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# **New York City Fire Pension Funds New York State**



**Annual Comprehensive Financial Report  
A Fiduciary Fund of The City of New York  
For The Fiscal Years Ended  
June 30, 2023 and June 30, 2022**

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# New York City Fire Pension Funds

One Battery Park Plaza, 9<sup>th</sup> Floor, New York, N. Y. 10004  
(929) 436 - 0099



## Annual Comprehensive Financial Report A Fiduciary Fund of The City of New York For Fiscal Years Ended June 30, 2023 and June 30, 2022

Prepared under the  
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**New York City Fire Pension Funds**  
**Annual Comprehensive Financial Report**  
**A Fiduciary Fund of The City of New York**



**Introductory Section**

**Part I**

**Fiscal Year Ended June 30, 2023**

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Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

**New York Fire Department Pension Funds**

For its Annual Comprehensive  
Financial Report  
For the Fiscal Year Ended

June 30, 2022

*Christopher P. Morrill*

Executive Director/CEO

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**NEW YORK CITY FIRE PENSION FUND**  
ONE BATTERY PARK PLAZA, 9<sup>TH</sup> FLOOR  
NEW YORK, NY 10004  
(929) 436-0099

**Patrick M. Dunn**  
Executive Director

December 21, 2023

Board of Trustees  
New York City Fire Pension Fund  
One Battery Park Plaza, 9<sup>th</sup> Floor.  
New York, NY 10004

Dear Members of the Board of Trustees:

I am pleased to present the Annual Comprehensive Financial Report (“ACFR”) of the New York City Fire Pension Funds (“Fire” or the “Funds”) for the Fiscal Year ended June 30, 2023. Our ACFR contains combined financial statements and disclosures for the New York City Fire Pension Fund qualified pension plan (“QPP”) and two additional funds administered by Fire: the New York City Firefighters’ Variable Supplements Fund (“FFVSF”) and the New York City Fire Officers’ Variable Supplements Fund (“FOVSF”). Management is responsible for the preparation, accuracy and completeness of this presentation. We believe that the data in this report is a fair representation of the financial position and results of operations of the Funds, and to the best of our knowledge the information is accurate and includes all required disclosures. Our report is organized into the Introductory, Financial, Investment, Actuarial and Statistical sections. Users of the financial statements are encouraged to review the Management Discussion and Analysis (MD&A) presented in the financial section.

**Profile of the Funds**

The New York City Fire Pension Fund, formerly known as the New York Fire Department Subchapter Two Pension Fund (formerly Article 1-B), was established pursuant to Local Law No. 53, enacted July 14, 1941. On that date, all participants covered under Article 1-A and subsequent appointees to the Fire Department were granted the option of membership in either Article 1-A or Subchapter Two, in accordance with the legislation. At that time, all members of the Article 1-A Fund became participants in the Fund established under Subchapter Two and, with one exception, all new appointees elected membership in the Subchapter Two Pension Fund.

Effective July 1, 1980, the Article 1-A Fund was terminated, and its assets transferred to the Subchapter Two Pension Fund. Prior to July 1, 1980, each member contributed by salary deduction an amount determined to provide approximately 25% of the cost of their benefits, while the city contributed the remaining 75%. The total contributions under this arrangement proved inadequate to finance benefits, and the Pension Fund became actuarially unsound.

Effective July 1, 1980, July 1, 1981, and July 1, 1982, new state laws amended the benefit provisions of the Fund by establishing a new Plan known as the Improved Benefits Plan (“IBP”). The IBP provides increased benefits supported by higher members and City contributions. The Original Plan (“OP”) was closed to new entrants on July 1, 1981, and membership in the IBP became mandatory for employees hired on or after that date. Members of the OP have the option, during specified periods each year, to transfer to the IBP.

The new laws were expected to correct previous under-funding of the Pension Fund. The provisions of these laws increased City contributions annually to provide an amount deemed sufficient to cover benefits, excluding annuities and refunds from member contribution accounts. These contributions cover the normal costs of operation each year.

The Firefighters’ Variable Supplements Fund (“FFVSF”) and the Fire Officers’ Variable Supplements Fund (“FOVSF”) (collectively the “VSFs”) operate pursuant to the provisions of Title 13, Chapter 3 of the New York City Administrative Code and provide supplemental benefits to retired Firefighters, Fire Marshals, Marine Titles, Fire Officers and Supervising Fire Marshals, respectively. To receive benefits from the VSFs, eligible participants must retire on or after October 1, 1968, and be receiving a service retirement benefit from the QPP. The VSFs are not considered pension plans; they provide defined supplemental payments other than pension or retirement system benefits.

Effective September 8, 2016, the New York City Fire Pension Fund, formerly known as the New York Fire Department Pension Fund, was granted corpus funding pursuant to Chapter 298 of the Laws of 2016. Under the new law, the Pension Fund ceased to be part of the Fire Department and became a separate agency. The law mandates budgetary approval by the offices of the Mayor and Comptroller, and a majority of the Board of Trustees. This authorizes the Fund to pay for operational expenses from Fund assets. The City later reimburses the Fund for expenses incurred.

### **Current Initiatives & Events**

All activities of the New York City Fire Pension Fund and the Subchapter II (1B) Medical Board have been consolidated in a bifurcated setting at our headquarters located at One Battery Park Plaza, 9<sup>th</sup> Floor, New York, NY 10004. The move effected on February 4, 2019 and completed on July 1, 2019, has resulted in streamlined operations and improved member services.

The COVID 19 pandemic continued to adversely impact communities and economies worldwide through fiscal year 2023. The future course of the pandemic is uncertain; however, the City of New York has seen great improvement in this public health crisis, with a fall in hospitalization and death rates from COVID. Lockdowns and other measures to control the spread of the virus imposed by the City of New York in March of 2020 expired on August 18, 2023.

Management’s primary goal is to deliver the highest level of services to members and their beneficiaries. Our plan is to ensure accurate and timely payment of benefits to retirees and beneficiaries and provide members with the best information available, so that they may plan for a secure retirement. During this period of challenges, we have continued to conduct business in person and by using virtual technology, telephones, and hosting socially distanced meetings at our headquarters. We believe our commitment to constant improvement in our operations will assure success. Highlights of some of our activities over the past year are listed below.

**Self Service Portal**

Our pension information system's ("e-UPS") self-service portal has become an integral part of our customer service delivery. E-UPS is available through the Fire Department's intranet and may be accessed from computers at all firehouses. Each year, the number of members accessing the portal has increased. Also, members may download Annual Pension Statements, manuals and forms, view updated account details and obtain current estimates of retirement benefits. The fund continues to seek funding for a more modern IT system to replace the current legacy system. The new system will use the funds to improve services to members and allow for the full inclusion of Tier III membership data in our operations.

**New Member Applications**

During Fiscal Year 2023, the Fund successfully completed the processing of approximately 634 new membership applications. The Fund conducted two classes for probationary firefighters hired by the Fire Department during that period. These firefighters have since become members of the Fund under the new Tier 3 Enhanced legislation.

**Retirement Processing**

The Retirement Counseling Unit consulted with thousands of prospective retirees and processed retirement applications of more than 694 members during Fiscal Year 2023. These applicants are now receiving 90% of their expected retirement benefit, pending finalization of calculations.

**Communication & Information**

To improve education and communication with members of the Fund, we now conduct rank specific virtual retirement seminars two times monthly. Additionally, the Fund continues to seek resources for the development of an independent website. A new website will provide the current membership with their specific individual data as well as information required to be disseminated to members and the public.

**Financial Information****Economic Conditions in Fiscal Year 2023 and Outlook for Fiscal Year 2024**

Our Funds' current obligations and future commitments to members and beneficiaries are financed by employer and employee contributions and earnings generated by the Funds' investment portfolio. Economic conditions at both the national and the local level significantly impact financial markets and ultimately portfolio earnings, thus the state of the economy is always of interest. The COVID -19 pandemic had a negative impact on public health, employment, the supply of goods and services and generated general uncertainty in the global economy. The news on economic recovery is positive due to strong policy support and progress on vaccinations and by the close of the second quarter of Fiscal Year 2023, the Bureau of Economic Analysis (BEA) reported that the U.S. economy had increased at an average annual rate of 2.1%, as measured by real Gross Domestic Product (GDP). Unemployment levels remain unchanged from June 2022 to June 2023 at 3.6% as per the Bureau of Labor Statistics (BLS). The Federal Reserve Bank ("FRB") in press releases during September 2023, committed to using its full range of tools to support the economy by promoting maximum employment and price stability during this period. The FRB also noted that the rate of inflation is currently at 3.7% and expected to remain so for some time. The FRB Open Market Committee ("OMC") will maintain its accommodative stance on monetary policy to keep pace with current economic activity and conditions in the labor market and hold inflation near the stated 2% level over the long run. Additionally, due to the current state of economic activity the OMC will continue to hold the target range for the federal funds' interest rate at levels between 5.25% and 5.5%.

New York City's economy, though adversely impacted by the pandemic and attendant financial crisis began to recover with the help of federal stimulus in a measured way during fiscal year 2023. The Comptroller's Office reported that by the close of fiscal year 2023 employment in New York City stood at 4.7 million, an increase of almost 149,100 jobs compared to the previous period. However, some sources of revenue for the City, such as the small business sector and tourism, continue to be depressed.

During the early half of Fiscal Year 2024 BLS reported the unemployment rate at 3.8% at the end of September 2023. The BEA report in October 2023 indicated that GDP had increased at an annual rate of 5.2% for third quarter 2023 (advance estimates), as compared to the growth of 2.1% in the previous quarter. According to the FRB, the increase reflects consumer spending and inventory investments.

### **Investments**

The Comptroller of the City of New York is the designated custodian of the Funds' investment portfolio, subject to the direction, control and approval of the NYC Fire Pension Fund Board of Trustees. The investment policy adopted by the Funds' Boards of Trustees is one that promotes growth through increasing returns. The strategy used to implement this policy is the allocation of assets, diversified into a wide range of instruments to minimize overall risk, maintain liquidity and generate competitive returns.

The Funds' portfolio is comprised largely of holdings in domestic, international and private equities as well as fixed income securities. For Fiscal Year 2023, Fire's QPP investment portfolio of approximately \$18.7 billion under management posted a gain of 7.8%, while the corresponding Policy Index posted a gain of 7.2%. The FFVSF's investment portfolio of approximately \$444.1 million posted a gain of 10.0%, while the corresponding Policy Index posted a gain of 10.1%. The FOVSF's investment portfolio of approximately \$337.5 million posted a gain of 10.3% and the Policy Index gain 10.1%. A detailed discussion of our investment policy, activities and results is presented in the Investment Section of our report.

### **Funding**

Adequate funding is essential to ensure the financial soundness of a pension plan. Therefore, when funding levels are adequate, the total amount of accumulated assets will be comparable to the total amount of benefit obligations of the Funds. The City's funding policy is to contribute statutorily required contributions which, combined with member contributions and investment returns, meet current and future obligations. A well-funded plan gives Fund participants the confidence that their pension benefits are secure.

Fire's Fiduciary Net Position as a Percentage of Total Pension Liability, formerly "funded ratio," is calculated in accordance with newly adopted Governmental Accounting Standards Board Statements ("GASB") Numbers 67 and 68. This ratio stands at 72.8 % for Fiscal Year 2023, an increase from 71.0% in the previous period (Net Pension Liability - Note 6 of Notes to Financial Statements). Funding is further addressed in the actuarial section of our report.



**Accounting and Reporting**

This report was prepared to conform to principles of governmental accounting and reporting as promulgated by the GASB, and according to guidelines adopted and published by the Government Finance Officers Association of the United States and Canada (“GFOA”). The requirements of GASB Statement No. 67, “Financial Reporting for Pension Plans,” have been adhered to in determining the information in the financial statements.

The accrual basis of accounting is used to record all transactions executed by the Pension Funds. Under this method, revenues are recognized when earned and expenses are recognized when the Funds incur an unconditional obligation to pay. The accrual basis of accounting provides a realistic picture of the financial activity and performance of the Pension Funds for each period.

**Internal Control**

The management of New York City Fire Pension Funds is responsible for establishing and maintaining an internal control structure, designed to ensure that the assets of the Funds are adequately safeguarded. Additionally, the control structure should ensure that all transactions are properly recorded to allow for the preparation of financial statements in conformity with generally accepted accounting principles. The objective of internal control is to provide reasonable rather than absolute assurance that the financial statements are free of material misstatements. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived, and that the evaluation of costs and benefits requires estimates and judgments to be made by management.

Procedures that reinforce established controls are periodically reviewed and evaluated by management as well as the New York City Comptroller’s Office through its assessment of the Funds’ Financial Integrity Compliance statement. In addition, independent certified public accountants audit the financial statements each year.

**Professional Services**

The Comptroller of the City of New York is the custodian of the Funds’ assets and provides investment services through independent advisors and consultants. These advisors and consultants are disclosed in the Financial section of the ACFR in the schedule of Investment Expenses on page 105 and the schedules of Administrative Expenses and Payments to Consultants on pages 106 and 107. We also include a listing of brokerage firms and the amounts paid to each firm in the Investment section of the ACFR in the schedule of Broker’s Commissions and Fees on pages 145 through 157. Additionally, the Chief Actuary of the City’s pension systems provides actuarial services, while the Corporation Counsel provides legal services to the Funds. The City of New York defrays the expenses associated with these services.

**Independent Audit**

The New York City Fire Pension Funds are required to undergo an annual audit by independent certified public accountants in accordance with generally accepted auditing standards. The accounting firm of Grant Thornton LLP was selected to perform the annual audits for the Fiscal Years ended June 30, 2020 through June 30, 2023. The Independent Auditor’s Report for the Fiscal Years ended June 30, 2023 and 2022 on the general-purpose financial statements and schedules of historical information required by the GASB is presented in the Financial section of this report. The Financial section also contains Management Discussion and Analysis (MD&A) with comparative data for Fiscal Years 2023, 2022 and 2021. The contents of this letter should be considered along with additional information contained in the MD&A.

**Other Information**

**Awards**

The Government Finance Officers' Association of the United States and Canada ("GFOA") awarded a Certificate of Achievement for Excellence in Financial Reporting to the New York City Fire Pension Funds for its Annual Comprehensive Financial Report for the Fiscal Year ended June 30, 2022. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to conform to the Certificate of Achievement program's requirements, and we are submitting it to the GFOA to determine its eligibility for Fiscal Year 2023.

**Acknowledgements**

The compilation of this annual report represents the combined efforts of the Pension Administration management and staff, whom I commend for their consistent hard work and dedication. Our report presents complete and reliable information to provide a basis for making management decisions, to comply with legal provisions, and to determine responsible stewardship of the assets of the Funds.

I take this opportunity to express my gratitude to the Board of Trustees for the guidance and support they have provided during this period. I also am very grateful to the Office of the Actuary, the Office of the Comptroller and the Office of the Mayor for providing the wide range of valuable actuarial and statistical data that is an integral part of this report.

