	0.40%	0.25%	0.030%	0.025%		
41	0.42%	0.26%	0.030%	0.025%		
42	0.44%	0.27%	0.030%	0.025%		
43	0.46%	0.28%	0.030%	0.025%		
44	0.48%	0.29%	0.030%	0.025%		
45	0.50%	0.30%	0.030%	0.025%		
46	0.52% 0.54%	0.34% 0.38%	0.030%	0.025% 0.025%		
48	0.56%	0.42%	0.030%	0.025%		
49	0.58%	0.46%	0.030%	0.025%		
50	0.60%	0.50%	0.030%	0.025%		
51	0.62%	0.54%	0.030%	0.025%		
52	0.64%	0.58%	0.030%	0.025%		
53	0.66%	0.62%	0.030%	0.025%		
54	0.68%	0.66%	0.030%	0.025%		
55	0.70%	0.70%	0.030%	0.025%		
56 57	0.70% 0.70%	0.70% 0.70%	0.030%	0.025% 0.025%		
58	0.70%	0.70%	0.030%	0.025%		
59	0.70%	0.70%	0.030%	0.025%		
60	0.70%	0.70%	0.030%	0.025%		
61	0.70%	0.70%	0.030%	0.025%		
62	0.70%	0.70%	0.030%	0.025%		
63	0.70%	0.70%	0.030%	0.025%		
64	0.70%	0.70%	0.030%	0.025%		
65	0.70%	0.70%	0.030%	0.025%		
66	0.70% 0.70%	0.70% 0.70%	0.030%	0.025% 0.025%		
68	0.70%	0.70%	0.030%	0.025%		
69	0.70%	0.70%	0.030%	0.025%		
70	0.70%	0.70%	0.030%	0.025%		
<i>7</i> 1	0.70%	0.70%	0.030%	0.025%		
72	0.70%	0.70%	0.030%	0.025%		
73	0.70%	0.70%	0.030%	0.025%		
74	0.70%	0.70%	0.030%	0.025%		
75 74	0.70%	0.70%	0.030%	0.025%		
76 77	0.70% 0.70%	0.70% 0.70%	0.030%	0.025% 0.025%		
78	0.70%	0.70%	0.030%	0.025%		
79	0.70%	0.70%	0.030%	0.025%		
80+	NA NA	NA NA	NA NA	NA		
00∓	AVI	INA	INA	INA		

Table 4 PROBABILITIES OF MORTALITY FOR ACTIVE MEMBERS **BASE RATES**

	BA		
	Ordinar		
Age	Males	Females	Accidental Death
15	0.027% 0.027%	0.020% 0.020%	0.000%
17	0.027%	0.020%	0.000%
18	0.027%	0.020%	0.000%
19	0.027%	0.020%	0.000%
20	0.027%	0.020%	0.000%
21	0.027%	0.020%	0.000%
22	0.027%	0.020%	0.000%
23	0.027%	0.020%	0.000%
24	0.027% 0.027%	0.020%	0.000%
26	0.027%	0.020% 0.021%	0.000%
27	0.032%	0.023%	0.000%
28	0.035%	0.024%	0.000%
29	0.037%	0.025%	0.000%
30	0.040%	0.027%	0.000%
31	0.043%	0.028%	0.000%
32	0.045%	0.029%	0.000%
33	0.048%	0.031%	0.000%
34	0.051%	0.032%	0.000%
35	0.053%	0.033%	0.000%
36 37	0.056%	0.035%	0.000%
38	0.059% 0.061%	0.036% 0.037%	0.000%
39	0.064%	0.039%	0.000%
40	0.067%	0.040%	0.000%
41	0.073%	0.045%	0.000%
42	0.080%	0.051%	0.000%
43	0.087%	0.056%	0.000%
44	0.093%	0.061%	0.000%
45	0.100%	0.067%	0.000%
46	0.107%	0.073%	0.000%
47	0.113%	0.080%	0.000%
48	0.120% 0.127%	0.087% 0.093%	0.000%
50	0.133%	0.100%	0.000%
51	0.147%	0.107%	0.000%
52	0.160%	0.113%	0.000%
53	0.173%	0.120%	0.000%
54	0.187%	0.127%	0.000%
55	0.200%	0.133%	0.000%
56	0.213%	0.140%	0.000%
57 58	0.227%	0.147%	0.000%
59	0.240% 0.253%	0.153% 0.160%	0.000%
60	0.267%	0.167%	0.000%
61	0.280%	0.173%	0.000%
62	0.293%	0.180%	0.000%
63	0.307%	0.187%	0.000%
64	0.320%	0.193%	0.000%
65	0.333%	0.200%	0.000%
66	0.360%	0.213%	0.000%
67	0.387%	0.227%	0.000%
68	0.413% 0.440%	0.240% 0.253%	0.000%
70	0.500%	0.300%	0.000%
71	0.580%	0.350%	0.000%
72	0.660%	0.400%	0.000%
73	0.740%	0.450%	0.000%
74	0.820%	0.500%	0.000%
75	0.900%	0.550%	0.000%
76	1.020%	0.640%	0.000%
77	1.140%	0.730%	0.000%
78 79	1.260% 1.380%	0.820% 1.000%	0.000%
80+	1.380% NA	1.000% NA	0.000% NA
	IVA	140	170

Table 5a PROBABILITIES OF MORTALITY FOR SERVICE RETIREES **BASE RATES**

Age	Males	Females	Age	Males	Females
15	0.0105%	0.0090%	68	1.6659%	0.9362%
16	0.0142%	0.0110%	69	1.7932%	1.0193%
17	0.0191%	0.0120%	70	1.9258%	1.1035%
18	0.0222%	0.0130%	<i>7</i> 1	2.0702%	1.2437%
19	0.0240%	0.0140%	72	2.2162%	1.3853%
20	0.0251%	0.0142%	73	2.3643%	1.5280%
21	0.0268%	0.0150%	74	2.5141%	1.6727%
22	0.0284%	0.0158%	75	2.6665%	1.8182%
23	0.0301%	0.0168%	76	3.0461%	2.0628%
24	0.0315%	0.0179%	77	3.4300%	2.3088%
25	0.0327%	0.0191%	78	3.8175%	2.5551%
26	0.0342%	0.0204%	79	4.2104%	2.8024%
27	0.0354%	0.0217%	80	4.6069%	3.0489%
28	0.0371%	0.0231%	81	5.1554%	3.4450%
29	0.0394%	0.0247%	82	5.7232%	3.8502%
30	0.0427%	0.0265%	83	6.3098%	4.2655%
31	0.0495%	0.0316%	84	6.9124%	4.6895%
32	0.0562%	0.0360%	85	7.5337%	5.1258%
33	0.0625%	0.0398%	86	8.3597%	5.8556%
34	0.0682%	0.0378%	87	9.1919%	6.5878%
35	0.0743%	0.0427 %	88	10.0369%	7.3277%
36	0.0780%	0.0433%	89	10.0369%	8.0720%
37	0.0780%		90	11.7567%	8.8218%
		0.0497%			
38	0.0861%	0.0521%	91	13.4856%	10.1869%
39	0.0917%	0.0551%	92	15.2819%	11.5772%
40	0.0997%	0.0588%	93	17.1377%	13.0290%
41	0.1422%	0.0633%	94	19.0983%	14.4884%
42	0.1848%	0.0702%	95	21.2134%	16.0080%
43	0.2279%	0.0792%	96	23.2990%	17.8232%
44	0.2725%	0.0907%	97	25.4356%	19.4807%
45	0.3194%	0.1052%	98	27.7079%	20.8097%
46	0.3686%	0.1228%	99	29.9402%	21.7553%
47	0.4207%	0.1427%	100	32.1584%	22.1859%
48	0.4752%	0.1652%	101	33.7521%	23.0680%
49	0.5320%	0.1896%	102	35.1259%	24.0803%
50	0.5908%	0.2151%	103	36.3671%	25.2770%
51	0.6563%	0.2401%	104	37.3834%	26.6309%
52	0.7203%	0.2647%	105	38.1051%	28.0912%
53	0.7821%	0.2889%	106	38.4698%	29.6244%
54	0.8405%	0.3120%	107	38.6325%	31.1943%
55	0.8938%	0.3338%	108	38.8076%	32.7579%
56	0.9368%	0.3689%	109	38.9794%	34.2712%
57	0.9718%	0.4030%	110	50.0000%	50.0000%
58	0.9982%	0.4360%	111	50.0000%	50.0000%
59	1.0164%	0.4677%	112	50.0000%	50.0000%
60	1.0277%	0.4987%	113	50.0000%	50.0000%
61	1.0989%	0.5398%	114	50.0000%	50.0000%
62	1.1606%	0.5722%	115	50.0000%	50.0000%
63	1.2158%	0.6041%	116	50.0000%	50.0000%
64	1.2656%	0.6395%	117	50.0000%	50.0000%
65	1.3111%	0.6785%	118	50.0000%	50.0000%
66	1.4252%	0.7529%	119	50.0000%	50.0000%
67	1.5432%	0.8397%	120	100.0000%	100.0000%