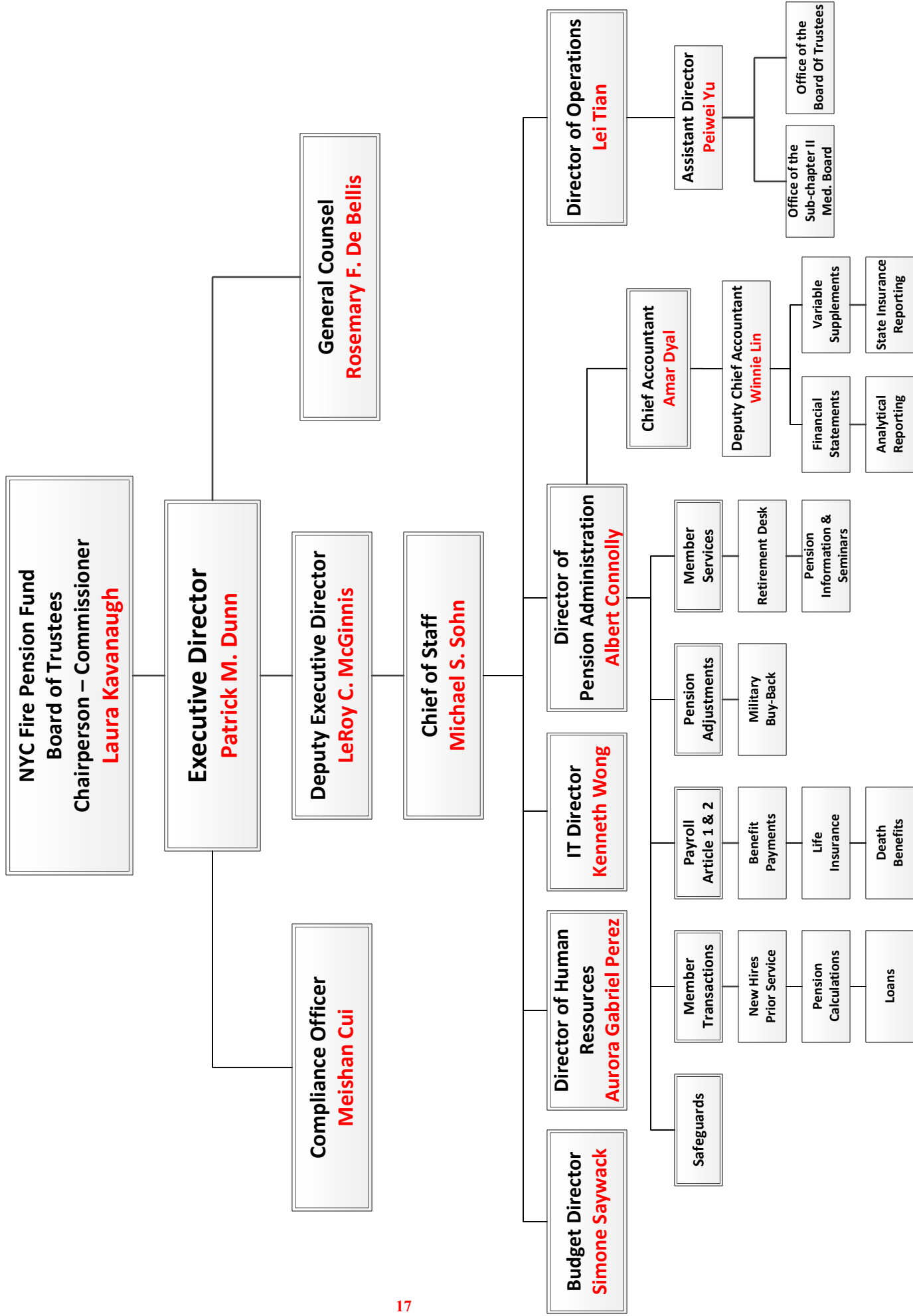
Finally, I wish to thank the staff for their outstanding efforts, and our management team for their leadership and commitment. Together, we will continue to work diligently to enhance the delivery of member services and to assure the success of our operations.

Respectfully submitted,



Patrick M. Dunn  
Executive Director

# ADMINISTRATIVE ORGANIZATION



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**MEMBERS OF THE BOARD OF TRUSTEES**

**As of June 30, 2023**

<b>Eric L. Adams</b>	<b>Mayor, City of New York</b>
<b>Laura Kavanagh</b>	<b>Fire Commissioner and Chairperson</b>
<b>Brad Lander</b>	<b>Comptroller, City of New York</b>
<b>Preston Niblack</b>	<b>Commissioner, Department of Finance</b>
<b>Jim Brosi</b>	<b>Chiefs' Representative of the Uniformed Fire Officers' Association of Greater New York</b>
<b>Liam Guilfoyle</b>	<b>Captains' Representative of the Uniformed Fire Officers' Association of Greater New York</b>
<b>Christopher Jensen</b>	<b>Lieutenants' Representative of the Uniformed Fire Officers' Association of Greater New York</b>
<b>Andrew Ansbro</b>	<b>President of the Uniformed Firefighters' Association of Greater New York</b>
<b>Robert Eustace</b>	<b>Vice President of the Uniformed Firefighters' Association of Greater New York</b>
<b>Edward Brown</b>	<b>Treasurer of the Uniform Firefighters' Association of Greater New York</b>
<b>Eric Bischoff</b>	<b>Vice Chairman of the Uniformed Firefighters' Association of Greater New York</b>
<b>Peter De Vita</b>	<b>Representative of the Uniformed Pilots' and Marine Engineers' Association of Greater New York</b>

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# **New York City Fire Pension Funds**

## **Summary**

### **Of Funds Benefits**



### **Tier I – Tier II & Tier III**

**Fiscal Year Ended June 30, 2023**

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**Summary Funds and Options Benefits**

**TIERS I & II**

The New York City Fire Department Pension Fund, Subchapter II, (the “Fund”) is a corporation, separate from the Fire Department of The City of New York. All uniformed employees of the Department become members of the Fund, upon appointment.

**MEMBERSHIP**

**TIERS**

Firefighters who became members of the Fund before July 1, 1973 are Tier 1 members. Firefighters who became members of the Fund between July 1, 1973 and June 30, 2009 are Tier II members.

**ORIGINAL PLAN – PRE-JULY 1, 1981 MEMBERS**

Prior to July 1, 1981, all members of the Fund were enrolled in the “Original Plan.” After the Fund was financially restructured in 1981, the “Original Plan” was closed to new entrants and the “Improved Benefits Plan,” which covers all firefighters hired on or after July 1, 1981, was adopted. It provided some increases in benefits, along with somewhat higher member and City contributions.

Although closed to new entrants, the “Original Plan” covered pre- July 1, 1981 members who had not elected to transfer to the “Improved Benefits Plan.” Legislation enacted in 1986 permitted such transfers in June, July, and August of every year.

**IMPROVED BENEFITS PLAN (IBP) – POST- JUNE 30, 1981 MEMBERS**

All firefighters who become members of the NYC Fire Pension Fund on or after July 1, 1981 are covered only by the “Improved Benefits Plan” (IBP). Unless specifically stated otherwise, all information in this summary refers to members of the IBP only.

**SUMMARY**

<b><u>Date of Membership</u></b>	<b><u>Tier</u></b>	<b><u>Applicable Plan</u></b>
Pre- July 1, 1973	1	Original of Improved Benefits Plan
July 1, 1973 to June 30, 1981	2	Original of Improved Benefits Plan
July 1, 1981 to June 30, 2009	2	Improved Benefits Plan

Members with a membership date or equated date between June 17, 1971 and June 30, 1973 are subject to the limitations on final salary imposed by the Kingston Law.

**KINGSTON LAW LIMITATIONS**

For all members of the Fund appointed between June 17, 1971 and June 30, 1973, the pensionable compensation for the final year of service is limited to 120% of the pensionable compensation for the year immediately preceding the final year. For example, a member's final year of service is July 6, 2009 through July 5, 2010. If between July 6, 2008 and July 5, 2009 the member earned \$90,000.00 in pensionable salary, holiday pay, night-shift differential, and overtime, the final year pensionable compensation cannot exceed \$108,000 (\$90,000 X 120%).

**CONTRIBUTIONS****REQUIRED EMPLOYEE CONTRIBUTIONS**

Tier I and Tier II members contribute a percentage of all earnings through payroll deductions to a 20-year plan. The contribution rate is based on age at appointment. Member contributions earn interest, currently 8 ¼% per year. Contributions are required for the first twenty (20) years of allowable fire service. After 20 years, contributions will continue unless the member submits a written request to the Pension Fund to discontinue the contributions.

Contributions and any interest earned are referred to as "accumulated deductions." The amount of accumulated deductions required to be in the member's account at any given time is referred to as the "minimum required contribution." The total minimum required contribution is determined on the member's 20<sup>th</sup> anniversary. Contributions made above the minimum required are referred to as "excess" contributions.

**TAXATION**

Contributions made before December 1989 were federally taxed. Regular contributions made since December 1989 are federally tax-deferred as per section 414(h) of the Internal Revenue Code but are subject to state and local income taxation. Thus, upon retirement or termination, withdrawal of these contributions and interest earnings will be subject to federal taxation only. Members who are under the age of 50 may be subject to an additional 10% federal tax penalty and should consult a tax advisor before withdrawing excess contributions at retirement. Minimum required contributions may not be withdrawn except upon separation from service before retirement (*i.e.* resignation or termination).

**VOLUNTARY EMPLOYEE CONTRIBUTIONS 50% INDICATOR**

Members may make additional contributions equal to 50% of their required employee contributions on a voluntary basis. Since these contributions are not covered by section 414(h) of the Internal Revenue Code, they are subject to immediate federal, state and city income taxation. These additional contributions will also increase a member's excess contributions, which will provide an additional annuity, or may be withdrawn as a lump sum, at retirement.

**ITHP WAIVER**

The City of New York makes employer contributions to the Fund. The City of New York also pays a portion of employee contributions. These contributions are called "Increased-Take-Home-Pay" (ITHP) and currently equal 5% of gross salary. For example, assume an employee contribution rate of 7.3% of pay. With ITHP, the member contributes 2.3% (the "minimum required contribution") and the City contributes 5%.

Members may waive the ITHP and contribute at the full employee rate. These additional contributions are covered by section 414(h) of the Internal Revenue Code and are therefore federally tax deferred. Although this lowers take-home pay during employment, it results in either a greater annuity at retirement or a lump-sum return of any excess. For example, assume a contribution rate of 7.3% of pay, and the employee waives the ITHP. While the employee contributes 7.3% of pay, the City of New York continues to make ITHP contributions equal to 5%. Excess tax-deferred 414(h) contributions are taxable in the year withdrawn.

**NOTE:** Effective October 1, 2000, the 2.5% amount represents the required contributions.

**HOW TO REDUCE PAYROLL DEDUCTIONS (138-b REGULATIONS)**

To increase take-home pay, required employee contributions may be reduced up to the amount of Social Security (FICA) contributions. If required contributions are less than FICA contributions, the member will not be making any pension contributions, thereby creating a deficit in his/her retirement account. For example, assume a member has a pension contribution rate of 7.5%. The required contribution rate is 2.5%, and the ITHP is 5%. Under the 138-B election, the member will not be making any pension contributions as long as his/her required contribution rate of 2.5% is less than the current Social Security rate. If the percentages change and the required contribution rate becomes greater than the FICA rate, the member would contribute the difference into the retirement account.

If the 138-B option is elected, Social Security benefits will not be affected. However, the value of the retirement allowance will be reduced because it is based in part on required employee contributions and the interest earned thereon. After maximum Social Security contributions have been reached during any calendar year, pension contributions will resume.

**EXCESS CONTRIBUTIONS**

At retirement, Service and Accidental Disability retirees can choose to take any excess contributions as either a lump-sum payment or as an additional annuity. Members retiring for Ordinary Disability are required to take a lump-sum payment of any excess. Members are reminded that a withdrawal of 414(h) contributions and interest is subject to federal tax in the year withdrawn. In addition, members who are under age 50 at retirement may also be subject to an additional 10% federal tax penalty and should consult a tax advisor prior to withdrawal. Retiring members may request a direct rollover of any taxable excess into a qualified plan such as the NYC Deferred Compensation/401K plans or an IRA, in order to defer payment of federal tax.

**CREDITED SERVICE**

Credited service is classified as uniformed service or non-uniformed service.

**ALLOWABLE FIRE SERVICE**

Twenty (20) years of allowable fire service are required for Service Retirement. Such service includes:

All member service rendered as a uniformed member of the New York City Fire Department in the competitive class of the civil service.

Credit for service rendered in the uniformed force of the New York City Police Department immediately preceding service in the uniformed force of the New York City Fire Department, provided application for such credited service is made within prescribed time limits and such credited service is transferred to the Fund.

New York City Employees' Retirement System (NYCERS) uniformed force service rendered immediately before appointment as a uniformed member of the New York City Fire Department, provided application for such credited service is made within prescribed time limits and such credited service is transferred to the Fund. Uniformed service from NYCERS includes uniformed service in the Department of Correction, Sanitation, as well as service as an Emergency Medical Technician (EMT) or Fire Alarm Dispatcher.

All allowable Peace Officer service (as defined in Section 2.10 of the Criminal Procedure Law), service as Sheriff, Marshal, or D.A. Investigator, and any position specified in Appendix A of the agreement dated October 27, 2005 among the City of New York, the Uniformed Firefighters' Association and the Uniformed Fire Officers' Association.

Credit for any service rendered while a member of the New York State Policemen's and Firemen's Retirement System or the New York State & Local Retirement System, provided application for such credited service is made within prescribed time limits and such credited service is transferred to the Fund.

Credit for up to five (5) years of military service, provided the member was a member of a City retirement system at the time they entered military service and they immediately returned to City service upon discharge from the military.

Uniformed Services Employment & Reemployment Rights Act (USERRA) credit for members called off a Military Preferred List.

**BUYBACK CREDIT**

**Chapter 646 of the Laws of 1999 - Tier Reinstatement:** this law amends RSSL §645 and permits a member, who was previously a member of any New York public retirement system, to be deemed to have become a member of the current retirement system as of the original date of such previous ceased membership. Chapter 646 may allow for a tier change or tier reinstatement.

**Military Service, RSSL §1000:** this allows a member to purchase credited service for up to three years of military service rendered prior to the commencement of public employment. A member must have at least five years of pension credit to be eligible to receive credit under this law.

**Chapter 552 of the Laws of 2000 - Prior Service Credit:** this law allows a member who was eligible for membership in any of the New York State or New York City retirement systems, but did not become a member of such system, to purchase pension credit for the period of time that they were eligible for membership. It also permits a member to purchase pension credit for membership service in any New York City or State retirement system that may have been lost or withdrawn. Service purchased pursuant to Chapter 646 can either be non-uniformed service, which increases the pension's value but does not change the retirement date, or it can be uniformed service, which changes the retirement date.

**OTHER CREDITED SERVICE**

Other Credited Service is any New York City service (except Teachers' Retirement System service) which is not considered allowable credited service. It counts as additional service credit after completing the required twenty (20) years and includes service rendered while a member in a non-uniformed position with the New York City Employees' Retirement System and membership in the Board of Education Retirement System.

However, there is no credit for prior non-uniformed service for members who are granted an accidental disability pension. Uniformed service credit that does not immediately precede uniformed service in the New York City Fire Department is Other Credited Service.

**RETIREMENT PROCESS**

**SERVICE RETIREMENT**

Members may retire for service (non-disability) after completing 20 years of uniformed service. To initiate Service Retirement, Form FPF 175 (formerly BP-165) must be submitted through the chain of command. The Fund's Retirement Counseling Unit must receive the form at least thirty (30) days before the date on which the member wishes to retire and at least ten (10) days before the date on which usage of accrued and terminal leave begins.

**WITHDRAWAL OF SERVICE RETIREMENT APPLICATION**

If a member has begun to utilize terminal leave and decides to withdraw their application for retirement, the FDNY Bureau of Health Services must evaluate the member for a duty determination before he/she can return to full duty.

**DISABILITY RETIREMENT**

A member may apply for either ordinary disability (non-service connected) retirement or accidental disability (service connected) retirement, or both. Applications for service or non-service incurred disability retirement shall be submitted to the Fire Commissioner on Form FPF 180 (formerly BP-409). The following steps are necessary before disability retirement is considered.

**STEP I: SUBMISSION OF APPLICATION**

***Member's Application for Disability Retirement:***

A member may initiate the disability retirement process by submitting FPF 180 (formerly BP-409), whether or not there has been an examination by the Bureau of Health Services (BHS). However, BHS is required to make a determination of the member's fitness for duty status prior to or during the disability pension application process. When an officer submits an application for disability retirement, vacation, accrued and terminal leaves must begin immediately.

Depending upon the results of an initial examination by a medical officer at the Fire Department's Bureau of Health Services, the member will be referred to the BHS Medical Committee, which is comprised of three or more FDNY medical officers. The BHS Medical Committee makes fitness for duty determinations. Upon examining the member, one of the following determinations is made:

- a) Temporarily unfit for full duty. In this case, the member is placed on light duty or medical leave with an expectation of being returned to full duty.

- b) Permanently unfit for full duty. This category is also known as REC/LSS (Recommended Limited-Service Squad or Long Term Light Duty). Pursuant to Mayoral Executive Order 78-14, the member may remain on Light Duty for up to one year.
- c) Undetermined.
- d) Full Duty.

***Fire Commissioner's Application for Disability Retirement:***

Pursuant to Mayoral Directive No. 78-14, the Fire Commissioner must apply for the disability retirement of any member found permanently unfit for full firefighting duty by the BHS Medical Committee. Upon the BHS Medical Committee's determination that a member is permanently unfit for full firefighting duty (REC/LSS), the Fire Commissioner endorses the transcript or minutes from the BHS Medical Committee and forwards it to the NYC Fire Pension Fund for processing as the Fire Commissioner's Application for Disability Retirement.

**STEP II: REVIEW OF APPLICATION BY THE SUBCHAPTER II 1-B MEDICAL BOARD**

The Subchapter II 1-B Medical Board is comprised of three physicians and is independent of both the Fire Department and the Fire Pension Fund Board of Trustees. The Subchapter II 1-B Medical Board meets weekly and is the sole authority in determining whether a member is disabled for retirement/pension purposes. In reviewing an application, the Subchapter II 1-B Medical Board addresses the following questions:

- a) Is the member disabled for retirement purposes?
- b) If the member is disabled for retirement purposes, is the disability due to a line-of-duty accident? (a.k.a. the *causation* question). Please note that while the Medical Board's disability determination is binding upon the Fire Pension Fund Board of Trustees, it may only make *recommendations* with respect to the causation component.

The applicant has the right to submit any and all evidence in support of a disability retirement and the Subchapter II 1-B Medical Board must evaluate all of the evidence and report its conclusions and recommendations to the Fire Pension Fund Board of Trustees.

Upon review, the Subchapter II 1-B Medical Board reaches one of the following conclusions:

- a) Disabled due to line-of-duty accident (Accidental Disability)
- b) Disabled due to non-line-of-duty condition (Ordinary Disability)
- c) Not Disabled for retirement purposes (Denied)
- d) Decision deferred until the Medical Board has evaluated additional evidence.

The Subchapter II 1-B Medical Board's determination and recommendation is then forwarded to the Fire Pension Fund's Board of Trustees for a final determination of the disability application.



**STEP III: REVIEW BY THE BOARD OF TRUSTEES**

The Board of Trustees consists of New York City and Union representatives, each group with an equal number of votes. During its monthly meetings, the Board of Trustees reviews the reports of the Medical Board, the relevant medical records and the relevant CD-72s. Although the Board of Trustees cannot change the Medical Board’s decision regarding whether a member is permanently disabled from full duty, it can overrule the Medical Board’s recommendation on causation. When the Board of Trustees does not reach the necessary number of votes to pass a motion (7/12 of the whole, or 14 votes) on the cause of the disability, the member will be retired for ordinary disability. This is based on a court case known as the “Schoeck Decision.”

**WITHDRAWAL OF DISABILITY RETIREMENT APPLICATION**

If the Fire Commissioner applied for a member’s disability retirement, only the Fire Commissioner can stop the process. If a member has applied for disability retirement, the member may stop the process by withdrawing the application. If the Subchapter II 1-B Medical Board’s doctors have found the member disabled for retirement purposes, the member may not return to full duty. However, members found to be disabled by the Subchapter II 1-B Medical Board will be afforded the opportunity to request a Reasonable Accommodation.

A request to withdraw a disability retirement application by the member shall be made on a letterhead report to the Fire Commissioner and processed through the chain of command. The report shall include:

NAME, RANK, UNIT, SOCIAL SECURITY NUMBER, REASON MEMBER SUBMITTED RETIREMENT APPLICATION, REASON FOR REQUESTING WITHDRAWAL, DATE(S) OF PREVIOUS RETIREMENT APPLICATIONS AND WITHDRAWAL REQUEST(S)

Upon receipt of the request, the FDNY Bureau of Human Resources shall direct the member to the Bureau of Health Services for examination. The Fire Commissioner may elect to either withdraw or keep in effect the Fire Commissioner’s application for retirement.

An application to withdraw shall be denied for either of the following reasons:

The member is found unfit for any duty by BHS or the member has had disability certified by the Board of Trustees prior to receipt of his/her withdrawal application.

If the application to withdraw is approved, the member will be notified to report to the Bureau of Human Resources for clarification of duty status and suitable assignment.



**RETIREMENT PROCEDURES FOR ALL RETIREES**

During the retirement process, retirees will be advised regarding health insurance, pension options, post-retirement employment restrictions, withholding tax, and related issues. At this time, the member's projected retirement date will be determined, and an estimate of the final pension allowable, as well as the amount of the partial allowance, will be determined. NOTE: health insurance is not provided for members with less than ten (10) years of service retiring on an ordinary disability.

Members are generally entitled to take all vacation leave, accrued and terminal leave (normally one (1) day per four (4) completed months of service) after their last day on duty, and remain on the active payroll during this time. Terminal leave is not granted for vested separations. Under limited circumstances, service retirees and vested separations may submit a request for withdrawal of their retirement application before going off the payroll. To do so, the Retirement Counseling Unit must be notified at least ten (10) business days before the date on which the member is requesting a return to active status. (NOTE: service retirees who have begun to utilize terminal leave must be evaluated by BHS prior to return to full duty.)

Upon retirement, a member must return all Department property and obtain a Property Release Form (BP-71) from the Bureau of Personnel. The retiree must forward a copy of the Property Release Form to the Fund before any pension payments are issued. In addition, a copy of the Property Release Form also must be forwarded to Uniformed Payroll for release of the final active paycheck.

**SERVICE RETIREMENT ALLOWANCE**

Members will be eligible to receive a retirement allowance after completing twenty (20) years of allowable fire service.

The Service retirement allowance is calculated as follows:

50% of final salary  
-plus-  
 $1/60^{\text{th}}$  x total earnings after your 20<sup>th</sup> anniversary  
-plus-  
 $1/80^{\text{th}}$  x average annual earnings of the last 5 years x the years and days of other credited service, if applicable  
-plus-  
a pension based on the actuarial value of the ITHP contributions made after completion of 20 years of allowable fire service, together with the interest earned on those contributions  
-plus-  
an annuity based on any accumulations in excess of minimum required contributions remaining in the member's account at retirement, including interest earned on those contributions  
-less-

the annuity value of any shortage in the member's account (shortages result from a contribution rate deficiency, prior loans, unpaid loans, and/or nonpayment of contributions).

**DISABILITY RETIREMENT ALLOWANCE**

**ORDINARY DISABILITY RETIREMENT**

A member is eligible to receive an ordinary disability retirement allowance, regardless of age or years of credited service, provided the Subchapter II 1-B Medical Board and the Fire Pension Fund Board of Trustees have found the member disabled.

An Ordinary Disability retirement allowance is calculated as follows:

Members with less than ten years of credited service:

Pension equal to 33 1/3% of final average salary  
-plus-  
An annuity based on ASF (Annuity Savings Fund) balance in excess of required amount  
-less-  
Annuity value of any shortage

Members with ten or more years of credited service:

Pension equal to 50% of final average salary  
-plus-  
An annuity based on ASF (Annuity Savings Fund) balance in excess of required amount  
-less-  
Annuity value of any shortage

Members with twenty or more years of credited service:

Pension equal to 1/40<sup>th</sup> of the member's final average salary multiplied by the number of years of city-service  
-plus-  
An annuity based on ASF (Annuity Savings Fund) balance in excess of required amount  
-less-  
Annuity value of any shortage

**ACCIDENTAL DISABILITY RETIREMENT**

There is no minimum service requirement for accidental disability retirement. The Subchapter II 1-B Medical Board must find a member physically or mentally unable to perform his/her regular job duties because of an accidental injury received in the line-of-

duty. (May include the Lung/Heart/Cancer/Infectious Diseases/WTC Bills/Parkinson's Disease presumptions.) Such disability must not be the result of a member's own willful negligence.

An Accidental Disability retirement allowance is calculated as follows:

a pension equal to 75% of final salary  
-plus-  
 $1/60^{\text{th}}$  x total earnings after the member's 20<sup>th</sup> anniversary  
-plus-  
an additional pension based on the actuarial value of the ITHP reserve account as of the effective date of retirement  
-plus-  
an annuity based on the actuarial value of accumulated deductions as of the effective date of retirement  
-less-  
a deduction for the annuity value of any loan outstanding at the time of retirement.

**Notes:**

For members retiring on or after January 1, 2009, accidental disability pensions are federally taxed on the  $1/60^{\text{th}}$  portion, ITHP over 20 years, and the annuity based on contributions attributed to 414(h) and interest. The balance of an accidental disability pension is federally tax-free. However, the entire accidental disability is exempt from New York State and New York City income tax.

There is no credit for prior non-uniformed City service for Improved Benefits Plan members granted an accidental disability pension.

**TIERS I and II: OPTIONS**

**MAXIMUM RETIREMENT ALLOWANCE (NO OPTION)**

At retirement, a member may elect to receive the maximum retirement allowance. The maximum retirement allowance is the largest benefit that can be received. Payments are made throughout the retiree's lifetime and cease upon death. There are no survivor benefits under the maximum retirement allowance.

**OPTIONS**

An option is an election that provides a continued pension benefit or lump-sum payment to a beneficiary. When electing an option, the member accepts a reduced retirement allowance during his/her lifetime. The reduction is based on the option selected, age, and sometimes the age of the beneficiary. After certification by the Office of the Actuary, the pension is finalized. Once the member receives his/her first full pension check, the option selected cannot be changed.

**OPTION 1**

*Option 1 is available only to Tier 1 members appointed prior to July 1, 1973.*

This option sets up an initial pension reserve. If the retiree dies before receiving payments equal to this total pension reserve (the reserve set aside to pay benefits over a retiree's lifetime), the difference between the total pension reserve and all payments received will be awarded to the beneficiary. This option may be selected for the annuity reserve, the pension reserve, or both. More than one beneficiary may be named, and the beneficiary(ies) may be changed at any time.

**OPTION 2**

Joint and 100% Survivor: the retiree receives a reduced monthly lifetime allowance. Upon the death of the retiree, this option allows the named beneficiary to receive 100% of the reduced pension allowance for life. Only one beneficiary may be named, and the designated beneficiary may not be changed once the option is in effect.

**OPTION 3**

Joint and 50% Survivor: the retiree receives a reduced monthly lifetime allowance. Upon the death of the retiree, this option allows the named beneficiary to receive 50% of the reduced pension allowance for life. Only one beneficiary may be named, and the designated beneficiary may not be changed once this option is in effect.

**OPTION 4**

Lump Sum: the retiree receives a reduced annual pension allowance for life with the provision that upon the death of the retiree, the beneficiary(ies) will receive a limited lump sum payment specified by the retiree at the time the option is chosen. More than one beneficiary may be named and the beneficiary(ies) may be changed at any time;

Annuity: the retiree receives a reduced annual pension allowance for life with the provision that upon the death of the retiree, the beneficiary will receive a specified annual annuity, as pre-determined by the retiree. Only one beneficiary may be named, and the designated beneficiary may not be changed once the option is in effect.

**“POP-UP” OPTION MODIFICATION**

Under this option modification, if the named beneficiary predeceases the retiree, the retirement allowance reverts back to the maximum retirement allowance. The “Pop-up” may ONLY be applied to Option 2, Option 3, and Option 4 annuities. There is an extra cost for this option.

**FIVE-YEAR OR TEN-YEAR CERTAIN**

*The Five-Year or Ten-Year Certain Options are available only to Tier 2 members appointed after July 1, 1973.*

**FIVE-YEAR CERTAIN:** the retiree receives a reduced monthly lifetime allowance. If the retiree dies within five years of his/her retirement, the benefit is paid to the retiree's beneficiary either in a lump sum or in monthly payments for the remainder of the five years.

**TEN-YEAR CERTAIN:** the retiree receives a reduced monthly lifetime allowance. If the retiree dies within ten years of his/her retirement, the benefit is paid to the retiree's beneficiary either in a lump sum or in monthly payments for the remainder of the ten years.

Should the beneficiary predecease the retiree, upon the death of the retiree, a lump sum will be paid to the estate of said retiree. The beneficiary may be changed at any time with this option.

**Notes:**

Fifty percent (50%) of any cost-of-living adjustments (COLAs) are paid to a spouse under Options 2 and 3, under Option 4 Annuity, and any "Pop-up" option whose deceased spouse, if alive, would be eligible for a COLA benefit increase.

Under current tax laws, for the beneficiary(ies) of line-of-duty (accidental) disability retirees, all options are federally taxed on a portion of the pension that was taxable to the retiree, however, the total pension received under an option is exempt from New York State and New York City taxation.

**TIERS I and II: SURVIVOR BENEFITS**

Tier I survivor benefits are paid if a member dies before retirement, whether death occurs on or off the job.