Table 5b PROBABILITIES OF MORTALITY FOR DISABLED RETIREES **BASE RATES**

Age	Males	Females	Age	Males	Females
15	0.3309%	0.3302%	68	2.8866%	2.3870%
16	0.4477%	0.4467%	69	2.9926%	2.4723%
17	0.6034%	0.6020%	70	3.1133%	2.5721%
18	0.7007%	0.6521%		3.2494%	2.6887%
19	0.7591%	0.7023%	72	3.4007%	2.8231%
20	0.7745%	0.7242%	73	3.5688%	2.9757%
21	0.8177%	0.7766%	74	3.7535%	3.1493%
22	0.8636%	0.8321%	75	3.9565%	3.3428%
23	0.9115%	0.8806%		4.1960%	3.5573%
24	0.9623%	0.9414%	77	4.4576%	3.7722%
25	1.0128%	0.9950%	78	4.7400%	4.0056%
26	1.0629%	1.0450%		5.0460%	4.2512%
27	1.1121%	1.1039%	80	5.3741%	4.5399%
28	1.1590%	1.1437%	81	5.7241%	4.8505%
29	1.2025%	1.1849%	82	6.0991%	5.1822%
•				6.5012%	5.5379%
30	1.2403%	1.2276%	83 84		
31	1.2721%	1.2719%		6.9293%	5.9081%
32	1.2964%	1.2906%	85	7.5490%	6.6447%
33	1.3125%	1.3095%	86	8.3752%	7.3415%
34	1.3230%	1.3220%	87	9.2076%	8.0805%
35	1.3497%	1.3314%	88	10.0528%	8.8285%
36	1.3769%	1.3388%	89	10.9057%	10.1243%
37	1.4047%	1.3459%	90	11.7730%	11.4944%
38	1.4330%	1.3555%	91	13.5023%	12.9995%
39	1.4619%	1.3700%	92	15.2987%	14.4425%
40	1.4914%	1.3831%	93	17.1548%	15.8488%
41	1.5215%	1.3968%	94	19.1157%	17.6512%
42	1.5522%	1.4199%	95	21.2311%	19.4304%
43	1.5835%	1.4535%	96	23.3168%	20.7560%
44	1.6154%	1.4910%	97	25.4537%	21.5692%
45	1.6480%	1.5473%	98	27.7263%	22.0007%
46	1.6812%	1.6100%	99	29.9589%	23.0087%
47	1.7151%	1.6774%	100	32.1584%	23.1230%
48	1.7497%	1.7359%	101	33.7521%	23.6022%
49	1.7850%	1.7789%	102	35.1259%	24.0803%
50	1.8210%	1.8069%	103	36.3671%	25.2770%
51	1.8577%	1.8265%	104	37.3834%	26.6309%
52	1.8952%	1.8400%	105	38.1051%	28.0912%
53	1.9838%	1.8414%	106	38.4698%	29.6244%
54	2.0700%	1.8419%	107	38.6325%	31.1943%
55	2.1499%	1.8425%	108	38.8076%	32.7579%
56	2.2301%	1.8428%	109	38.9794%	34.2712%
57	2.2996%	1.8478%	110	50.0000%	50.0000%
58	2.3571%	1.8725%	111	50.0000%	50.0000%
59	2.4033%	1.9054%	112	50.0000%	50.0000%
60	2.4415%	1.9416%	113	50.0000%	50.0000%
61	2.4758%	1.9833%	114	50.0000%	50.0000%
62	2.5090%	2.0209%	115	50.0000%	50.0000%
63	2.5475%	2.0671%	116	50.0000%	50.0000%
64	2.5926%	2.1353%	117	50.0000%	50.0000%
65	2.6476%	2.2013%	118	50.0000%	50.0000%
66	2.7148%	2.2603%	119	50.0000%	50.0000%
67	2.7940%	2.3165%	120	100.0000%	100.000%

Table 5c PROBABILITIES OF MORTALITY FOR BENEFICIARIES **BASE RATES**

Age	Males	Females	Age	Males	Females
15	0.0105%	0.0092%	68	1.8256%	1.3605%
16	0.0142%	0.0112%	69	1.9386%	1.4332%
17	0.0191%	0.0122%	70	2.0542%	1.5007%
18	0.0222%	0.0133%	<i>7</i> 1	2.2359%	1.6745%
19	0.0240%	0.0143%	72	2.4230%	1.8463%
20	0.0251%	0.0145%	73	2.6165%	2.0157%
21	0.0268%	0.0153%	74	2.8157%	2.1838%
22	0.0284%	0.0161%	75	3.0220%	2.3492%
23	0.0301%	0.0171%	76	3.4928%	2.6652%
24	0.0315%	0.0183%	77	3.9787%	2.9831%
25	0.0327%	0.0195%	78	4.4792%	3.3011%
26	0.0342%	0.0208%	79	4.9963%	3.6207%
27	0.0354%	0.0221%	80	5.5282%	3.9391%
28	0.0371%	0.0236%	81	6.1051%	4.4386%
29	0.0394%	0.0252%	82	6.6894%	4.9473%
30	0.0427%	0.0270%	83	7.2805%	5.4665%
31	0.0495%	0.0330%	84	7.8749%	5.9942%
32	0.0562%	0.0384%	85	8.4753%	6.5354%
33	0.0625%	0.0431%	86	9.6136%	7.4659%
34	0.0682%	0.0471%	87	10.8005%	8.3995%
35	0.0743%	0.0511%	88	12.0443%	9.3428%
36	0.0780%	0.0542%	89	13.3397%	10.2918%
37	0.0818%	0.0579%	90	14.6958%	11.2477%
38	0.0861%	0.0618%	91	16.4185%	12.8868%
39	0.0917%	0.0666%	92	18.1416%	14.4887%
40	0.0997%	0.0719%	93	19.8574%	16.0801%
41	0.1394%	0.0775%	94	21.6187%	17.5854%
42	0.1774%	0.0859%	95	23.5884%	19.0626%
43	0.2143%	0.0968%	96	25.4266%	20.2474%
44	0.2507%	0.1111%	97	27.2119%	21.2937%
45	0.2875%	0.1117%	98	29.0202%	22.0663%
46	0.3207%	0.1501%	99	30.6654%	22.5443%
47	0.3534%	0.1748%	100	32.1584%	22.6473%
48	0.3849%	0.2022%	101	33.7521%	23.5294%
49	0.3849%	0.2022%	102	35.1259%	24.5619%
50	0.4431%	0.2633%	103	36.3671%	25.7825%
51	0.5156%	0.2999%	103	37.3834%	27.1635%
52	0.5928%	0.3376%	105	38.1051%	28.6530%
53	0.6740%	0.3762%	106	38.4698%	30.2169%
54	0.7583%	0.4151%	107	38.6325%	31.8182%
55	0.7363%	0.4131%	108	38.8076%	33.4131%
56	0.9048%	11 1 111	109		
57	0.9604%	0.5132%	110	38.9794%	34.9566%
58	1.0101%	0.5735% 0.6353%	111	50.0000%	50.0000% 50.0000%
59	1.0536%	0.6333%	112	50.0000%	50.0000%
60	1.0919%	0.7631%	113	50.0000%	50.0000%
61	1.1835%	0.8329%	114	50.0000%	50.0000%
62			114		
63	1.2676%	0.8908%		50.0000%	50.0000%
		0.9493%	116 11 <i>7</i>	50.0000%	50.0000%
64	1.4238%	1.0146%			50.0000%
65	1.4985%	1.0876%	118	50.0000%	50.0000%
66	1.6059%	1.1681%	119	50.0000%	50.0000%
67	1.7146%	1.2609%	120	100.0000%	100.0000%

Table 6 **ANNUAL RATES OF MERIT AND SALARY INCREASE**

Years of Service	Merit Increase	Salary Increase ¹
0	6.00%	9.00%
1	5.00%	8.00%
2	4.00%	7.00%
3	3.00%	6.00%
4	2.50%	5.50%
5	2.00%	5.00%
6	1.90%	4.90%
7	1.80%	4.80%
8	1.70%	4.70%
9	1.60%	4.60%
10	1.50%	4.50%
11	1.50%	4.50%
12	1.50%	4.50%
13	1.50%	4.50%
14	1.50%	4.50%
15	1.50%	4.50%
16	1.45%	4.45%
17	1.40%	4.40%
18	1.35%	4.35%
19	1.30%	4.30%
20	1.25%	4.25%
21	1.20%	4.20%
22	1.15%	4.15%
23	1.10%	4.10%
24	1.05%	4.05%
25+	1.00%	4.00%

¹ Salary Increase is the General Wage Increase of 3% plus the Merit Increase.