There are two types of death benefits:

- Death Gamble Benefit – for ordinary (non-line-of-duty) deaths
- Accidental Death Benefit (Line-of-Duty)

**DEATH GAMBLE BENEFIT**

For non-line-of-duty deaths, the benefit is computed as though the member had retired the day before his/her death. The designated beneficiary(ies) will be eligible to receive an amount equal to the reserve for the service retirement allowance that would have been payable had the member retired on the day before his/her death. If the beneficiary predeceases the member, this death benefit is paid to the member's estate.

**ACCIDENTAL (LINE –OF-DUTY) DEATH BENEFIT**

An Accidental Death Benefit is payable to an eligible beneficiary if the member dies before the effective date of retirement as the natural and proximate result of an accident sustained in the performance of duty, not caused by the member’s own willful negligence.

The application for the Accidental Death Benefit must be filed within two (2) years of the death of the member.

In the event that the class of eligible beneficiaries consists of more than one person, the benefit will be divided equally. Eligible beneficiaries are dictated by statute and payable in the following hierarchy:

City Portion:

1. A surviving spouse who has not renounced survivorship rights in a separation agreement, until remarriage; or
2. Surviving children until age 25; or
3. Dependent parents; or
4. Any other person qualified as a dependent on the final tax return of the member until such person reaches age 21.

State Portion:

1. A widow or widower; or
2. Deceased member’s children under the age of 18 or, if a student, under the age of 23, if the widow or widower has died.

The SADB is increased from time to time by act of the New York State Legislature and is not payable to dependent parents. Effective September 1, 2000, any COLA received on the 50% pension payable from the NYC Fire Pension Fund, as well as any Social Security benefits received by the beneficiary, shall be subtracted from the SADB (State’s portion).

**BENEFICIARY DESIGNATION**

Upon membership in the Fund, a beneficiary(ies) for the Life Insurance Fund benefit and for Death Benefits is (are) elected. A member may change beneficiary(ies) at any time by filing the appropriate form(s) with the Fire Pension Fund. Please note that the beneficiary(ies) designated on the Ordinary Death Benefits beneficiary form will receive this benefit in the event of the member’s non-line-of-duty death while the member is in active service. In the event of Accidental Death (line-of-duty), benefits will be paid to the appropriate beneficiary(ies) in accordance with the applicable sections of the law.

## **Summary Funds Benefits**

### **TIER 3 Enhanced Benefits Plan**

This Summary Plan Description (SPD) summarizes the benefits provided by the New York City Fire Department Pension Fund, Subchapter II (the “NYC Fire Pension Fund”), for Tier 3 Enhanced members.

This summary is as accurate and complete as possible. However, in the event of conflict between this summary and any applicable law, including but not limited to the Administrative Code of the City of New York (ACNY), the New York State Retirement and Social Security Law (RSSL), and the rules of the NYC Fire Pension Fund, the applicable law or rule will govern.

### **HOW TO CONTACT THE FIRE PENSION FUND**

For questions or issues regarding confidential membership issues, you may make an appointment to visit the NYC Fire Pension Fund office, located at One Battery Park Plaza, 9th Floor, New York, NY 10004. You may also contact NYC Fire Pension Fund Administration by phone at (929) 436-0099.

### **MEMBERSHIP**

The NYC Fire Pension Fund is a separate entity from the Fire Department of the City of New York (FDNY), your employer. All Uniformed employees of the Fire Department become members of the NYC Fire Pension Fund upon appointment.

Uniformed members of the FDNY appointed on or after July 1, 2009 are subject to Article 14 of the RSSL, also known as Tier 3.

### **CONTRIBUTIONS**

The Enhanced Plan members are required to contribute the basic 3% and an additional 2.1% of pensionable salary for the first 25 years of credited service (RSSL § 517). The rate of additional contributions may range from 2% to 3%, depending on specified future cost calculations, and are evaluated every three years. The maximum total contribution is currently limited to 6%. For Enhanced Plan members who were mandated into the plan, contributions are federally tax- deferred, as per section 414(h) of the Internal Revenue Code, but are subject to state and local income taxation. For members appointed before September 8, 2016 who opted to join the Enhanced Benefit Plan, the additional contributions are taxable under federal, state and local regulations, and will continue until the 25th year of credited service.

**MINIMUM REQUIRED AND INTEREST**

Member contributions and any interest earned are referred to as “accumulated contributions.” The Tier 3 rate of interest on member contributions is currently 5%. The amount of accumulated contributions required to be in a member’s account at any given time is referred to as the “minimum required.” To be eligible for a benefit at retirement, a member must have the “minimum required” of accumulated contributions, which is equal to the 3% contribution rate, the Enhanced Plan 2.1% contribution rate, plus the statutory interest earned.

**ITHP (INCREASED-TAKE-HOME-PAY)**

ITHP stands for "Increased-Take-Home-Pay" and relates to the increase in a member's take home pay due to the City paying a portion or the entire required rate by making the contribution on the member's behalf. ITHP does not apply to Tier 3.

**DEFICITS**

A deficit occurs when a member’s pension account balance falls below the minimum required. Deficits may occur because of delays in contract settlements. Pension contributions on retroactive pay from a contract settlement do not include the interest that would have been earned on those contributions. Since interest earned on contributions is part of a member’s minimum required, a deficit can occur.

Members are not permitted to retire with a deficit and are responsible for any account shortages. Members may opt to make a lump sum payment or bi-weekly payroll deductions to reduce and eliminate any deficit.

**EXCESS FUNDS**

A member may withdraw any excess funds within six months of appointment or at the time of retirement. Excess created by errors of the Fund will be returned upon identification.

**WITHDRAWAL OF CONTRIBUTIONS**

In the event of a resignation or termination, a member who is not vested or entitled to any other benefit under Tier 3 may withdraw accumulated contributions, and thereby terminate his or her NYC Fire Pension Fund membership. A member who separates from service as a vested member, but with less than 10 years of credited service, may also withdraw his or her accumulated contributions. A withdrawal of contributions by such a vested member, however, will terminate all membership rights, including the right to receive a Vested Retirement Benefit in the future. If contributions are not withdrawn, the money will continue to earn interest for a maximum of five years from the date of separation. After 10 years of service, contributions may not be withdrawn, and members will receive a Vested Retirement Benefit.



**LOANS**

There is no provision in Tier 3 that allows a member to take loans.

**CREDITED SERVICE**

Unless otherwise stated, “credited service” is defined as allowable Uniformed service.

**ALLOWABLE UNIFORMED SERVICE**

Twenty-two years of allowable Uniformed service are required for Normal Service Retirement, or 20 years for Early Service Retirement. Such service includes:

All member service rendered as a Uniformed member of the New York City Fire Department in the competitive class of the civil service.

Credit for service rendered in the Uniformed force of the New York City Police Department acquired pursuant to applicable law.

Credit for any service rendered while a member of the New York State and Local Police and Fire Retirement System as a Police Officer or Firefighter.

Credit for military service acquired pursuant to applicable law.

**PRIOR SERVICE CREDIT**

**OVERVIEW**

**Chapter 646 of the Laws of 1999 - Tier Reinstatement:** This law amends RSSL § 645 and permits a member, who was previously a member of any New York public retirement system, to be deemed to have become a member of the current retirement system as of the original date of such previous ceased membership. Chapter 646 may allow for a tier change or tier reinstatement.

**Chapter 548 of the Laws of 2000 and Chapter 41 of the Laws of 2016 - Military Buyback:** This allows a member to purchase credited service for up to three years of military service rendered prior to the commencement of public employment. A member must have at least five years of pension credit to be eligible to receive credit under this law.

**Chapter 552 of the Laws of 2000 - Prior Service Credit:** This law allows a member who was eligible for membership in any of the New York State or New York City retirement systems, but did not become a member of such system, to purchase pension credit for the time that was eligible for membership. It also permits a member to purchase pension credit for membership service in any New York City or State retirement system that may have been lost or withdrawn. However, there may not be any benefit for purchasing such credit.

**PRIOR UNIFORMED SERVICE**

A member may obtain prior credited service for any New York State Police or Fire time, or for Uniformed service with the New York City Police Department. This prior credited service counts toward the requirements for vesting and retirement.

**TRANSFER TO THE FIRE PENSION FUND**

A member may transfer to the NYC Fire Pension Fund from another public retirement system within the State of New York. Under Tier 3, transferring prior City or State service, other than Uniformed Police or Fire service, does not provide any additional monetary benefit, nor does it change your Normal Service Retirement eligibility date. However, members with a membership in a New York public pension fund that began prior to July 1, 2009 will become Tier 2 members of the NYC Fire Pension Fund upon completion of a proper transfer.

***TRANSFERS OF FORMER EMS EMPLOYEES FROM NYCERS*****FORMER EMS EMPLOYEES WHO JOINED NYCERS PRIOR TO JULY 1, 2009:**

- An individual who transfers membership from NYCERS to the NYC Fire Pension Fund will become a Tier 2 member, and any prior EMS service which immediately preceded service in the Fire Department will be treated as credited service.
- An individual whose pre- July 1, 2009 membership in NYCERS has terminated, and who is granted a retroactive membership date in the NYC Fire Pension Fund back to his or her original NYCERS membership date, pursuant to the tier reinstatement provisions of RSSL § 645, will become a Tier 2 member, and any prior EMS service will be treated as credited service.

**FORMER EMS EMPLOYEES WHO JOINED NYCERS ON OR AFTER JULY 1, 2009 BUT BEFORE APRIL 1, 2012:**

- An individual who either transfers his or her NYCERS membership to the NYC Fire Pension Fund or who is granted a retroactive membership date in the NYC Fire Pension Fund back to his or her original NYCERS membership date, pursuant to the tier reinstatement provisions of RSSL § 645, will be treated as a Tier 3 member with a three-year FAS. Time served as an EMS member that is acquired by transfer, tier reinstatement or purchase is NOT treated as credited service for the purposes of a Normal Service Retirement or Vested Retirement benefit, but it does count toward the service eligibility requirement of five years for Ordinary Disability Retirement and 90 days for Ordinary Death Benefits.

FORMER EMS EMPLOYEES WHO JOINED NYCERS ON OR AFTER APRIL 1, 2012:

- An individual will be a modified Tier 3 member (also referred to as a Tier 6 member) with a five-year FAS, even if he or she transfers his or her NYCERS membership to the NYC Fire Pension Fund or reinstates his or her terminated NYCERS membership pursuant to RSSL § 645. Time served as an EMS member that is acquired by transfer, tier reinstatement or purchase will NOT be treated as credited service for purposes of a Service Retirement or Vested Retirement benefit, but it will count toward the service eligibility requirement of five years for Ordinary Disability Retirement and 90 days for Ordinary Death Benefits.

**MILITARY SERVICE CREDIT**

Military service with the federal government may be credited pursuant to New York State Military Law § 243, the federal Uniformed Services Employment and Reemployment Rights Act (USERRA), and RSSL § 1000.

Active members who have five years of credited service, not including the military service being purchased, are eligible to purchase up to three years of military service for pension credit.

Members who wish to purchase credit for military service under RSSL § 1000, pay an amount for such credit equal to the number of years of military credit being purchased multiplied by 6% of the compensation earned by the member during the 12 months of credited service immediately preceding the member's application to purchase such credit.

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**New York City Fire Pension Funds**  
**Annual Comprehensive Financial Report**  
**A Fiduciary Fund of The City of New York**



**Financial Section**

**Part II**

**Fiscal Years Ended June 30, 2023 and June 30, 2022**

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**REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS**

To the Board of Trustees of  
New York City Fire Pension Funds

**Opinion**

We have audited the combining financial statements of New York City Fire Pension Fund, New York City Firefighters' Variable Supplements Fund, and New York City Fire Officers' Variable Supplements Fund, which collectively comprise the New York City Fire Pension Funds (the "Funds"), which comprise the combining statements of fiduciary net position as of June 30, 2023 and 2022 and the related combining statements of changes in fiduciary net position for the years then ended, and the related notes to combining financial statements, which collectively comprise the Funds' 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 Funds as of June 30, 2023 and 2022, 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 Funds 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 Funds' ability to continue as a going concern for one year after the date the financial statements are available to be issued.

### **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 Funds' 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 Funds' 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, 2023, schedule 2 - schedules of employer contributions for each of the ten years in the period ended June 30, 2023, and schedule 3 - schedule of investment returns for each of the ten years in the period ended June 30, 2023, be presented to supplement the basic combining financial statements. Such information is the responsibility of management and, although not a required 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 audit was 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 payments to consultants ("Additional Supplementary Information") for the year ended June 30, 2023, 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 taken 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.

*Grant Thornton LLP*

New York, New York  
October 26, 2023

(except for the Additional Supplementary Information and the Other information section of our report, as to which the date is December 21, 2023)

## New York City Fire Pension Funds

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

June 30, 2023 and 2022

This narrative discussion and analysis of the New York City Fire Pension Funds' ("FIRE", "Funds" or the "Plan") financial performance provides an overview of the Funds' combining financial activities for the Fiscal Years ended June 30, 2023 and 2022. It is meant to assist the reader in understanding the Funds' combining financial statements by providing an overall review of the combining financial activities during the years and the effects of significant changes, as well as a comparison with the prior years' activity and results. This discussion and analysis is intended to be read in conjunction with the Funds' combining financial statements.

FIRE administers the New York City Fire Pension Fund, which is generally referred to as the New York Fire Department Pension Fund - Qualified Pension Plan ("QPP") - as set forth in the Administrative Code of the City of New York ("ACNY") Section 13-313.1. FIRE also administers the New York City Firefighters' Variable Supplements Fund ("FFVSF") and the New York City Fire Officers' Variable Supplements Fund ("FOVSF").

#### ***Overview of Combining Financial Statements***

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

- **The Combining Statements of Fiduciary Net Position** - presents the financial position of the Funds at fiscal year-end. It provides information about the nature and amounts of resources with present service capacity that the Funds presently control (assets), consumption of net assets by the Funds that is applicable to a future reporting period (deferred outflow of resources), present obligations to sacrifice resources that the Funds have little or no discretion to avoid (liabilities), and acquisition of net assets by the Funds 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 Funds 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 Funds' accounting policies, significant account balances and activities, material risks, obligations, contingencies and subsequent events, if any.
- **Required Supplementary Information (Unaudited)** - includes the management discussion and analysis (this section), and the notes to combining financial statements as required by the GASB.

**New York City Fire Pension Funds**

**MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED**

**June 30, 2023 and 2022**

***Financial Highlights***

For Fiscal Year ended June 30, 2023, the Funds' fiduciary net position restricted for benefits was approximately \$19.4 billion. This amount reflects an increase of \$1.2 billion, 6.6% over the Funds' fiduciary net position restricted for benefits in the prior Fiscal Year. The increase for Fiscal Year 2023 can be attributed to the increase in the fair value of invested assets in the combined investment portfolio of the funds. There was an excess of total contribution, other receipts over pension benefits and administrative expenses paid. In addition, the net increase in fair value of the Funds' investment portfolio resulted in an increase to the amount of net investment income reported for the period.

For Fiscal Year ended June 30, 2022, the Funds' fiduciary net position restricted for benefits was approximately \$18.2 billion. This amount reflects a decrease of \$1.7 billion (8.2%) over the Funds' fiduciary net position restricted for benefits in the prior Fiscal Year. The decrease for Fiscal Year 2022 can be attributed to the decrease in the fair value of invested assets in the combined investment portfolio of the funds. However, there was an excess of total contribution, other receipts over pension benefits and administrative expenses paid. In addition, the net decrease in fair value of the Funds' investment portfolio resulted in the decrease to the amount of net investment income reported for the period.

**Changes in Fiduciary Net Position**

**Years ended June 30, 2023, 2022 and 2021**

**(In thousands)**

	<u>2023</u>	<u>2022</u>	<u>2021</u>
<b>Additions:</b>			
Member contributions	\$ 118,264	\$ 134,469	\$ 112,566
Employer contributions	1,423,679	1,446,992	1,436,977
Net investment income (loss)	1,427,950	(1,582,857)	3,963,257
Other	838	953	758
<b>Total additions</b>	<u>2,970,731</u>	<u>(443)</u>	<u>5,513,558</u>
<b>Deductions:</b>			
Benefit payments, withdrawals and administrative expenses	<u>1,789,792</u>	<u>1,633,116</u>	<u>1,550,256</u>
<b>Net increase (decrease) in net position</b>	<u>1,180,939</u>	<u>(1,633,559)</u>	<u>3,963,302</u>
<b>Net position restricted for benefits</b>			
Beginning of year	<u>18,230,450</u>	<u>19,864,009</u>	<u>15,900,707</u>
<b>End of year</b>	<u>\$ 19,411,389</u>	<u>\$ 18,230,450</u>	<u>\$ 19,864,009</u>

Fiscal Year 2023 member contributions of approximately \$118 million was 12% lower compared to member contributions for Fiscal Year 2022. Fiscal Year 2022 member contributions of approximately \$134.5 million was 19.5% higher compared to member contributions for Fiscal Year 2021. Generally, increases or decreases in member contributions are primarily due to changes in the number of active fund members making voluntary contributions in addition to their required contributions and changes in the average annual pay of Funds' members.

## New York City Fire Pension Funds

### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED

June 30, 2023 and 2022

Employer contributions are made on a statutory basis determined by the actuarial valuations performed as of June 30, 2022 and 2021, under the One-Year Lag Methodology ("OYLM"). Employer contributions for Fiscal Year 2023 totaled \$1.42 billion, which decreased \$23.4 million when compared to employer contributions for Fiscal Year 2022. Employer contributions for Fiscal Year 2022 totaled \$1.45 billion, which increased \$10.0 million when compared to employer contributions for Fiscal Year 2021.

For Fiscal Year 2023, the Funds had a net investment gain of \$1.4 billion, which was 188% higher compared to the net investment loss of \$1.6 billion reported for Fiscal Year 2022. The net investment gain for Fiscal Year 2023 can be attributed to the significant overall net increase in fair values of invested assets in the combined investment portfolio of the Funds.

For Fiscal Year 2022, the Funds had a net investment loss of \$1.6 billion, which was 139.9% lower compared to the net investment gain of \$4.0 billion reported for Fiscal Year 2021. The net investment loss for Fiscal Year 2022 can be attributed to the significant overall net decline in fair values of invested assets in the combined investment portfolio of the Funds.

Benefit payments, withdrawals and administrative expenses totaled \$1.8 billion for the Fiscal Year 2023, which exceeds the benefit payments, withdrawals and administrative expenses paid in the previous Fiscal Year. During Fiscal Year 2022, the Funds recorded benefit payments, withdrawals and administrative expenses of \$1.6 billion which is equal to Fiscal Year 2021. Increases in benefit payments and withdrawals are primarily due to changes in the number of new retirees and the number of payments made to beneficiaries. Members are also able to withdraw excess or voluntary contributions made to the pension fund. In addition, legislatively enacted cost of living increases for certain retirees and beneficiaries also serve to increase benefit payments each year.

#### ***Fiduciary Net Position***

For Fiscal Year 2023, the Funds' combined net position restricted for benefits increased by 6.6% to \$19.4 billion, compared to the net position restricted for benefits of \$18.2 billion in Fiscal Year 2022. The overall increase for the current fiscal year can be attributed to the overall net investment increase in the net investment income over pension benefits and withdrawals and administrative expenses.

For Fiscal Year 2022, the Funds' combined net position restricted for benefits decreased by 8.2% to \$18.2 billion, compared to the net position restricted for benefits of \$19.9 billion in Fiscal Year 2021. The overall decline for the current fiscal year can be attributed to the overall net investment decline in the net investment income over pension benefits and withdrawals and administrative expenses.

Outstanding member loans for Fiscal Year 2023 totaled \$12.9 million; this amount is 10% higher than member loans reported in the prior fiscal year. Outstanding member loans for Fiscal Year 2022 totaled \$11.7 million; this amount is 23.2% lower than member loans reported in the prior fiscal year. Changes in member loans can be attributed to changes in the number and amounts of new loans disbursed and the number of repayments received. Members are permitted to borrow up to 75% (for certain members up to 90%) of their required contributions, including accumulated interest.

**New York City Fire Pension Funds**

**MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED**

**June 30, 2023 and 2022**

**Fiduciary Net Position**

**June 30, 2023, 2022 and 2021**

**(In thousands)**

	2023	2022	2021
Cash	\$ 7,615	\$ 13,168	\$ 25,162
Receivables	244,899	375,332	488,580
Investments - at fair value	19,527,632	18,397,688	20,292,439
Collateral from securities lending	2,137,568	2,004,521	2,141,504
Other assets	11,704	14,644	3,431
Total assets	21,929,418	20,805,353	22,951,116
Accounts payable	96,256	90,881	100,913
Payables for investments purchased	223,189	424,802	796,171
Accrued benefits payable	61,016	54,699	48,519
Payables for securities lending transactions	2,137,568	2,004,521	2,141,504
Total liabilities	2,518,029	2,574,903	3,087,107
Net position restricted for benefits	\$ 19,411,389	\$ 18,230,450	\$ 19,864,009

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

**New York City Fire Pension Funds**

**MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED**

**June 30, 2023 and 2022**

**Investment Summary**

**June 30, 2023**

**(In thousands)**

Investments - at fair value:	QPP	FFVSF	FOVSF	Combined
Short-term investments:				
U.S. Treasury bills and agencies	\$ 88,462	\$ 2,994	\$ 3,026	\$ 94,482
Commercial paper	21,994	-	-	21,994
Short-term investment fund	207,493	100	147	207,740
Debt (fixed income) securities:				
U.S. government and agency	2,069,986	-	-	2,069,986
Corporate and other	1,745,068	-	-	1,745,068
Mortgage debt securities	671,797	-	-	671,797
Bank loans	65,191	-	-	65,191
Treasury inflation-protected securities	722,535	-	-	722,535
Equity securities:				
Domestic equity	5,664,574	166,695	127,370	5,958,639
International equity	1,996,593	-	-	1,996,593
Collective trust funds:				
Bank loans	21,975	-	-	21,975
Corporate and other	59,912	44,814	33,379	138,105
International equity	392,325	114,219	85,164	591,708
Domestic equity	8,558	12,113	11,668	32,339
Mortgage debt securities	24,281	40,083	29,856	94,220
U.S. government and agency	-	62,982	46,912	109,894
Alternative investments:				
Infrastructure	372,979	-	-	372,979
Opportunistic-fixed income	682,276	-	-	682,276
Private equity	1,744,526	-	-	1,744,526
Private real estate	1,178,865	-	-	1,178,865
Hedge funds	951,281	-	-	951,281
Fixed Income Investment Company	55,439	-	-	55,439
Collateral from securities lending	2,062,901	43,281	31,386	2,137,568
	<u>\$ 20,809,011</u>	<u>\$ 487,281</u>	<u>\$ 368,908</u>	<u>\$ 21,665,200</u>

**New York City Fire Pension Funds**

**MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED**

**June 30, 2023 and 2022**

**Investment Summary**

**June 30, 2022**

**(In thousands)**

Investments - at fair value:	QPP	FFVSF	FOVSF	Combined
Short-term investments:				
U.S. Treasury bills and agencies	\$ 179,990	\$ -	\$ -	\$ 179,990
Commercial paper	150,480	2,209	3,949	156,638
Short-term investment fund	178,943	17	69	179,029
Debt (fixed income) securities:				
U.S. government and agency	2,899,182	-	-	2,899,182
Corporate and other	1,546,553	-	-	1,546,553
Mortgage debt securities	796,717	-	-	796,717
Bank loans	46,620	-	-	46,620
Treasury inflation-protected securities	-	-	-	-
Equity securities:				
Domestic equity	4,973,935	162,047	122,535	5,258,517
International equity	1,805,750	-	-	1,805,750
Collective trust funds:				
Bank loans	172	-	-	172
Corporate and other	-	39,467	27,316	66,783
International equity	393,822	113,642	83,575	591,039
Domestic equity	11,101	12,528	10,917	34,546
Mortgage debt securities	48,946	42,762	29,596	121,304
Opportunistic-fixed income	53,999	-	-	53,999
U.S. government and agency	-	78,113	54,063	132,176
Alternative investments:				
Infrastructure	275,604	-	-	275,604
Opportunistic-fixed income	616,087	-	-	616,087
Private equity	1,657,719	-	-	1,657,719
Private real estate	1,117,567	-	-	1,117,567
Hedge funds	861,696	-	-	861,696
Collateral from securities lending	1,905,756	57,655	41,110	2,004,521
	<u>\$ 19,520,639</u>	<u>\$ 508,440</u>	<u>\$ 373,130</u>	<u>\$ 20,402,209</u>

The tables above summarize the Funds' investment portfolio including collateralized securities lending. To meet the Funds' long-term benefit obligations, 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. For example, the Russell 3000 index, a broad measure of the United States stock market posted gains of 18.95% in Fiscal Year 2023, compared to losses posted of 13.9% in Fiscal Year 2022. The QPP's investment portfolio posted a gain of 7.8% for Fiscal Year 2023 compared to the losses of 7.6% for Fiscal Year 2022. For the three-year period ended June 30, 2023, the overall rate of return on the QPP's investment portfolio was 7.51%.

**New York City Fire Pension Funds**

**MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED**

**June 30, 2023 and 2022**

The FFVSF's investment portfolio posted gains of 9.74% for Fiscal Year 2023 compared to the loss of 13.3% for Fiscal Year 2022. For the three-year period ended June 30, 2023, the overall rate of return on the Funds' investment portfolio was 5.78%.

Similarly, the FOVSF's investment portfolio posted gains of 10.33% for Fiscal Year 2023 compared to the loss of 13.8% for Fiscal Year 2022. For the three-year period ended June 30, 2023, the overall rate of return on the Funds' investment portfolio was 5.83%.

***Other Matters***

Chapter 298 of the laws of 2016 provides corpus funding of administrative expense for the Funds commencing September 8, 2016. This means that the administrative expenses are paid for out of the assets of the Funds instead of being paid for by the City of New York. Chapter 298 also allows for the appointment of an executive director of the Funds.

***Contact Information***

This financial report is designed to provide a general overview of the New York City Fire Pension Funds' finances. Questions concerning any data provided in this report or requests for additional information should be directed to the Chief Accountant, New York City Fire Pension Funds, One Battery Park Plaza, 9th Floor, New York, New York 10004.

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## New York City Fire Pension Funds

### COMBINING STATEMENT OF FIDUCIARY NET POSITION

**June 30, 2023**  
**(In thousands)**

	QPP	FFVSF	FOVSF	Eliminations	Combined Funds
<b>ASSETS</b>					
Cash	\$ 5,953	\$ 998	\$ 664	\$ -	\$ 7,615
Receivables:					
Investments securities sold	170,659	-	-	-	170,659
Member loans (Note 7)	12,948	-	-	-	12,948
Accrued interest and dividends	60,680	121	326	-	61,127
Accounts receivable	-	138	27	-	165
Total receivables	<u>244,287</u>	<u>259</u>	<u>353</u>	<u>-</u>	<u>244,899</u>
Investments - at fair value (Notes 2 and 3):					
Short-term investments:					
Commercial paper	21,994	-	-	-	21,994
Short-term investment fund	207,493	100	147	-	207,740
U.S. Treasury bills and agencies	88,462	2,994	3,026	-	94,482
Debt (fixed income) securities:					
U.S. government and agencies	2,069,986	-	-	-	2,069,986
Mortgage debt security	671,797	-	-	-	671,797
Corporate and other	1,745,068	-	-	-	1,745,068
Treasury inflation-protected securities	722,535	-	-	-	722,535
Bank loans	65,191	-	-	-	65,191
Equity securities:					
Domestic equity	5,664,574	166,695	127,370	-	5,958,639
International equity	1,996,593	-	-	-	1,996,593
Collective trust funds:					
Bank loans	21,975	-	-	-	21,975
Corporate and other	59,912	44,814	33,379	-	138,105
International equity	392,325	114,219	85,164	-	591,708
Domestic equity	8,558	12,113	11,668	-	32,339
Mortgage debt security	24,281	40,083	29,856	-	94,220
U.S. government and agency	-	62,982	46,912	-	109,894
Alternative investments:					
Infrastructure	372,979	-	-	-	372,979
Opportunistic-fixed income	682,276	-	-	-	682,276
Private equity	1,744,526	-	-	-	1,744,526
Private real estate	1,178,865	-	-	-	1,178,865
Hedge funds	951,281	-	-	-	951,281
Fixed income investment company	55,439	-	-	-	55,439
Collateral from securities lending (Note 2)	2,062,901	43,281	31,386	-	2,137,568
Total investments	<u>20,809,011</u>	<u>487,281</u>	<u>368,908</u>	<u>-</u>	<u>21,665,200</u>
Other assets	11,704	-	-	-	11,704
Total assets	<u>21,070,955</u>	<u>488,538</u>	<u>369,925</u>	<u>-</u>	<u>21,929,418</u>
<b>LIABILITIES</b>					
Accounts payable	96,210	27	19	-	96,256
Payable for investment securities purchased	223,126	-	63	-	223,189
Accrued benefits payable (Note 2)	33,605	18,479	8,932	-	61,016
Securities lending (Note 2)	2,062,901	43,281	31,386	-	2,137,568
Total liabilities	<u>2,415,842</u>	<u>61,787</u>	<u>40,400</u>	<u>-</u>	<u>2,518,029</u>
Net position restricted for benefits:					
Benefits to be provided by QPP	18,655,113	-	-	-	18,655,113
Benefits to be provided by VSF	-	426,751	329,525	-	756,276
Total net position restricted for benefits	<u>\$ 18,655,113</u>	<u>\$ 426,751</u>	<u>\$ 329,525</u>	<u>\$ -</u>	<u>\$ 19,411,389</u>