Table 7 **ACTIVE MEMBER VALUATION DATA**

June 30 Actuarial Valuation	Number	Annual Salary	Average Annual Salary	Percentage Increase/ (Decrease) In Average Salary
2013	25,848	\$ 1,051,571,168	\$40,683	11.2%
2014	25,182	1,045,187,738	41,505	2.0%
2015	24,903	1,093,962,316	43,929	5.8%
2016	25,864	1,149,019,892	44,425	1.1%
2017	25,794	1,201,925,550	46,597	4.9%
2018	25,864	1,280,302,470	49,501	6.2%
2019	25,825	1,353,266,355	52,401	5.9%
2020	28,183	1,476,597,629	52,393	0.0%
2021	27,556	1,484,264,302	53,864	2.8%
2022	25,639	1,467,607,056	57,241	6.3%

Salaries reflect the impact of recent labor contract settlements and certain non-union salary increases with retroactive effective dates, if any.

Table 8 **SUMMARY OF PLAN MEMBERSHIP DATA**

As of the June 30, 2022 and June 30, 2021 actuarial valuations, the Plan's Membership consisted of:

Group	June 30, 2022	June 30, 2021
Active members	25,639	27,556
Terminated Nonvested Members	9,245	8,922
Deferred vested members not yet receiving benefits	2,410	1,972
Retirees and beneficiaries currently receiving benefits	20,481	19,448
Total	57,775	57,898

Qualified Pension Plan Schedule of Retirees and Beneficiaries

Table 9
SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM THE ROLLS

	Added to Rolls		Removed	Removed from Rolls		End of Year Rolls			
June 30 Actuarial Valuation	Number	Annual Allowances ¹	Number	Annual Allowances	Number	Annual Allowances ²	% Increase In Annual Allowances	Average Annual Allowances	
2013	1,110	\$ 16,977,455	529	\$ 4,957,022	15,455	\$ 198,534,297	6.4%	\$ 12,846	
2014	1,094	13,701,890	554	5,306,812	15,995	206,929,375	4.2%	12,937	
2015	1,002	16,482,509	559	4,979,621	16,438	218,432,263	5.6%	13,288	
2016	1,075	14,412,852	576	5,776,541	16,937	227,068,574	4.0%	13,407	
2017	1,061	17,321,922	573	6,234,174	17,425	238,156,322	4.9%	13,668	
2018	1,179	20,878,837	563	5,613,557	18,041	253,421,602	6.4%	14,047	
2019	1,216	22,617,426	755	8,877,195	18,502	267,161,833	5.4%	14,440	
2020	1,326	23,003,553	708	8,604,426	19,120	281,560,960	5.4%	14726	
2021	1,066	18,952,419	738	7,909,902	19,448	292,603,477	3.9%	15,045	
2022	1,792	35,161,651	759	9,079,916	20,481	318,685,212	8.9%	15,560	

¹ Amounts shown include changes due to benefit finalization, changes in benefit type (e.g. Service to Accidental Disability), COLA increases, and other changes

Amounts shown are those used in the actuarial valuation as of the Year Ended Date and are not adjusted for anticipated changes due to finalization of benefit calculations or contract settlements.

Table 10 **ACTUARIAL AND STATUTORY CONTRIBUTION HISTORY**

Fiscal Year Ended June 30	Actuarial Contribution Certified	Statutory Contribution Contributed ¹	Employer Rate of Contribution ²
2015	\$ 258,099,327	\$ 258,099,327	25.4%
2016	265,532,032	265,532,032	26.3%
2017	288,233,217	288,233,217	27.4%
2018	318,643,334	318,643,334	28.9%
2019	269,636,601	269,636,601	22.8%
2020	257,503,447	257,503,447	20.5%
2021	182,983,084	182,983,084	13.7%
2022	262,404,099	262,404,099	18.1%
2023	233,546,202	233,546,202	16.0%
2024	247,720,923	247,720,923	17.2%

Represents total employer contributions accrued for fiscal year.

The Employer Rate of Contribution equals the Statutory Contribution as a percentage of the salaries of members who were on payroll or projected to be on payroll (under One-Year Lag Methodology) as of the preceding June 30 adjusted, where applicable, to be consistent with collective bargaining agreements estimated to be achieved.

Table 11 **FUNDED STATUS BASED ON ENTRY AGE NORMAL COST METHOD** (\$ Thousands)

June 30 Valuation Date	(1) Actuarial Value of Assets (AVA)	(2) Accrued Liability (AL)	(3) Unfunded AL (UAL) (2) - (1)	(4) Funded Ratio (1)/(2)	(5) Covered Payroll ¹	(6) UAL as a % of Covered Payroll (3)/(5)
2013	\$ 2,277,791	\$ 4,015,080	\$ 1, <i>7</i> 3 <i>7</i> ,289	56.7%	\$ 1,051,571	165.2%
2014	2,632,922	4,335,746	1,702,824	60.7%	1,045,188	162.9%
2015	2,772,466	4,585,781	1,813,315	60.5%	1,093,962	165.8%
2016	2,858,737	4,767,760	1,909,023	60.0%	1,149,020	166.1%
2017	3,289,191	4,743,881	1,454,690	69.3%	1,201,926	121.0%
2018	3,908,833	5,103,583	1,194,750	76.6%	1,280,302	93.3%
2019	4,991,832	5,306,986	315,154	94.1%	1,353,266	23.3%
2020	5,291,811	5,620,897	329,086	94.1%	1,476,598	22.3%
2021	5,471,200	5,880,071	408,871	93.0%	1,484,264	27.5%
2022	6,303,743	6,682,653	378,910	94.3%	1,467,607	25.8%

Salaries reflect the impact of recent labor contract settlements and certain non-union salary increases with retroactive effective dates, if any.

Table 12
COMPARATIVE SUMMARY OF ACCRUED LIABILITIES FUNDED BY ACTUARIAL VALUE OF ASSETS
SOLVENCY TEST
(\$ Thousands)

		Accrued I					
June 30 Valuation Date	(A) Accumulated Member Contributions	(B) Current Retirees and Beneficiaries	(C) Active Members' Employer-Financed Portion	(D) Actuarial Value of Assets	Accrue	Percentage of Accrued Liabilities Funda by Actuarial Value of Ass (A) (B)	
2013	\$ 469,312	\$ 1,918,824	\$ 1,372,542	\$ 2,277,791	100	94	0
2014	504,619	2,080,400	1,475,008	2,632,922	100	100	3
2015	527,781	2,200,281	1,569,097	2,772,466	100	100	3
2016	557,473	2,273,411	1,638,262	2,858,737	100	100	2
2017	593,952	2,364,059	1,433,790	3,289,191	100	100	23
2018	619,602	2,541,989	1,591,961	3,908,833	100	100	47
2019	647,081	2,680,150	1,979,755	4,991,832	100	100	84
2020	678,178	2,836,001	2,106,718	5,291,811	100	100	84
2021	728,036	2,953,125	2,198,910	5,471,200	100	100	81
2022	768,170	3,286,049	2,628,434	6,303,743	100	100	86

See following "SOLVENCY TEST - NOTES."

Qualified Pension Plan

Comparative Summary of Accrued Liabilities Funded by Actuarial Value of Assets

SOLVENCY TEST - NOTES

The ultimate test of financial soundness in a retirement system is its ability to pay all of its promised benefits when due. The retirement system's progress in accumulating assets to pay all promised benefits can be measured by comparing the Actuarial Value of Assets of the retirement system with the Accrued Liabilities for:

- Accumulated Member Contributions:
- Current Retirees and Beneficiaries; and b.
- Active Members' Employer-Financed Portion. c.

Prior to the June 30, 2019 valuation, the Accrued Liabilities were calculated under the Projected Unit Credit actuarial cost method. Beginning with the June 30, 2019 actuarial valuation, the Accrued Liabilities are calculated based on the Entry Age Normal (EAN) actuarial cost method.

The values in the table are dependent upon census data, benefit levels, and the actuarial assumptions and methods employed at each valuation date.

To fully evaluate trends in financial soundness, changes in assumptions need to be evaluated. The Actuarial Interest Rate assumption has been 7.0% per annum, net of investment expenses, throughout the period shown. However, other actuarial assumptions and methods have been revised. The two most recent changes in assumptions and methods occurred in the June 30, 2020 valuation used to compute the Employer Contributions for Fiscal Year 2022 and in the June 30, 2019 valuation used to compute the Employer Contributions for Fiscal Year 2021.

CONTRIBUTIONS

The benefits of the System are financed by member and employer contributions and from investment earnings of the System.

A. MEMBER CONTRIBUTIONS

Tier 1 and Tier 2

A member who joined prior to July 27, 1976 contributes by salary deductions on the basis of a normal rate of contribution which is assigned by the System at the time he or she elects his or her plan. The normal contribution rate, which is dependent upon the member's age and plan, as well as the tables in effect for such purpose at the time he or she became a member, is determined to provide approximately one-third of the benefit on account of the first 25 years of service.