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

## New York City Fire Pension Funds

### COMBINING STATEMENT OF FIDUCIARY NET POSITION

**June 30, 2022**  
**(In thousands)**

	QPP	FFVSF	FOVSF	Eliminations	Combined Funds
<b>ASSETS</b>					
Cash	\$ 10,873	\$ 1,219	\$ 1,076	\$ -	\$ 13,168
Receivables:					
Investments securities sold	303,803	-	-	-	303,803
Member loans (Note 7)	11,656	-	-	-	11,656
Accrued interest and dividends	59,230	139	339	-	59,708
Accounts receivable	-	138	27	-	165
Total receivables	<u>374,689</u>	<u>277</u>	<u>366</u>	<u>-</u>	<u>375,332</u>
Investments - at fair value (Notes 2 and 3):					
Short-term investments:					
Commercial paper	150,480	2,209	3,949	-	156,638
Short-term investment fund	178,943	17	69	-	179,029
U.S. Treasury bills and agencies	179,990	-	-	-	179,990
Debt (fixed income) securities:					
U.S. government and agencies	2,899,182	-	-	-	2,899,182
Mortgage debt security	796,717	-	-	-	796,717
Corporate and other	1,546,553	-	-	-	1,546,553
Bank loans	46,620	-	-	-	46,620
Equity securities:					
Domestic equity	4,973,935	162,047	122,535	-	5,258,517
International equity	1,805,750	-	-	-	1,805,750
Collective trust funds:					
Bank loans	172	-	-	-	172
Corporate and other	-	39,467	27,316	-	66,783
International equity	393,822	12,528	83,575	-	489,925
Domestic equity	11,101	113,642	10,917	-	135,660
Mortgage debt security	48,946	42,762	29,596	-	121,304
Opportunistic-fixed income	53,999	-	-	-	53,999
U.S. government and agency	-	78,113	54,063	-	132,176
Alternative investments:					
Infrastructure	275,604	-	-	-	275,604
Opportunistic-fixed income	616,087	-	-	-	616,087
Private equity	1,657,719	-	-	-	1,657,719
Private real estate	1,117,567	-	-	-	1,117,567
Hedge funds	861,696	-	-	-	861,696
Collateral from securities lending (Note 2)	1,905,756	57,655	41,110	-	2,004,521
Total investments	<u>19,520,639</u>	<u>508,440</u>	<u>373,130</u>	<u>-</u>	<u>20,402,209</u>
Other assets	14,644	-	-	-	14,644
Total assets	<u>19,920,845</u>	<u>509,936</u>	<u>374,572</u>	<u>-</u>	<u>20,805,353</u>
<b>LIABILITIES</b>					
Accounts payable	90,612	154	115	-	90,881
Payable for investment securities purchased	424,802	-	-	-	424,802
Accrued benefits payable (Note 2)	27,511	18,395	8,793	-	54,699
Securities lending (Note 2)	1,905,756	57,655	41,110	-	2,004,521
Total liabilities	<u>2,448,681</u>	<u>76,204</u>	<u>50,018</u>	<u>-</u>	<u>2,574,903</u>
Net position restricted for benefits:					
Benefits to be provided by QPP	17,472,164	-	-	-	17,472,164
Benefits to be provided by VSF	-	433,732	324,554	-	758,286
Total net position restricted for benefits	<u>\$ 17,472,164</u>	<u>\$ 433,732</u>	<u>\$ 324,554</u>	<u>\$ -</u>	<u>\$ 18,230,450</u>

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

## New York City Fire Pension Funds

### COMBINING STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

Year ended June 30, 2023

(in thousands)

	QPP	FFVSF	FOVSF	Eliminations	Total
<b>Additions</b>					
Contributions:					
Member contributions	\$ 118,264	\$ -	\$ -	\$ -	\$ 118,264
Employer contributions	1,423,679	-	-	-	1,423,679
Total contributions	<u>1,541,943</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,541,943</u>
Investment income (loss) (Note 3):					
Interest income	255,152	4,445	3,239	-	262,836
Dividend income	205,475	6,826	5,194	-	217,495
Net appreciation (depreciation) in fair value of investments	1,066,542	30,394	24,889	-	1,121,825
Total investment income (loss)	<u>1,527,169</u>	<u>41,665</u>	<u>33,322</u>	<u>-</u>	<u>1,602,156</u>
Less: investment expenses	<u>(178,481)</u>	<u>(242)</u>	<u>(176)</u>	<u>-</u>	<u>(178,899)</u>
Net investment (loss) income before securities lending transactions	<u>1,348,688</u>	<u>41,423</u>	<u>33,146</u>	<u>-</u>	<u>1,423,257</u>
Securities lending transactions:					
Securities lending income	4,888	157	122	-	5,167
Securities lending fees	<u>(449)</u>	<u>(14)</u>	<u>(11)</u>	<u>-</u>	<u>(474)</u>
Net securities lending income	<u>4,439</u>	<u>143</u>	<u>111</u>	<u>-</u>	<u>4,693</u>
Net investment income (loss)	<u>1,353,127</u>	<u>41,566</u>	<u>33,257</u>	<u>-</u>	<u>1,427,950</u>
Net receipts from other retirement systems	-	-	-	-	-
Litigation income	811	11	16	-	838
Total additions	<u>2,895,881</u>	<u>41,577</u>	<u>33,273</u>	<u>-</u>	<u>2,970,731</u>
<b>Deductions</b>					
Benefit payments and withdrawals (Note 1)	1,699,912	48,558	28,302	-	1,776,772
Administrative expenses	13,020	-	-	-	13,020
Total deductions	<u>1,712,932</u>	<u>48,558</u>	<u>28,302</u>	<u>-</u>	<u>1,789,792</u>
Net increase (decrease) in net position	1,182,949	(6,981)	4,971	-	1,180,939
Net position restricted for benefits					
Beginning of year	<u>17,472,164</u>	<u>433,732</u>	<u>324,554</u>	<u>-</u>	<u>18,230,450</u>
End of year	<u>\$ 18,655,113</u>	<u>\$ 426,751</u>	<u>\$ 329,525</u>	<u>\$ -</u>	<u>\$ 19,411,389</u>

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

## New York City Fire Pension Funds

### COMBINING STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

**Year ended June 30, 2022**  
(in thousands)

	QPP	FFVSF	FOVSF	Eliminations	Total
<b>Additions</b>					
Contributions:					
Member contributions	\$ 134,469	\$ -	\$ -	\$ -	\$ 134,469
Employer contributions	1,446,992	-	-	-	1,446,992
Total contributions	<u>1,581,461</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,581,461</u>
Investment (loss) income (Note 3):					
Interest income	253,563	7,233	5,442	-	266,238
Dividend income	209,174	7,666	5,728	-	222,568
Net (depreciation) appreciation in fair value of investments	(1,781,277)	(87,273)	(66,479)	-	(1,935,029)
Total investment (loss) income	<u>(1,318,540)</u>	<u>(72,374)</u>	<u>(55,309)</u>	<u>-</u>	<u>(1,446,223)</u>
Less: investment expenses	(140,427)	(292)	(210)	-	(140,929)
Net investment (loss) income before securities lending transactions	<u>(1,458,967)</u>	<u>(72,666)</u>	<u>(55,519)</u>	<u>-</u>	<u>(1,587,152)</u>
Securities lending transactions:					
Securities lending income	4,494	154	115	-	4,763
Securities lending fees	(445)	(13)	(10)	-	(468)
Net securities lending income	<u>4,049</u>	<u>141</u>	<u>105</u>	<u>-</u>	<u>4,295</u>
Net investment (loss) income	<u>(1,454,918)</u>	<u>(72,525)</u>	<u>(55,414)</u>	<u>-</u>	<u>(1,582,857)</u>
Net receipts from other retirement systems	-	-	-	-	-
Litigation income	953	-	-	-	953
Total additions	<u>127,496</u>	<u>(72,525)</u>	<u>(55,414)</u>	<u>-</u>	<u>(443)</u>
<b>Deductions</b>					
Benefit payments and withdrawals (Note 1)	1,551,182	43,559	25,664	-	1,620,405
Administrative expenses	12,711	-	-	-	12,711
Total deductions	<u>1,563,893</u>	<u>43,559</u>	<u>25,664</u>	<u>-</u>	<u>1,633,116</u>
Net (decrease) increase in net position	(1,436,397)	(116,084)	(81,078)	-	(1,633,559)
Net position restricted for benefits					
Beginning of year	18,908,561	549,816	405,632	-	19,864,009
End of year	<u>\$ 17,472,164</u>	<u>\$ 433,732</u>	<u>\$ 324,554</u>	<u>\$ -</u>	<u>\$ 18,230,450</u>

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

## New York City Fire Pension Funds

### NOTES TO COMBINING FINANCIAL STATEMENTS

June 30, 2023 and 2022

#### NOTE 1 – PLAN DESCRIPTION

The City of New York (“City” or “The 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 Fire Pension Funds (“FIRE”, “Funds” or the “Plan”), the New York City Employees’ Retirement System (“NYCERS”), the Teachers’ Retirement System of the City of New York (“TRS”), the New York City Board of Education Retirement System (“BERS”), and the New York City Police Pension Funds (“POLICE”). Each pension system is a separate Public Employee Retirement System (“PERS”) with a separate oversight body and is financially independent of the others.

FIRE administers the New York City Fire Subchapter Two Pension Fund, which is generally referred to as the New York City Fire Pension Fund (“QPP”) as set forth in the Administrative Code of The City of New York (“ACNY”) Section 13-313.1. FIRE also administers the New York City Firefighters’ Variable Supplements Fund (“FFVSF”) and the New York City Fire Officers’ Variable Supplements Fund (“FOVSF”).

The QPP is a single-employer pension plan. The QPP provides pension benefits for full-time uniformed employees of the New York City Fire Department (the “Employer”). All full-time uniformed employees of the New York City Fire Department become members of the QPP upon appointment. The QPP functions in accordance with existing State statutes and City laws, which are the basis by which benefit terms and Employer and member contribution requirements are established and amended. The QPP 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.

The FFVSF and the FOVSF (collectively, the “VSFs”) operate pursuant to the provisions of Title 13, Chapter 3 of the ACNY and provide supplemental benefits to retired Firefighters and Wipers, and Fire Officers, respectively. To be eligible to receive benefits from the VSFs, Firefighters and Wipers, and Fire Officers must retire, on or after October 1, 1968, with 20 or more years of uniformed service and be receiving a service retirement benefit from the QPP. Under current law, the VSFs are not to be construed as constituting a pension or retirement system. Instead, they provide defined supplemental payments, other than pension or retirement system allowances, in accordance with applicable statutory provisions. While The City guarantees these payments, the New York State Legislature has reserved to itself and the State the right and power to amend, modify, or repeal the VSFs and the payments they provide. For financial reporting purposes, however, the VSFs are considered single employer defined benefit pension plans.

FIRE is a fiduciary fund of The City and is included 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 new term replaces comprehensive annual financial report and its acronym in generally accepted accounting principles for state and local governments. FIRE has decided to early implement this pronouncement and has applied the change as of the issuance of this report.

#### ***Boards of Trustees***

The QPP’s Board of Trustees consists of 12 members. The Trustees and their voting rights are as follows: The City Fire Commissioner, The City Mayor, The City Comptroller (the “Comptroller”), and Commissioner of Finance (three votes each); the President, the Vice President, Treasurer, and Chairperson of the Board of Trustees of the Uniformed Firefighters Association of Greater New York (“UFA”) (two votes each); the President of the Uniformed Fire Officers’ Association of Greater New York (“UFOA”) and three elected members of the Executive Board of the UFOA, one of whom shall be an officer with rank above that of captain (one vote), one of whom shall be a captain (one vote) and one of whom shall be a lieutenant (one and one-half votes); and a representative of the Uniformed Pilots’ and Marine Engineers’ Association of Greater New York (one-half vote).

**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

The FFVSF's Board of Trustees consists of five members. The Trustees are as follows: The City Mayor, Comptroller, Commissioner of Finance, and two representatives of the UFA who are members of the QPP Board of Trustees with one vote each.

The FOVSF's Board of Trustees consists of five members. The Trustees are as follows: The Mayor, Comptroller, Commissioner of Finance, and two of the representatives of the UFOA who are members of the QPP Board of Trustees with one vote each.

**Membership Data**

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

	<u>2023<sup>1</sup></u>	<u>2022</u>	<u>2021</u>
Retirees and beneficiaries receiving benefits	17,611	16,717	16,578
Terminated vested members not yet receiving benefits	55	71	62
Terminated non-vested members <sup>2</sup>	5	-	2
Active members receiving salary	<u>10,669</u>	<u>10,685</u>	<u>10,793</u>
 Total	 <u>28,340</u>	 <u>27,473</u>	 <u>27,435</u>

<sup>1</sup> Estimated figures.

<sup>2</sup> Members that are on leave with insufficient service for vesting and assumed to not return to active service are classified as terminated non-vested members.

At June 30, 2023, June 30, 2022 and June 30, 2021, the FFVSF and FOVSF membership consisted of:

	<u>FFVSF</u>			<u>FOVSF</u>		
	<u>2023<sup>3</sup></u>	<u>2022</u>	<u>2021</u>	<u>2023<sup>3</sup></u>	<u>2022</u>	<u>2021</u>
Retirees currently receiving payments	3,088	3,121	3,130	1,491	1,514	1,467
Active members <sup>4</sup>	<u>8,221</u>	<u>8,159</u>	<u>8,203</u>	<u>2,472</u>	<u>2,526</u>	<u>2,590</u>
 Total	 <u>11,309</u>	 <u>11,280</u>	 <u>11,333</u>	 <u>3,963</u>	 <u>4,040</u>	 <u>4,057</u>

<sup>3</sup> Estimated figures.

<sup>4</sup> Represents the number of actively employed Firefighters and Fire Officers, respectively, as of the June 30 valuation dates.

**Summary of Benefits**

QPP

The New York State Constitution provides that the pension rights of public employees are contractual and shall not be diminished or impaired. In 1973, amendments were made to the New York State Retirement and Social Security Law ("RSSL") to modify certain benefits for employees joining the QPP on or after the effective date of such amendments. These amendments, which affect employees who joined the QPP on and after July 1, 1973, established certain benefit limitations relating to eligibility for retirement, the salary base for benefits and maximum benefits. Recent laws, including but not limited to Chapter 372 of the Laws of 2000 which provides a revised definition of salary base to be used in the computation of certain benefits

## New York City Fire Pension Funds

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2023 and 2022

for Tier 2 members of the QPP and Chapter 589 of the Laws of 2001 which eliminated the Tier 2 maximum 30 years of service limitation, have lessened these limitations.

The QPP currently administers the following pension tiers: Tier 1, Tier 2, Tier 3, Tier 3 Modified, and Tier 3 Enhanced.

The QPP provides four main types of retirement benefits for all tiers: Vested Retirement benefits, Service Retirements, Ordinary Disability Retirements (non-job-related disabilities), and Accident Disability Retirements (job-related disabilities). Additionally, the QPP provides death benefits for all tiers.

Tier 1 is applicable to members appointed to the FDNY prior to July 1, 1973. Tier 2 is applicable to members appointed between July 1, 1973 and June 30, 2009. Benefits are generally the same for Tier 1 and Tier 2.