For Tier 1 and Tier 2 plans which permit retirement for service at age 55, the normal contribution rate is calculated to provide an annuity equal to 1.0% of final salary for each year of service at the earliest age for service retirement. For such plans, the normal contribution rate for members who enter at age 55 or over is the rate applicable to a member entering at age 54.

Member contributions are accumulated with interest on individually maintained ledger accounts. Upon retirement, the amount to his or her credit (i.e. accumulated deductions) is used to purchase an annuity on the basis of the tables adopted by the Board of Trustees. Upon death in service, the accumulated deductions are paid to the beneficiary.

Beginning July 1, 1960, on a year-to-year basis, the normal contribution rates of Tier 1 and Tier 2 members who joined before July 27, 1976 were reduced by an increased-take-home- pay rate of 2.5%, and of 5.0% beginning July 1, 1961. Between July 1, 1968 and December 31, 1975, an increased-take-home-pay rate of 4.0% was effective for all members. On January 1, 1976, an increased-take-home-pay rate of 2.0% became effective for all members. The following table shows the effective periods and increased-take-home-pay rate.

PERIOD	INCREASED-TAKE-HOME-PAY RATE
07/01/60 – 06/30/61	2.5%
07/01/61 - 06/30/68	5.0%
07/01/68 – 12/31/75	4.0%
01/01/76 and after	2.0%

In general, the retirement and death benefits payable to or on account of members are supplemented by the reserve for increased-take-home-pay, accumulated from City contributions equal to the increased-take-home-pay rate times salary so that in general, the total benefit is equal to the benefit which would have been paid if the members' rates of contribution had not been reduced. However, the reserve for increased-take-home-pay is not payable upon death of a member who joins after June 30, 1973.

Tier 4

A Tier 4 member of Article 15 (Coordinated Retirement Plan) who joined BERS on or before March 31, 2012 is mandated to contribute 3% of salary during all years of coverage. Effective October 1, 2000, most Tier 4 members are not required to make contributions after the 10th anniversary of their membership date or completion of ten years of credited service, whichever is earlier. Tier 4 members of the Chapter 504 55/27 plan contribute Basic Member Contributions for 27 years of service. For those who elected or were mandated into an Optional Retirement Plan or Special Officers Plan, Additional Member Contributions are required.

Tier 6

A member who joins BERS on or after April 1, 2012 (Tier 6) is required to contribute between 3.0% and 6.0% of salary, depending on salary level, for all years of service. Tier 6 members in the Automotive or Special Officers Programs also contribute AMC.

EMPLOYER CONTRIBUTIONS

The Entry Age Normal cost method of funding is utilized by the Plan's Actuary to calculate the contributions required of the employers.

Employer contributions are accrued by the Plan and are funded by the employers on a current basis.

AMERICAN ELM | BRONX **ECOLOGICAL BENEFITS** Stormwater intercepted each year 877 gallons Energy conserved each year Air pollutants removed each year

STATISTICAL

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Retirement is like planting a tree. You nurture it with your hard work, and then enjoy the shade of its fruits in your golden years.

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INTRODUCTION:

The Statistical section presents three sets of data. The first group of data is comprised of six (6) schedules and accompanying graphs that provide a comparative horizontal base of the financials over a ten-year spread for the QPP and ten-year spread for the TDA. The second group of data offers an analysis of the BERS benefit payments based on demographic information. The third and final group gives a comparative analysis of the contributors based on their salary and their provenance.

The schedules and graphs of the first group are:

- (A) Revenue by source for the QPP
- (B) Expenses by type for the QPP
- (C) Refunds by type for the QPP
- (D) Schedule of changes in QPP net position
- (E) Schedule of changes in TDA net position
- (F) Benefit expenses by type for the QPP

The second group of data is comprised of the following: QPP

- (A) Age and service retirement
- (B) Ordinary disability retirement
- (C) Accidental disability retirement
- (D) Accidental death retirement
- (E) Other beneficiaries
- (F) All pensioners and beneficiaries

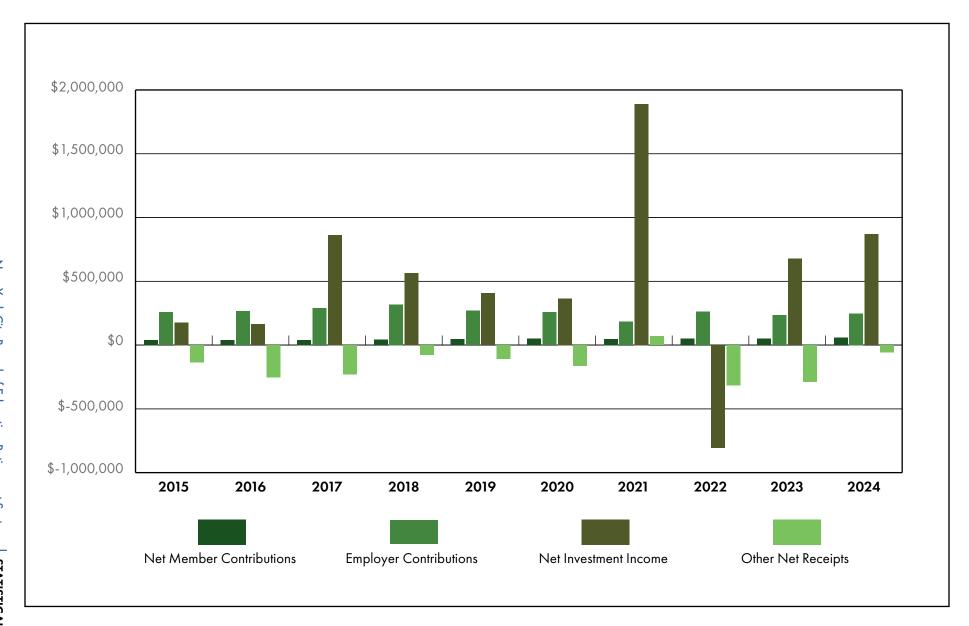
The third group of data is comprised of the following: QPP

- (A) Summary of activities by Age and Service
- (B) Average annual benefit payments
- (C) Participating Employers

Qualified Pension Plan Schedule of Revenue by Source (In thousands)

Fiscal Year Ended June 30	Net Member Contributions	Employer Contributions	Net Investment Income	Net Receipts	Total	Employer Contributions as % of Payroll
2015	\$39,564	\$258,099	\$177,166	(\$137,125)	\$337,704	24.5
2016	\$38,581	\$265,532	\$164,144	(\$252,288)	\$215,969	25.4
2017	\$39,821	\$288,233	\$862,510	(\$229,508)	\$961,056	26.3
2018	\$40,846	\$318,643	\$565,577	(\$76,948)	\$848,118	27.7
2019	\$46,304	\$269,637	\$406,879	(\$106,071)	\$616,749	22.4
2020	\$49,766	\$2 <i>57</i> ,503	\$365,767	(\$163,724)	\$509,312	20.1
2021	\$48,125	\$182,983	\$1,889,751	\$68,002	\$2,188,861	13.5
2022	\$49,591	\$262,404	(\$803,664)	(\$315,242)	(\$806,911)	17.8
2023	\$49,810	\$233,546	\$676,092	(\$290,060)	\$669,388	15.7
2024	\$56,552	\$247,721	\$868,593	(\$56,485)	\$1,116,381	16.9

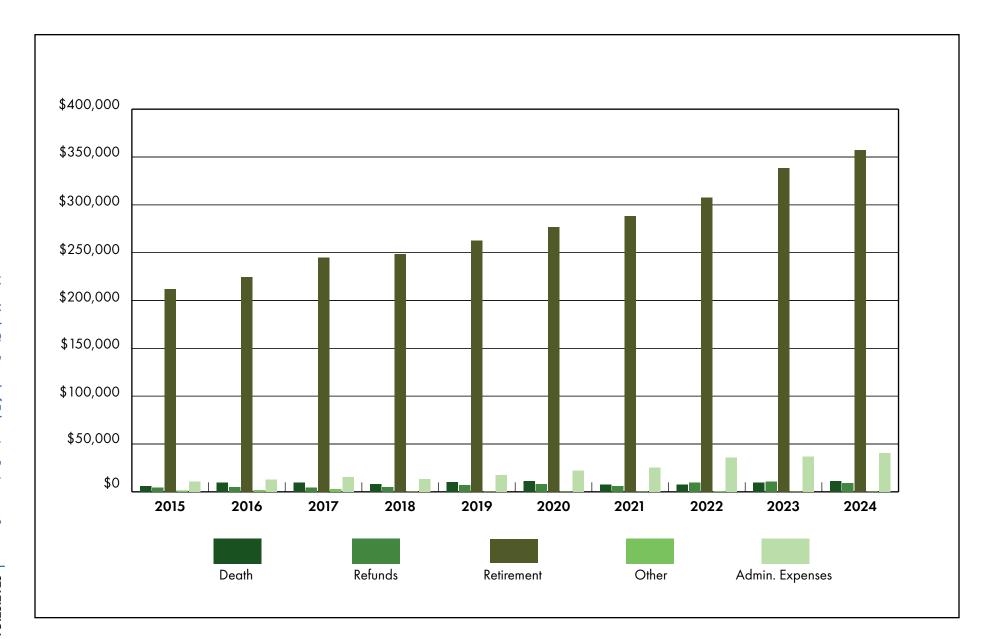
The table offers a horizontal comparison base for the revenue sources of the Plan for the past 10 years.



Qualified Pension Plan Schedule of Expenses by Type (In thousands)

Fiscal Year Ended		Ber Payr	Administrative			
June 30	Death	Refunds	Retirement	Other	Expenses	Total
2015	\$5,765	\$4,614	\$211,693	\$1,172	\$10,956	\$234,200
2016	\$9,580	\$4,750	\$224,639	\$1,758	\$12,818	\$253,545
2017	\$9,570	\$4,687	\$245,066	\$3,109	\$15,486	\$277,918
2018	\$8,208	\$4,808	\$248,429	\$129	\$13,212	\$274,786
2019	\$10,161	\$7,231	\$262,804	\$267	\$17,357	\$297,820
2020	\$11,016	\$8,174	\$276,614	\$243	\$22,207	\$318,254
2021	\$ <i>7</i> ,638	\$5,871	\$288,419	\$408	\$25,175	\$327,511
2022	\$7,732	\$9,836	\$307,520	\$591	\$35,566	\$361,245
2023	\$9,719	\$10,606	\$338,670	\$276	\$36, <i>7</i> 17	\$395,988
2024	\$11,144	\$9,118	\$357,121	\$110	\$40,250	\$417,744

The table offers a horizontal comparison base for the expense groups of the Plan for the past 10 years.

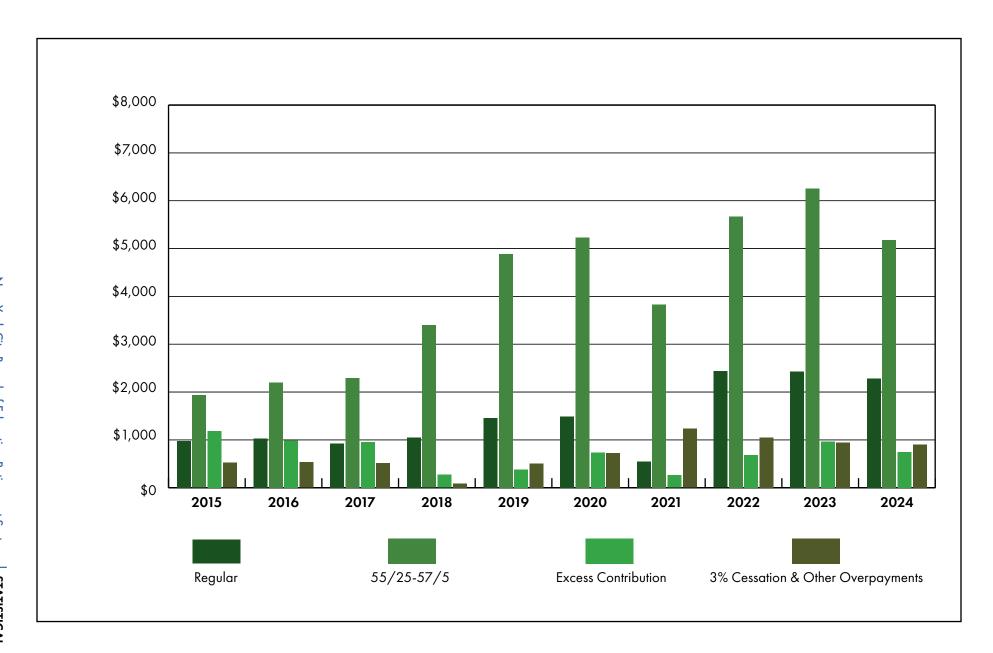


Qualified Pension Plan Schedule of Refunds by Type (In thousands)

Fiscal	Refunds							
Year Ended June 30	Regular Resignation	Add. Pension 55/25 - 57/5	Excess Contribution	3% Cessation & Other Overpayments	Total			
2015	\$973	\$1,933	\$1,186	\$522	\$4,614			
2016	\$1,033	\$2,198	\$986	\$533	\$4,750			
2017	\$920	\$2,295	\$957	\$515	\$4,687			
2018	\$1,053	\$3,397	\$271	\$87	\$4,808			
2019	\$1,459	\$4,887	\$378	\$507	\$7,231			
2020	\$1,489	\$5,227	\$735	\$ <i>7</i> 23	\$8,174			
2021	\$551	\$3,826	\$261	\$1,233	\$5,871			
2022	\$2,435	\$5,670	\$685	\$1,046	\$9,836			
2023	\$2,429	\$6,259	\$969	\$949	\$10,606			
2024	\$2,284	\$5,183	\$750	\$901	\$9,118			

The table offers a horizontal comparison base for the refund segment of the expense groups of the Plan for the past 10 years.

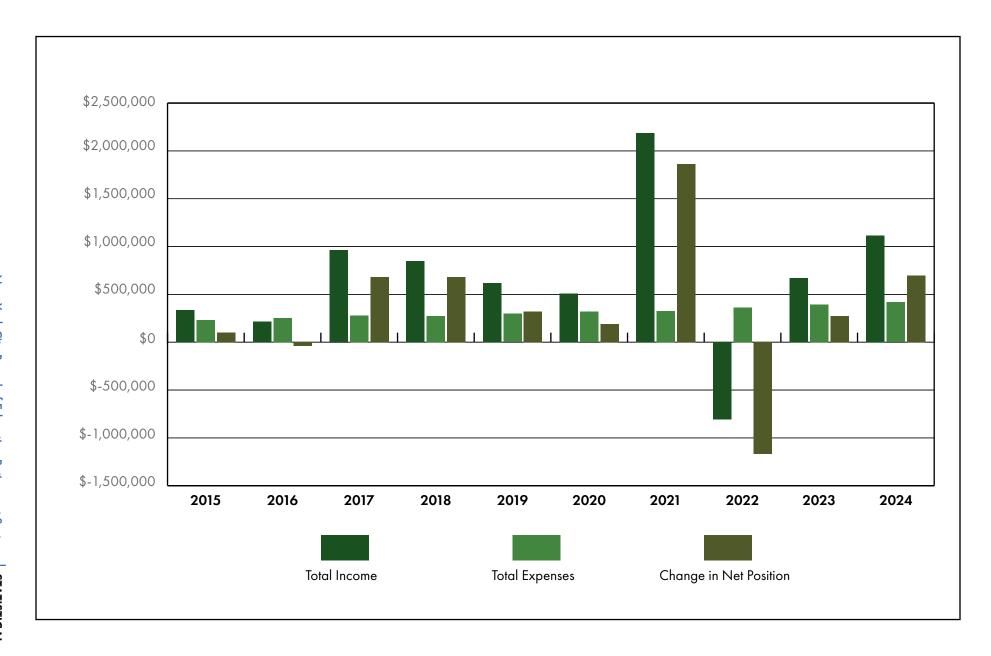
The refund segment is broken down by type.



Qualified Pension Plan Schedule of Changes in Net Position (In thousands)

Year	Member	Employer	Net Investment	Other Net	Total	Benefit Payments				Administrative	Total	Change in Net
Ended	Contributions	Contributions	Income	Receipts	Income	Death	Refund	Retirement	Other	Expenses	Expenses	Position
2015	\$39,564	\$258,099	\$177,166	(\$137,125)	\$337,704	\$ <i>5,7</i> 6 <i>5</i>	\$4,614	\$211,693	\$1,172	\$10,956	\$234,200	\$103,504
2016	\$38,581	\$265,532	\$164,144	(\$252,288)	\$215,969	\$9,580	\$4,750	\$224,639	\$1, <i>7</i> 58	\$12,818	\$253,545	(\$37,576)
2017	\$39,821	\$288,233	\$862,510	(\$229,508)	\$961,056	\$9,570	\$4,687	\$245,066	\$3,109	\$15,486	\$277,918	\$683,138
2018	\$40,846	\$318,643	\$565,577	(\$76,948)	\$848,118	\$8,208	\$4,808	\$248,429	\$129	\$13,212	\$274,786	\$573,332
2019	\$46,304	\$269,637	\$406,879	(\$106,071)	\$616,749	\$10,161	\$ <i>7</i> ,231	\$262,804	\$267	\$17,357	\$297,820	\$318,929
2020	\$49,766	\$257,503	\$365,767	(\$163,724)	\$509,312	\$11,016	\$8,174	\$276,614	\$243	\$22,207	\$318,254	\$191,058
2021	\$48,125	\$182,983	\$1,889, <i>75</i> 1	\$68,002	\$2,188,861	\$ <i>7</i> ,638	\$5,871	\$288,419	\$408	\$25,175	\$327,511	\$1,861,350
2022	\$49,591	\$262,404	(\$803,664)	(\$315,242)	(\$806,911)	\$7,732	\$9,836	\$307,520	\$591	\$35,566	\$361,245	(\$1,168,156)
2023	\$49,810	\$233,546	\$676,092	(\$290,060)	\$669,388	\$9, <i>7</i> 19	\$10,606	\$338,670	\$276	\$36,717	\$395,988	\$273,400
2024	\$56,552	\$247,721	\$868,593	(\$56,485)	\$1,116,381	\$11,144	\$9,118	\$3 <i>57</i> ,121	\$110	\$40,250	\$417,744	\$698,637