For Tier 1 and Tier 2 members, the QPP generally provides the following:

- A Vested Retirement benefit is payable to Tier 1 and 2 members with at least five years of uniformed service. Tier 1 and 2 members who commenced their membership with the QPP prior to February 4, 2000 must have 15 years of uniformed service to be eligible for a Vested Retirement benefit. This benefit is generally comprised of a pension equal to 1/40 of their final average salary for every year of uniformed service and is reduced or increased based on the actuarial value of an account shortage or excess. The benefit can also be increased for any purchased non-uniformed service.
- A Service Retirement benefit, in both tiers, provides an allowance of one-half of “final salary” after 20 years or 25 years of uniformed service (as elected), with additional benefits equal to a specified percentage per year of service (currently approximately 1.67%) of “average salary” times the number of years of credited service in excess of the 20-year or 25-year minimum. Under the new program, these additional benefits are increased, where applicable, by an annuity attributable to employee contributions accumulated with interest with respect to service over the 20-year or 25-year minimum and an annuity attributable to the Increased-Take-Home-Pay (“ITHP”) contributions accumulated after required member qualifying service. ITHP represents amounts contributed by The City in lieu of members’ own contributions. These amounts reduce the contributions that the 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 and increase pension contributions made to the QPP.
- An Ordinary Disability Retirement (“ODR”) benefit generally provides a pension equal to 1/40 of “final salary” times the number of years of service but not less than one-half of “final salary” if 10 or more years of service were completed, or one-third of “final salary” if less than 10 years of service were completed. Members of the Improved Benefits Plan with years of service in excess of 20 years receive the actuarial equivalent of their Annuity Savings Fund balance.
- An Accident Disability Retirement (“ADR”) benefit provides a pension of three-fourths of “final salary” plus an increment, as described above based on years of credited service in excess of the 20-years or 25-years minimum plus: (i) under the Original Plan, accumulated employee contributions without interest as a lump sum or an actuarially equivalent annuity; and (ii) under the Improved Benefits Plan, an annuity based on the member’s contributions and ITHP contributions both of which are accumulated with interest.
- Tier 1 and Tier 2 members have the right to make voluntary member contributions (“Voluntary Contributions”) in excess of their required member contributions (“Required Contributions”). Both the Voluntary Contributions and the Required Contributions are credited with interest at a statutory rate (currently 8.25% Annual Percentage Rate). At the time of retirement or refund of contributions, a member’s aggregate balance of actual Required Contributions and Voluntary Contributions,

## New York City Fire Pension Funds

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2023 and 2022

including statutory interest (“Actual Balance”), 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 Required Amount. The Required Amount is the sum of the Required Contributions which a member should have made during his or her first 20 years of credited service, plus statutory interest earnings thereon. The amount of the member’s retirement annuity or the refund of contributions that he or she is entitled to is increased by the actuarial value of any Excess of Contributions or reduced by any Deficiency of Contributions. The collective value of required amount, actual balance, and outstanding member loans, as of June 30, 2023, is as follows:

(In Thousands)	Tier 1	Tier 2	Total
Required amount	\$ -	\$ 584,714	\$ 584,714
Actual balance	-	2,297,892	2,297,892
Outstanding loans	-	12,948	12,948

Annuities attributable to member contributions are reduced on an actuarial basis for any loans with unpaid balances outstanding at the date of retirement.

Cost of living adjustments (“COLA”) are automatically payable to 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 are payable to members who retired for disability after being retired for five or more years and to beneficiaries receiving accidental death benefits who have been receiving them for at least 5 years. Beginning September 2001, COLA benefits equal 50% of the increase in the Consumer Price Index for All Urban Consumers (“CPI-U”) based on the year ending March 31, rounded to the next higher 0.1% not less than 1% nor greater than 3% of the first \$18,000 of the sum of maximum pension allowance and prior COLA.

In June of 2009, the Governor vetoed legislation that would have extended Tier 2 to members hired after June 30, 2009. As a result of the Governor’s veto, QPP members hired on and after July 1, 2009 are covered under Tier 3, as governed by Article 14 of the RSSL. As a result of Chapter 18 of the Laws of 2012, there are certain limitations on Tier 3 benefits available to participants hired on and after April 1, 2012. These changes are generally referred to as Tier 3 Modified.

For Tier 3/Tier 3 Modified members, the QPP generally provides the following:

- A Normal Service Retirement benefit is payable after completion of 22 years of uniformed service.
- An Early Service Retirement is payable upon completion of 20 years or age 62 for Tier 3 or upon completion of 20 years for Tier 3 Modified and is payable as a pension equal to 2.1% of Final Average Salary plus 1/3% of Final Average Salary for each month in excess of 20 years of uniformed service, such benefit not to exceed 50% of Final Average Salary.
- A Vested benefit is payable to members with at least five years of uniformed service. The benefit is equal to 2.1% of final average salary for every year of uniformed service payable upon attainment of eligibility for early age, or 55.
- An ODR retirement allowance is payable to a member who has at least five years of service and is in receipt of Social Security Disability Benefits (non-Enhanced members only). An ODR benefit is 1/3 of Final Average Salary or 2% of Final Average Salary for each year of credited service, whichever is greater and does not exceed 50% of Final Average Salary. The ODR retirement allowance for Enhanced Members is described on page 42.



## New York City Fire Pension Funds

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2023 and 2022

- An ADR retirement allowance is payable to a member who was disabled as the result of a line-of-duty accident not attributable to his own willful negligence. An ADR pension is 50% of a member's Final Average Salary. The ADR retirement allowance for Enhanced Members is described on page 42.

The Normal Service, Early Service, Vested, and non-Enhanced disability retirement allowances are reduced by one-half of the member's Social Security Benefit attributable to New York State public earnings, at age 62, regardless of eligibility for Social Security.

Tier 3/Tier 3 Modified members are also eligible for annual escalation on the retirement allowance: (1) in full, if they have retired for Service after completing 25 or more years of uniformed service (or elected to defer commencement of their benefit to that 25-year date) or on a reduced basis, by 1/36 for each month that their retirement precedes 25 years; or (2) in full, if they have retired for disability and are Non-Enhanced Members; or (3) in full, to their beneficiary for accidental death benefits. Escalation is determined from the change in the CPI-U based on the prior year ending December 31, not greater than 3% nor less than - 3% in the event of a decrease. Tier 3/Tier 3 Modified members, when eligible, receive the greater of the applicable increase from COLA or escalation.

#### VSFs

The FFVSF provides a guaranteed schedule of supplemental benefits for Firefighters who retire (or have retired) as Firefighters on Service retirement with at least 20 years of credited service as follows:

- For those Firefighters who retired from service as Firefighters before July 1, 1988, the annual supplemental benefit was \$2,500 in Calendar Year 1988. For those who retired during Calendar Year 1988, the annual \$2,500 benefit payment was prorated. The annual benefit increases \$500 each year thereafter to a maximum of \$12,000 in Calendar Year 2007. The 1988 benefits included any payments made under the prior program.
- For those Firefighters hired before July 1, 1988 and who retire after Calendar Year 1988, the annual benefit payment is the scheduled amount as described above, prorated in the year of retirement and the full amount thereafter.
- For those who become members of QPP on or after July 1, 1988, the annual supplemental benefit is \$2,500 for the first 12 months of retirement, which increases by \$500 each year until a maximum of \$12,000 is payable in the 20th and later years of retirement. This was later modified by Chapter 500 of the Laws of 1995 ("Chapter 500/95") such that these members will receive the maximum \$12,000 benefit beginning Calendar Year 2008 and thereafter.

The FOVSF provides a guaranteed schedule of supplemental benefits for Fire Officers who retire (or have retired) as Fire Officers on Service retirement with at least 20 years of credited uniformed service as follows:

- A Fire Officer hired before July 1, 1988, who retired from service as a Fire Officer on or after October 1, 1988, and prior to Calendar Year 1993 receives a defined schedule of benefits starting at \$5,000 payable in January 1994 for the Calendar Year 1993 payment. For those who retired during Calendar Year 1993, the annual \$5,000 benefit payment was prorated. The annual benefit increases \$500 each year thereafter to a maximum of \$12,000 for Calendar Year 2007 (payable by January 31, 2008) and thereafter.

For those who were members of QPP prior to July 1, 1988, and who retire after Calendar Year 1993, the annual benefit payment is the scheduled amount as described above, prorated in the year of retirement and the full amount thereafter.

## New York City Fire Pension Funds

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2023 and 2022

- For those who become members of the QPP on or after July 1, 1988, the annual supplemental benefit is \$2,500 for the first 12 months of retirement, which increases by \$500 each year until a maximum of \$12,000 is payable in the 20th and later years of retirement. This was later modified by Chapter 500 of the Laws of 1998 (“Chapter 500/98”) such that these members will receive the maximum \$12,000 benefit beginning Calendar Year 2008 and thereafter.

Chapter 500/95 permitted certain active employees with prior service credit before entering the QPP to utilize their original dates of hire for determining eligibility for benefits from the FFVSF and the FOVSF. In addition, this law permitted certain active employees with prior service credit before entering the QPP to utilize their original dates of hire for determining eligibility for benefits from the FFVSF and the FOVSF.

Additionally, Chapter 216 of the Laws of 2002 (“Chapter 216/02”) provides that participants of the VSFs who retire from the QPP on and after January 1, 2002 with more than 20 years of credited service are entitled to an additional one-time special lump-sum payment, the Deferred Retirement Option Plan (“DROP”). The DROP also known as “Banked Variable” represents the amount the member would have received had he/she retired for Service upon reaching eligibility. The DROP payment is an eligible distribution that may be rolled over pursuant to Internal Revenue Service regulations. Members who retired for a disability or die in active service are not eligible for the VSF DROP. Accumulated VSF DROP balances for Fiscal Year 2023 were \$50 million for FFVSF and \$110 million for FOVSF. Similarly, for Fiscal Year 2022, the balances were \$62.1 million for FFVSF and \$314.6 million for FOVSF.

Any increase in the amount of ad hoc cost-of-living increases (“Supplementation”) or automatic COLA payable from the QPP to a retiree of the FFVSF under legislation enacted on or after July 1, 1988 or to a retiree of the FOVSF under legislation enacted on or after January 1, 1993, will reduce benefits payable from the FFVSF or FOVSF to such retiree by an amount equal to such increase until the following date:

- For a retiree with a date of membership before July 1, 1988, the later of: (a) the first day of the month following the month such retiree attains age 62; and (b) January 1, 2007.
- For a retiree with a date of membership on or after July 1, 1988, the later of: (a) the first day of the month following the month such retiree attains age 62; and (b) the earlier of: (1) the first day of the month following the 19th anniversary of such retiree’s date of retirement; and (2) January 1, 2008.

#### NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

**Basis of Accounting** - The Funds use the accrual basis of accounting where the measurement focus is on the 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 by the QPP when the Employer makes payroll deductions from QPP members. Employer contributions are recognized when due and the Employer has a legal obligation to provide the contributions. Benefit payments and withdrawals are recognized when due and payable in accordance with the terms of the Funds.

**Use of Estimates** - The preparation of combining financial statements in conformity with accounting principles generally accepted in the United States of America 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.

## New York City Fire Pension Funds

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2023 and 2022

**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.

**Income Taxes** - Income earned by the Funds is not subject to federal income tax.

**Accounts Payable** - Accounts payable is principally comprised of amounts owed to the Funds' banks for overdrawn bank balances. The Funds' practice is to fully invest cash balances in most bank accounts daily. 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 either: (1) benefits due and unpaid by the Funds as of year-end; or (2) related to the VSFs, benefits deemed incurred and unpaid (an accrual for a portion of the current calendar year benefit) for the Fiscal Year ended on June 30.

**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.

**Securities Lending Transactions** - State statutes and Board policies permit the Funds 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 Funds' 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 Funds receive 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, 2023 and 2022, management believes that the Funds had no credit risk exposure because the fair value of collateral held by the Funds equaled or exceeded the fair value of securities lent to the borrowers. The contracts with the Funds' Securities Lending Agent (the "Agent") require the Agent to indemnify the Funds.

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 Funds or the borrowers. Cash collateral is invested by the securities lending agent using approved Lender's Investment guidelines. The weighted-average maturity is 31.64 days for collateral investments. The securities lending program in which the Funds participate 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

## New York City Fire Pension Funds

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2023 and 2022

has the ability to pledge or sell them without a borrower default. Accordingly, the Funds recorded the investments purchased with the cash collateral as collateral from securities lending with a corresponding liability for securities lending.

Securities on loan at fair value as of June 30, 2023 and 2022, were \$2.0 billion and \$1.9 billion, respectively, for the QPP, \$42.6 million and \$57.0 million, respectively, for the FFVSF, and \$30.9 million and \$40.6 million, respectively, for the FOVSF. Cash collateral received related to securities lending as of June 30, 2023 and 2022 was \$2.1 billion and \$2.0 billion, respectively, for the QPP, \$43.3 million and \$57.7 million, respectively, for the FFVSF, and \$31.4 million and \$41.1 million, respectively, for the FOVSF. As of the date of the combining statements of fiduciary net position, the maturities of the investments made with cash collateral on average exceed the maturities of the securities loans by approximately 86.2 days.

**Implementation of Governmental Accounting Standards Board (GASB) Statements** - GASB Statement No. 72, *Fair Value Measurement and Application* ("GASB 72") requires the Funds to use valuation techniques which are appropriate under the circumstances and are either a market approach, a cost approach or income approach. GASB 72 establishes a hierarchy of inputs used to measure fair value consisting of three levels. 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 was used for the fair value measurements.

GASB Statement No. 87, *Accounting for Leases*, requires that accounting for leases meets the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements 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 financing 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 of the Funds and determined there was no material impact because of the adoption of GASB Statement No. 87.

**New Accounting Standards Adopted** - GASB Statement No. 96, *Subscription-Based Information Technology Arrangements* ("SBITA"). GASB No. 96 establishes standards of accounting and financial reporting for government end users. This statement establishes that a SBITA results in a right-to-use subscription asset, an intangible asset, a corresponding subscription liability and provides the capitalization criteria for outlays other than subscription payments, including implementation costs; and requires a note disclosure. Management has evaluated this standard and determined there was no material impact because of the adoption of GASB Statement No. 96.

**Reclassifications** - Certain prior year investment amounts have been reclassified to conform to the current year presentation. Alternative investments totaling approximately \$4,529,000 previously reported as level 3 in the Fair Value hierarchy as of June 30, 2022 have been reclassified as Net Asset Value Practical Expedient to conform with the June 30, 2023 presentation. Certain investments previously reported as U.S. government & agency type investments in the credit risk and interest rate risk disclosures as of June 30, 2022 have been reclassified to mortgage debt securities type investments to conform with the June 30, 2023 presentation.

**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

**NOTE 3 – INVESTMENTS AND DEPOSITS**

The Comptroller acts as an investment advisor to the Funds. In addition, the Funds employ an independent investment consultant as an investment advisor. The Funds utilize several investment managers to manage the long-term debt and equity portfolios. The managers are regularly reviewed, regarding both their investment performance and their adherence to investment guidelines.