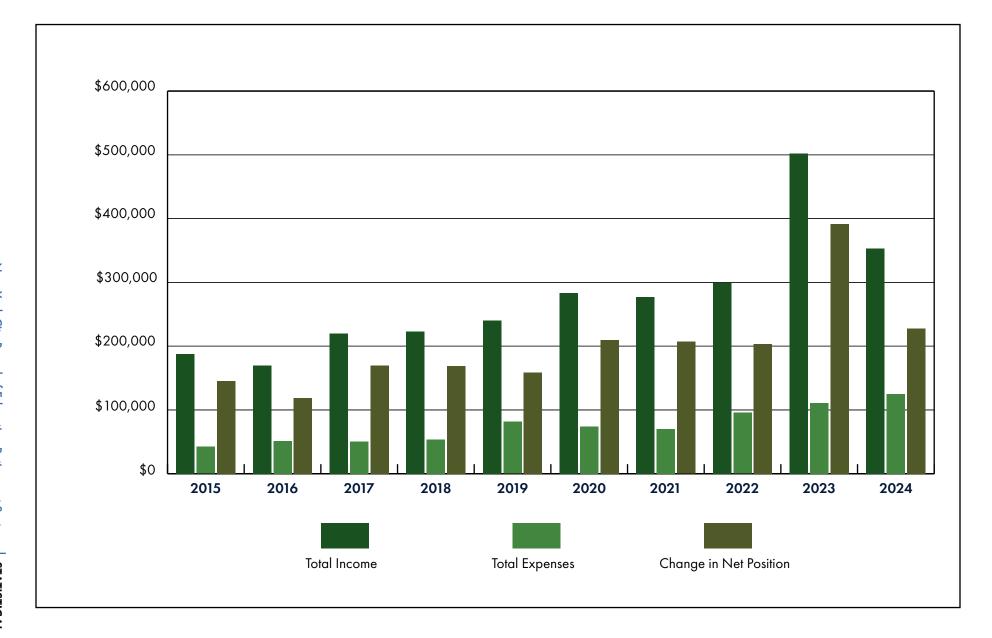
The table offers a 10 year horizontal comparison base for the operations of the BERS.



Tax Deferred Annuity Program Schedule of Changes in Net Position (In thousands)

Year	Participant	Net Investment	Other	Transfer of Investment	Total			nefit ments	Administrative	Total	Change in Net	
Ended	Contributions	Income	Receipts	Income	Income	Death	Refund	Retirement	Other	Expenses	Expenses	Position
2015	\$ <i>7</i> 4,890	\$22,950	\$4,448	\$85,104	\$187,392	\$4,133	\$34,707	\$370	\$12	\$3,033	\$42,255	\$145,137
2016	\$77,459	\$1,049	(\$3,541)	\$94,789	\$169,756	\$13,292	\$36,467	\$351	\$79	\$850	\$51,039	\$118 <i>,7</i> 17
2017	\$85,765	\$75,739	(\$48,113)	\$106,554	\$219,945	\$9,415	\$40,371	\$323	\$99	\$125	\$50,333	\$169,612
2018	\$89,972	\$59,168	(\$54,240)	\$127,972	\$222,872	\$10,851	\$42,427	\$338	\$52	\$84	\$53,752	\$169,120
2019	\$102,203	\$40,087	(\$43,842)	\$141,695	\$240,143	\$25,490	\$55,492	\$336	\$96	\$119	\$81,533	\$158,610
2020	\$109,944	\$14,912	\$2,945	\$15 <i>5,7</i> 49	\$283,550	\$20,695	\$52,877	\$352	\$12 <i>7</i>	\$167	\$74,218	\$209,332
2021	\$111,580	\$233,357	(\$239,773)	\$171,806	\$276,970	\$26,874	\$42,404	\$359	\$106	\$259	\$70,002	\$206,968
2022	\$111,685	(\$119,086)	\$115,459	\$191,054	\$299,112	\$22,601	\$72,306	\$387	\$23	\$285	\$95,602	\$203,510
2023	\$116,569	\$112,730	\$ <i>7</i> 1,665	\$201,361	\$502,325	\$28,514	\$81,661	\$335	\$67	\$310	\$110,887	\$391,438
2024	\$127,817	\$141,620	(\$137,326)	\$220,785	\$352,896	\$32,216	\$91,957	\$379	\$106	\$299	\$124,957	\$227,939

The table offers a 10 year horizontal comparison base for the operations of the BERS TDA Program.



Qualified Pension Plan Schedule of Benefit Expenses by Type (In thousands)

	Age and		bility	Lump Sum Payments		
Fiscal Year Ended	Service Retirement		ement efits	Death In		
June 30	Benefits	Duty	Non-Duty	Service	Survivors	Total
2015	\$202,193	\$3,065	\$6,435	\$3,642	\$2,124	\$217,459
2016	\$214,422	\$3,296	\$6,921	\$7,094	\$2,486	\$234,219
2017	\$234,057	\$3,551	\$7,458	\$6,571	\$2,999	\$254,636
2018	\$236,588	\$3,820	\$8,021	\$5,165	\$3,043	\$256,637
2019	\$250,070	\$4,108	\$8,626	\$9,720	\$441	\$272,965
2020	\$262,918	\$4,418	\$9,278	\$10,927	\$89	\$287,630
2021	\$273,689	\$4,752	\$9,978	\$4,909	\$2,729	\$296,057
2022	\$291,678	\$5,110	\$10,732	\$6,899	\$833	\$315,252
2023	\$321,632	\$5,496	\$11,542	\$6,712	\$3,007	\$348,389
2024	\$338,797	\$5,911	\$12,414	\$7,009	\$4,135	\$368,265

The table offers a horizontal comparison base for the benefit segment of the expense groups of the Plan across the past 10 years. The benefit segment is broken down by type.

AGE AND SERVICE RETIREMENT

	М	en	Wo	men
Age	Number of Retirants	Average Annual Allowance	Number of Retirants	Average Annual Allowance
49 & UNDER	0	\$0	1	\$6,238
50 - 54	2	51,440	0	0
55 - 59	94	33,979	282	13,461
60 - 64	369	35,778	1,421	14,096
65 - 69	723	33,143	2,859	13,943
70 - 74	<i>77</i> 1	31,300	3,217	12,579
75 - 79	576	29,698	2,776	11,766
80 - 84	414	30,192	1,908	10,574
85 - 89	256	28,389	1,156	9,527
90 & OVER	151	28,524	968	8,877
TOTALS	3,356	\$31,518	14,588	\$12,106

ORDINARY DISABILITY (NON-DUTY) RETIREMENT

	М	en	Woi	nen
Age	Number of Retirants	Average Annual Allowance	Number of Retirants	Average Annual Allowance
49 & UNDER	6	\$16,070	8	\$15,222
50 - 54	5	19,899	20	17,322
55 - 59	23	16,885	97	15,142
60 - 64	51	18,913	185	12,016
65 - 69	49	15,987	214	11,416
70 - 74	41	18,722	179	10,847
75 - 79	29	17,081	126	10,440
80 - 84	13	13,004	<i>7</i> 1	9,801
85 - 89	4	22,902	13	8,021
90 & OVER	4	17,487	6	8,324
TOTALS	225	\$17,448	919	\$11,654

NOTE: This schedule is based on 2022 data (LAG)

ACCIDENTAL DISABILITY (DUTY) RETIREMENT

	М	en	Woi	men
Age	Number of Retirants	Average Annual Allowance	Number of Retirants	Average Annual Allowance
49 & UNDER	1	\$4,937	3	\$14,919
50 - 54	2	11,103	3	9,890
55 - 59	2	25,587	10	10,599
60 - 64	14	26,531	30	11,027
65 - 69	8	22,328	42	12,137
70 - 74	10	14,718	37	10,738
75 - 79	7	27,716	25	8,268
80 - 84	3	20,644	11	9,119
85 - 89	3	44,453	11	7,146
90 & OVER	2	38,257	4	9,262
TOTALS	52	\$23,873	176	\$10,460

ACCIDENTAL DEATH (DUTY) RETIREMENT

	М	en	Wor	men
Age	Number of Retirants	Average Annual Allowance	Number of Retirants	Average Annual Allowance
49 & UNDER	6	\$8,386	4	\$16,207
50 - 54	0	0	1	64,239
55 - 59	3	17,807	0	0
60 - 64	3	9,051	1	51,707
65 - 69	1	17,226	1	34,676
70 - 74	1	12,801	0	0
75 - 79	0	0	0	0
80 - 84	0	0	0	0
85 - 89	1	397	0	0
90 & OVER	0	0	0	0
TOTALS	15	\$10,754	7	\$30,779

NOTE: This schedule is based on 2022 data (LAG)

OTHER BENEFICIARIES

	М	en	Woi	men
Age	Number of Retirants	Average Annual Allowance	Number of Retirants	Average Annual Allowance
49 & UNDER	36	\$14,548	49	\$11,521
50 - 54	14	9,506	38	6,744
55 - 59	25	10,142	48	5,773
60 - 64	32	13,791	52	8,994
65 - 69	38	14,672	72	14,821
70 - 74	57	22,657	66	16,659
75 - 79	89	19,262	80	14,552
80 - 84	69	19,142	89	20,957
85 - 89	49	18,453	93	19,688
90 & OVER	40	17,802	107	16,509
TOTALS	449	\$17,488	694	\$14,927

ALL PENSIONERS AND BENEFICIARIES

	М	en	Wor	men
Age	Number of Retirants	Average Annual Allowance	Number of Retirants	Average Annual Allowance
49 & UNDER	49	\$13,783	65	\$12,340
50 - 54	23	15,551	62	11,236
55 - 59	147	26,806	437	12,924
60 - 64	469	31,997	1,689	13,679
65 - 69	819	31,134	3,188	13,775
70 - 74	880	29,945	3,499	12,548
75 - 79	<i>7</i> 01	27,831	3,007	11,755
80 - 84	499	28,159	2,079	10,984
85 - 89	313	26,828	1,273	10,233
90 & OVER	197	26,221	1,085	9,628
TOTALS	4,097	\$29,035	16,384	\$12,191

NOTE: This schedule is based on 2022 data (LAG)

DATA USED IN THE JUNE 30, 2022 (LAG) ACTUARIAL VALUATION FOR DETERMINING FISCAL YEAR 2024 EMPLOYER CONTRIBUTIONS

Age \ Svc	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Up	All Years
Number:									•	
UNDER 20	1	0	0	0	0	0	0	0	0	1
20 TO 24	43	1	0	0	0	0	0	0	0	44
25 TO 29	198	18	0	0	0	0	0	0	0	216
30 TO 34	327	164	19	0	0	0	0	0	0	510
35 TO 39	347	247	105	17	0	0	0	0	0	<i>7</i> 16
40 TO 44	285	236	173	78	20	0	0	0	0	792
45 TO 49	232	243	215	163	59	8	0	0	0	920
50 TO 54	228	227	198	189	119	45	8	1	0	1,015
55 TO 59	201	243	196	173	132	87	46	11	0	1,089
60 TO 64	148	198	153	98	114	64	66	31	4	876
65 TO 69	60	96	69	67	45	26	33	12	8	416
70 & UP	24	42	29	26	21	14	6	6	8	176
TOTAL	2,094	1 <i>,7</i> 15	1,157	811	510	244	159	61	20	6,771
SALARIES (IN	THOUSAND	OS):								
UNDER 20	31	0	0	0	0	0	0	0	0	31
20 TO 24	1,396	47	0	0	0	0	0	0	0	1,443
25 TO 29	9,723	1,050	0	0	0	0	0	0	0	10, <i>77</i> 3
30 TO 34	20,472	11,659	1,558	0	0	0	0	0	0	33,689
35 TO 39	23,233	19,853	8,234	1,434	0	0	0	0	0	52,754
40 TO 44	18,994	18,891	13,772	7,640	1,659	0	0	0	0	60,956
45 TO 49	14, <i>7</i> 51	20,978	18,887	17,649	6,160	936	0	0	0	<i>7</i> 9,361
50 TO 54	13,424	17,405	15,262	20,380	12,962	4,158	992	90	0	84,673
55 TO 59	12,206	17,265	15,000	18,092	14,088	9,126	4,687	1,022	0	91,486
60 TO 64	7,780	13,503	10,823	9,013	10,599	6,218	7,266	3,170	515	68,887
65 TO 69	3,464	6,377	4,728	6,462	4,254	2,516	3,474	1,207	864	33,346
70 & UP	1,008	1,774	1,783	1,747	1,470	1,642	<i>7</i> 50	660	971	11,805
TOTAL	126,482	128,802	90,047	82,417	51,192	24,596	17,169	6,149	2,350	529,204
AVERAGE SA	IADIES:2									
UNDER 20	31,000	0	0	0	0	0	0	0	0	31,000
20 TO 24	32,465	47,000	0	0	0	0	0	0	0	32,795
25 TO 29	49,106	58,333	0	0	0	0	0	0	0	49,875
30 TO 34	62,606	<i>7</i> 1,091	82,000	0	0	0	0	0	0	66,057
35 TO 39	66,954	80,377	78,419	84,353	0	0	0	0	0	73,679
40 TO 44	66,646	80,047	79,607	97,949	82,950	0	0	0	0	76,965
45 TO 49	63,582	86,329	87,847	108,276	104,407	117,000	0	0	0	86,262
50 TO 54	58,877	76,674	<i>77</i> ,081	107,831	104,407	92,400	124,000	90,000	0	83,422
55 TO 59	60,726	71,049	76,531	104,578	106,727	104,897	101,891	92,909	0	84,009
60 TO 64	52,568	68,197	70,739	91,969	92,974	97,156	110,091	102,258	128,750	78,638
65 TO 69	57,733	66,427	68,522	96,448	94,533	96,769	105,273	100,583	108,000	80,159
70 & UP	42,000	42,238	61,483	67,192	70,000	117,286	125,000	110,000	121,375	67,074
TOTAL	60,402	75,103	77,828	101,624	100,376	100,803	107,981	100,803	117,500	78,157

Note: Age is nearest birthday. Service is nearest year.

¹ Total may not add up due to rounding.

² Average based on unrounded salary.

DATA USED IN THE JUNE 30, 2022 (LAG) ACTUARIAL VALUATION FOR DETERMINING FISCAL YEAR 2024 EMPLOYER CONTRIBUTIONS

Age \ Svc	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Up	All Years
Number:										
UNDER 20	1	0	0	0	0	0	0	0	0	1
20 TO 24	36	0	0	0	0	0	0	0	0	36
25 TO 29	422	33	0	0	0	0	0	0	0	455
30 TO 34	744	320	8	0	0	0	0	0	0	1,072
35 TO 39	743	516	189	1 <i>7</i>	0	0	0	0	0	1,465
40 TO 44	834	524	376	162	17	0	0	0	0	1,913
45 TO 49	903	640	423	300	119	10	1	0	0	2,396
50 TO 54	922	<i>7</i> 86	564	338	212	59	15	1	0	2,897
55 TO 59	764	924	814	552	288	92	59	27	1	3,521
60 TO 64	493	709	649	547	363	113	61	38	12	2,985
65 TO 69	185	293	343	295	200	86	38	12	11	1,463
70 & UP	56	127	140	163	91	50	15	11	11	664
TOTAL	6,103	4,872	3,506	2,374	1,290	410	189	89	35	18,868
SALARIES (IN	THOUSAND	OS):								
UNDER 20	11	0	0	0	0	0	0	0	0	11
20 TO 24	1,085	0	0	0	0	0	0	0	0	1,085
25 TO 29	24,298	1, <i>75</i> 1	0	0	0	0	0	0	0	26,049
30 TO 34	45,079	25,055	626	0	0	0	0	0	0	70,760
35 TO 39	39,835	36,366	15,792	1,331	0	0	0	0	0	93,324
40 TO 44	34,189	32,746	29,892	13,997	1,579	0	0	0	0	112,403
45 TO 49	35,441	32,846	28,847	26,124	10,024	961	154	0	0	134,397
50 TO 54	32,652	31,940	29,936	22,259	16,267	4,948	1,394	96	0	139,492
55 TO 59	25,651	33,256	34,699	27,332	15,431	7,154	5,301	2,509	75	151,408
60 TO 64	16,159	23,999	26,153	25,196	17,900	6,497	4,372	2,942	1,033	124,251
65 TO 69	6,561	9,680	14,612	12,776	9,460	4,558	2,651	986	1,009	62,293
70 & UP	1,476	3,434	4,181	5,688	3,552	2,394	919	468	818	22,930
TOTAL	262,437	231,073	184,738	134,703	74,213	26,512	14,791	7,001	2,935	938,403
A) (ED A O E C A	LADIEC 2									
AVERAGE SA		0	^	^	^	0	0	•	0	11.000
UNDER 20 20 TO 24	11,000	0	0	0	0	0	0	0	0	11,000
20 1O 24 25 TO 29	30,139		0	0	0	0	0	0	0	30,139
30 TO 34	57,578	53,061		0	0	0	0	0	0	57,251
	60,590	78,297	78,250		0	0	0	0		66,007
35 TO 39	53,614	70,477	83,556	78,294	0 00 000	0	0	0	0	63,702
40 TO 44	40,994	62,492	79,500	86,401	92,882	0 07 100	0	0	0	58,757
45 TO 49	39,248	51,322	68,196	87,080	84,235	96,100	154,000	0 000	0	56,092
50 TO 54	35,414	40,636	53,078	65,855	76,731	83,864	92,933	96,000	75.000	48,151
55 TO 59	33,575	35,991	42,628	49,514	53,580	<i>77,7</i> 61	89,847	92,926	75,000	43,001
60 TO 64	32,777	33,849	40,297	46,062	49,311	57,496	71,672	<i>77</i> ,421	86,083	41,625
65 TO 69	35,465	33,038	42,601	43,308	47,300	53,000	69,763	82,167	91,727	42,579
70 & UP	26,357	27,039	29,864	34,896	39,033	47,880	61,267	42,545	74,364	34,533
TOTAL	43,001	47,429	52,692	56,741	57,529	64,663	78,259	78,663	83,857	49,735

NOTE: Age is nearest birthday. Service is nearest year.

¹ Total may not add up due to rounding.

² Average based on unrounded salary.

DATA USED IN THE JUNE 30, 2022 (LAG) ACTUARIAL VALUATION FOR DETERMINING FISCAL YEAR 2023 EMPLOYER CONTRIBUTIONS

Age \ Svc	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Up	All Years
Number:										
UNDER 20	2	0	0	0	0	0	0	0	0	2
20 TO 24	79	1	0	0	0	0	0	0	0	80
25 TO 29	620	51	0	0	0	0	0	0	0	6 <i>7</i> 1
30 TO 34	1,071	484	27	0	0	0	0	0	0	1,582
35 TO 39	1,090	<i>7</i> 63	294	34	0	0	0	0	0	2,181
40 TO 44	1,119	<i>7</i> 60	549	240	37	0	0	0	0	2,705
45 TO 49	1,135	883	638	463	178	18	1	0	0	3,316
50 TO 54	1,150	1,013	762	527	331	104	23	2	0	3,912
55 TO 59	965	1,167	1,010	725	420	179	105	38	1	4,610
60 TO 64	641	907	802	645	477	177	127	69	16	3,861
65 TO 69	245	389	412	362	245	112	<i>7</i> 1	24	19	1,879
70 & UP	80	169	169	189	112	64	21	17	19	840
TOTAL	8,197	6,587	4,663	3,185	1,800	654	348	150	55	25,639
CALADIEC /IN	LTHOUGANI	SCI.								
SALARIES (IN UNDER 20	42	0	0	0	0	0	0	0	0	42
20 TO 24	2,481	47	0	0	0	0	0	0	0	2,528
25 TO 29	34,021	2,801	0	0	0	0	0	0	0	36,822
30 TO 34	65,551	36,714	2,184	0	0	0	0	0	0	104,449
35 TO 39	63,068	56,219	24,026	2,765	0	0	0	0	0	146,078
40 TO 44	53,183	51,637	43,664	21,637	3,238	0	0	0	0	173,359
45 TO 49	50,192	53,824	47,734	43,773	16,184	1,897	154	0	0	213,758
50 TO 54	46,076	49,345	45,198	42,639	29,229	9,106	2,386	186	0	224,165
55 TO 59	37,857	50,521	49,699	45,424	29,519	16,280	9,988	3,531	75	242,894
60 TO 64	23,939	37,502	36,976	34,209	28,499	12,715	11,638	6,112	1,548	193,138
65 TO 69	10,025	16,057	19,340	19,238	13,714	7,074	6,125	2,193	1,873	95,639
70 & UP	2,484	5,208	5,964	7,435	5,022	4,036	1,669	1,128	1,789	34,735
TOTAL ¹	388,919	359,875	274,785	217,120	125,405	51,108	31,960	13,150	5,285	1,467,607
AVERAGE SA										
UNDER 20	21,000	0	0	0	0	0	0	0	0	21,000
20 TO 24	31,405	47,000	0	0	0	0	0	0	0	31,600
25 TO 29	54,873	54,922	0	0	0	0	0	0	0	54,876
30 TO 34	61,205	75,855	80,889	0	0	0	0	0	0	66,023
35 TO 39	57,861	73,682	81,721	81,324	0	0	0	0	0	66,978
40 TO 44	47,527	67,943	79,534	90,154	87,514	0	0	0	0	64,088
45 TO 49	44,222	60,956	<i>7</i> 4,818	94,542	90,921	105,389	154,000	0	0	64,463
50 TO 54	40,066	48,712	59,315	80,909	88,305	87,558	103,739	93,000	0	57,302
55 TO 59	39,230	43,291	49,207	62,654	70,283	90,950	95,124	92,921	75,000	52,689
60 TO 64	37,346	41,347	46,105	53,037	59,746	<i>7</i> 1,836	91,638	88,580	96,750	50,023
65 TO 69	40,918	41,278	46,942	53,144	55,976	63,161	86,268	91,375	98,579	50,899
70 & UP	31,050	30,817	35,290	39,339	44,839	63,063	79,476	66,353	94,158	41,351
TOTAL	47,447	54,634	58,929	68,170	69,669	78,147	91,839	87,667	96,091	57,241

NOTE: Age is nearest birthday. Service is nearest year.

¹ Total may not add up due to rounding.

² Average based on unrounded salary.

Fiscal Year	Service Retirement Benefits			Ordinary (Non-Duty) Disability Benefits			Accidental (Duty) Disability Benefits			Survivor Benefits		
Ended June 30	Number	Average Annual Allowance	Average Monthly Allowance	Number	Average Annual Allowance	Average Monthly Allowance	Number	Average Annual Allowance	Average Monthly Allowance	Number	Average Annual Allowance	Average Monthly Allowance
2013 (Lag)	13,662	\$12,811	\$1,068	795	\$11,620	\$968	153	\$12,809	\$1,067	845	\$14,579	\$1,215
2014(Lag)	14,150	\$12,932	\$1,078	853	\$11,680	\$973	156	\$12,268	\$1,022	836	\$14,435	\$1,203
2015(Lag)	14,572	\$13,303	\$1,109	890	\$12,208	\$1,017	159	\$12,341	\$1,028	817	\$14,391	\$1,199
2016(Lag)	15,034	\$13,420	\$1,118	937	\$11,95 <i>7</i>	\$996	168	\$13,377	\$1,115	798	\$14,869	\$1,239
2017(Lag)	15,454	\$13 <i>,7</i> 22	\$1,144	999	\$11,960	\$997	182	\$12,585	\$1,049	790	\$15,010	\$1,251
2018(Lag)	15,979	\$14,138	\$1,178	1085	\$12,250	\$1,021	209	\$12,642	\$1,054	<i>7</i> 68	\$1 <i>5</i> ,0 <i>7</i> 6	\$1,256
2019(Lag)	16,156	\$14,594	\$1,216	1136	\$12,328	\$1,027	223	\$12,334	\$1,028	987	\$14,819	\$1,235
2020(Lag)	16,691	\$14,897	\$1,241	11 <i>57</i>	\$12,607	\$1,051	226	\$12,699	\$1,058	1046	\$1 <i>5,7</i> 28	\$1,311
2021(Lag)	16,993	\$15,225	\$1,269	1141	\$12,603	\$1,050	223	\$12, <i>757</i>	\$1,063	1091	\$15,265	\$1,272
2022(Lag)	17,944	\$15,737	\$1,311	1144	\$12,794	\$1,066	228	\$13,519	\$1,127	1165	\$15,955	\$1,330

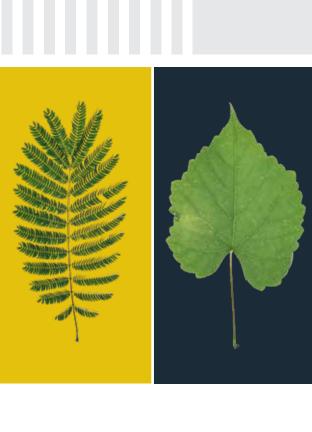
Qualified Pension Plan Participating Employers As Of June 30, 2022 (Lag)

	As of June 30, 2022 (Lag)		As of June 30, 2013 (Lag)	
Employer	Number of Employees	Annual Payroll	Number of Employees	Annual Payroll
NYC Department of Education ¹	24,920	\$ 1,382,181,613	25,271	\$ 997,290,412
NYC School Construction Authority	710	84,974,133	560	53,681,013
Charter Schools				
Beginning with Children ²	0	-	3	105,736
KIPP Academy	0	-	0	-
Renaissance	9	451,310	14	494,007
TOTAL	25,639	\$ \$1,467,607,056	25,848	\$ 1,051,571,168

¹A limited (de minimis) number of these employees have been reported as employed by employers other than those listed in the table. For actuarial valuation purposes, these employees are included with the NYC Department of Education pending confirmation of status.

²The Beginning with Children Charter School closed in 2016.











Board of Education Retirement System

Board of Education Retirement System

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