The Boards of Trustees of the respective Funds set investment objectives to assure adequate accumulation of reserves and to protect the long-term value of the assets. The Boards' investment policy is implemented using a strategic allocation of assets that meet the objectives of the Funds, while working within the confines of the legislative guidelines. The guidelines dictate that fixed income, equity and other investments may be made permitted by the RSSL and State Banking Law, the ACNY, and the Legal Investments for New York Savings Banks list as published by The New York State Banking Department. The Funds' asset allocation policy is constructed to meet both short-term funding requirements and long-term pension obligations. Investments up to 35% of assets of the Funds may be made in instruments not expressly permitted by the State RSSL.

The Funds do not possess an investment risk policy statement, nor do they actively manage assets to specific risk targets. Rather, investment risk management is an inherent function of the Funds' asset allocation process. Assets are diversified over a broad range of asset classes and encompass multiple investment strategies aimed at limiting concentration risk. The asset allocation targeted for the Funds in Fiscal Year 2023 and 2022 includes securities in the following categories:

	2023	2022
U.S. equity	27.0%	27.0%
Core U.S. fixed	19.0	19.0
EAFE markets	9.0	9.0
Private equities	8.0	8.0
Emerging markets	6.0	6.0
Enhanced yield bonds	6.0	6.0
Real estate	7.0	7.0
Infrastructure	3.0	3.0
Hedge funds	5.0	5.0
TIPS	4.0	4.0
Opportunistic fixed	4.0	4.0
ETI	2.0	2.0
Total	100.0%	100.0%

State Street Bank is the primary custodian for substantially all the securities of the Funds.

**Concentrations** - In accordance with RSSL § 177, no investment in any individual company may represent more than either 2% of the Funds' total net assets or 5% or more of their fiduciary net position.

**New York City Fire Pension Funds**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

**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 Funds' investments, by percentage of the rated portfolio, as described by nationally recognized statistical rating organizations, at June 30, 2023 and 2022, are as follows:

Investment Type June 30, 2023 (In percent)	Moody's Quality Ratings													Not Rated	Total				
	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3			B1	B2	B3	Caa & Below Caa1
U.S. government & agency Mortgage debt securities	46.03%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.60%	48.63%
Corporate bonds	12.83%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.83%
Short term: Commercial paper Discount notes & T-Bills Pooled fund	0.86%	0.02%	0.09%	0.22%	1.86%	1.00%	1.90%	2.09%	2.89%	2.19%	1.79%	1.78%	3.01%	3.04%	2.45%	2.63%	2.50%	2.68%	33.00%
Percent of rated portfolio	59.72%	0.02%	0.09%	0.22%	1.86%	1.00%	1.90%	2.09%	2.89%	2.19%	1.79%	1.78%	3.01%	3.04%	2.45%	2.63%	2.50%	10.82%	100%

Investment Type June 30, 2022 (In percent)	Moody's Quality Ratings													Not Rated	Total				
	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3			B1	B2	B3	Caa & Below Caa1
U.S. government & agency Mortgage debt securities	47.32%	0.01%	0.01%	0.01%	0.02%	-	-	-	0.03%	0.01%	-	-	-	-	-	-	-	5.70%	53.11%
Corporate bonds	12.28%	-	-	-	-	-	-	-	2.32%	2.39%	1.68%	2.20%	2.63%	2.45%	2.25%	1.98%	1.91%	-	12.28%
Short term: Commercial paper Pooled fund	1.01%	0.02%	0.10%	0.14%	0.88%	1.52%	1.38%	1.86%	2.32%	2.39%	1.68%	2.20%	2.63%	2.45%	2.25%	1.98%	1.91%	3.49%	30.21%
Percent of rated portfolio	60.61%	0.03%	0.11%	0.15%	0.90%	1.52%	1.38%	1.86%	2.35%	2.40%	1.68%	2.20%	2.63%	2.45%	2.25%	1.98%	1.91%	13.59%	100.00%



**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

**Custodial Credit Risk** - Deposits are exposed to custodial credit risk if they are uninsured and uncollateralized. 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 the Funds' deposits are insured by the Federal Deposit Insurance Corporation ("FDIC") and collateralized by securities held by a financial institution separate from the Funds' depository financial institution. However, the Funds' 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 (in years) of the Funds' investments, as shown by the percent of the rated portfolio, at June 30, 2023 and 2022, are as follows:

Years to Maturity June 30, 2023	Investment Maturities				
	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
U.S. government & agency	48.63%	0.01%	30.33%	7.26%	11.03%
Mortgage debt securities	12.83	-	0.07	0.14	12.62
Corporate bonds	33.00	0.43	17.47	8.24	6.86
Short term:					
Commercial paper	0.37	0.37	-	-	-
Discount notes & T-Bills	1.58	1.58	-	-	-
Pooled fund	3.59	3.59	-	-	-
Percent of rated portfolio	<u>100.00%</u>	<u>5.98%</u>	<u>47.87%</u>	<u>15.64%</u>	<u>30.51%</u>

Years to Maturity June 30, 2022	Investment Maturities				
	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
U.S. government & agency	53.11%	3.94%	27.40%	10.79%	10.98%
Mortgage debt securities	12.28	-	0.01	0.19	12.08
Corporate bonds	30.21	0.29	9.61	13.47	6.84
Short term:					
Commercial paper	1.35	1.35	-	-	-
Pooled fund	3.05	3.05	-	-	-
Percent of rated portfolio	<u>100.00%</u>	<u>8.63%</u>	<u>37.02%</u>	<u>24.45%</u>	<u>29.90%</u>

**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

**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 Funds have 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 Funds' combined foreign currency holdings as of June 30, 2023 and 2022, are as follows (in thousands, in U.S. Dollars):

Trade Currency	6/30/2023 Fair Value	6/30/2022 Fair Value
EURO CURRENCY (EUR)	\$ 864,003	\$ 772,016
HONG KONG DOLLAR (HKD)	291,222	339,554
JAPANESE YEN (JPY)	271,889	253,429
POUND STERLING (GBP)	254,956	233,837
INDIAN RUPEE (INR)	169,464	147,105
SOUTH KOREAN WON (KRW)	150,028	130,993
NEW TAIWAN DOLLAR (TWD)	148,726	128,545
SWISS FRANC (CHF)	135,663	133,893
CANADIAN DOLLAR (CAD)	114,189	98,594
BRAZILIAN REAL (BRL)	79,192	51,665
AUSTRALIAN DOLLAR (AUD)	70,424	64,772
DANISH KRONE (DKK)	65,409	61,618
SWEDISH KRONA (SEK)	36,917	31,537
SINGAPORE DOLLAR (SGD)	35,074	33,450
INDONESIAN RUPIAH (IDR)	31,444	26,093
THAILAND BAHT (THB)	29,220	21,011
CHINESE YUAN RENMINBI (CNY)	25,253	27,198
CHINESE YUAN RENMINBI OFFSHORE (CNH)	24,055	21,266
SOUTH AFRICAN RAND (ZAR)	22,620	25,690
MEXICAN PESO (MXN)	16,797	12,449
UAE DIRHAM (AED)	12,457	10,540
NORWEGIAN KRONE (NOK)	11,793	10,672
HUNGARIAN FORINT (HUF)	10,206	6,637
POLISH ZLOTY (PLN)	8,239	7,206
QATARI RIAL (QAR)	6,541	7,016
MALAYSIAN RINGGIT (MYR)	4,063	5,109
NEW ISRAELI SHEQEL (ILS)	4,051	6,906
TURKISH LIRA (TRY)	3,884	5,682
KUWAITI DINAR (KWD)	3,713	3,231
PHILIPPINE PESO (PHP)	1,772	1,828
CHILEAN PESO (CLP)	1,589	1,355
NEW ZEALAND DOLLAR (NZD)	1,236	1,966
ROMANIAN LEU (RON)	1,031	2,111
CZECH KORUNA (CZK)	665	6,673
COLOMBIAN PESO (COP)	421	533
EGYPTIAN POUND (EGP)	333	193
NIGERIAN NAIRA (NGN)	117	239
TUNISIAN DINAR (TND)	6	4
PAKISTAN RUPEE (PKR)	1	1
RUSSIAN RUBLE (RUB)	-	97
	<b>\$ 2,908,663</b>	<b>\$ 2,692,714</b>



**New York City Fire Pension Funds**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**  
**June 30, 2023 and 2022**

**Securities Lending Transactions**

**Credit Risk** – The quality ratings of investments held as collateral for securities lending by the Funds at June 30, 2023 and 2022, are as follows:

Investment Type and Fair Value of Securities Lending Transactions June 30, 2023 (in thousands)	Moody's Quality Ratings							Total				
	Aaa & Below	Aa & Below	A1	A2	A3	Baa & Below	Ba & Below		B & Below	Caa & Below	Ca & Below	Not Rated
Short term:												
Reverse repurchase agreements	\$ -	\$ 955,969	\$ 285,596	\$ 90,555	\$ -	\$ 13,931	\$ -	\$ -	\$ -	\$ -	\$ 453,414	\$ 1,799,465
Money market	77,173	-	-	-	-	-	-	-	-	-	1,210	78,383
Cash or cash equivalent	-	213,797	-	-	-	-	-	-	-	-	-	213,797
US agency	-	-	-	-	-	-	-	-	-	-	46,422	46,422
Uninvested	-	-	-	-	-	-	-	-	-	-	(498)	(498)
<b>Total</b>	<b>\$ 77,173</b>	<b>\$ 1,169,766</b>	<b>\$ 285,596</b>	<b>\$ 90,555</b>	<b>\$ -</b>	<b>\$ 13,931</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 500,548</b>	<b>\$ 2,137,569</b>
Percent of securities lending portfolio	3.61%	54.72%	13.36%	4.24%	0.00%	0.66%	0.00%	0.00%	0.00%	0.00%	23.41%	100.00%

Investment Type and Fair Value of Securities Lending Transactions June 30, 2022 (in thousands)	Moody's Quality Ratings							Total				
	Aaa & Below	Aa & Below	A1	A2	A3	Baa & Below	Ba & Below		B & Below	Caa & Below	Ca & Below	Not Rated
Short term:												
Reverse repurchase agreements	\$ -	\$ -	\$ -	\$ 58,355	\$ 599,248	\$ 13,441	\$ -	\$ -	\$ -	\$ -	\$ 695,667	\$ 1,366,711
Money market	195,825	-	-	-	-	-	-	-	-	-	241,806	437,631
Cash or cash equivalent	-	-	200,482	-	-	-	-	-	-	-	-	200,482
Uninvested	-	-	-	-	-	-	-	-	-	-	(309)	(309)
<b>Total</b>	<b>\$ 195,825</b>	<b>\$ -</b>	<b>\$ 200,482</b>	<b>\$ 58,355</b>	<b>\$ 599,248</b>	<b>\$ 13,441</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 937,170</b>	<b>\$ 2,004,521</b>
Percent of securities lending portfolio	9.77%	0.00%	10.00%	2.91%	29.89%	0.67%	0.00%	0.00%	0.00%	0.00%	46.76%	100%

**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

*Interest Rate Risk* – The lengths of investment maturities of the collateral for securities lending held by the Funds, are as follows:

Years to Maturity Investment Type June 30, 2023 (In thousands)	Investment Maturities (in years)				
	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
<b>Short term:</b>					
Reverse repurchase agreement	\$ 1,799,465	\$ 1,799,465	\$ -	\$ -	\$ -
Money market	78,383	78,383	-	-	-
US agency	46,422	860	45,562	-	-
Cash or cash equivalents	213,797	213,797	-	-	-
Uninvested	(498)	(498)	-	-	-
<b>Total</b>	<b>\$ 2,137,569</b>	<b>\$ 2,092,007</b>	<b>\$ 45,562</b>	<b>\$ -</b>	<b>\$ -</b>
Percent of securities lending portfolio	<u>100.00%</u>	<u>97.87%</u>	<u>2.13%</u>	<u>0.00%</u>	<u>0.00%</u>

Years to Maturity Investment Type June 30, 2022 (In thousands)	Investment Maturities (in years)				
	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
<b>Short term:</b>					
Reverse repurchase agreement	\$ 1,366,711	\$ 1,366,711	\$ -	\$ -	\$ -
Money market	437,631	437,631	-	-	-
Cash or cash equivalents	200,482	200,482	-	-	-
Uninvested	(303)	(303)	-	-	-
<b>Total</b>	<b>\$ 2,004,521</b>	<b>\$ 2,004,521</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Percent of securities lending portfolio	<u>100.00%</u>	<u>100.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>

**Rate of return** – For the years ended June 30, 2023 and 2022, the annual money-weighted rate of return on investments, net of investment expense, for the Funds was, as follows:

	2023	2022
QPP	7.75%	(7.64)%
FFVSF	9.74%	(13.34)%
FOVSF	10.33%	(13.76)%

The money-weighted rate of return expresses investment performance, net of investment expense adjusted for the changing amounts invested.

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

**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

**GASB 72 – Level Inputs** – The Funds categorizes fair value measurements within the fair value hierarchy established by generally accepted accounting principles. 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 Funds have the following recurring fair value measurements as of June 30, 2023 and 2022:

GASB 72 – Disclosure  
Investments – at fair value  
(In thousands)

	2023			
	Level 1	Level 2	Level 3	Total
Short-term investments:				
Commercial paper	\$ -	\$ 21,994	\$ -	\$ 21,994
Short-term investment fund	-	207,740	-	207,740
U.S. treasury bills and agencies	-	94,482	-	94,482
Debt (fixed income) securities:				
Bank loans	-	64,649	542	65,191
Corporate and other	-	1,734,468	10,600	1,745,068
Mortgage debt security	-	671,797	-	671,797
Treasury inflation-protected securities	-	722,535	-	722,535
U.S. government and agency	-	2,069,986	-	2,069,986
Equity securities:				
Domestic equity	5,955,906	-	2,733	5,958,639
International equity	1,995,654	-	939	1,996,593
Collective trust funds:				
Bank loans	-	19,317	2,658	21,975
Corporate and other	-	116,318	21,787	138,105
Domestic equity	31,984	-	355	32,339
International equity	591,604	-	104	591,708
Mortgage debt security	-	94,220	-	94,220
U.S. government and agency	-	109,894	-	109,894
Total investments in the fair value hierarchy	\$ 8,575,148	\$ 5,927,400	\$ 39,718	14,542,266
Alternative investments measured at NAV				4,985,366
Total investments				\$ 19,527,632

**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

GASB 72 – Disclosure  
Investments – at fair value  
(In thousands)

	2022			
	Level 1	Level 2	Level 3	Total
Short-term investments:				
Commercial paper	\$ -	\$ 156,638	\$ -	\$ 156,638
Short-term investment fund	-	179,029	-	179,029
U.S. Treasury bills and agencies	-	179,990	-	179,990
Debt (fixed income) securities:				
Bank loans	-	46,620	-	46,620
Corporate and other	-	1,540,992	5,561	1,546,553
Mortgage debt security	-	796,717	-	796,717
U.S. government and agency	-	2,899,182	-	2,899,182
Equity securities:				
Domestic equity	5,256,101	168	2,248	5,258,517
International equity	1,794,866	-	10,884	1,805,750
Collective trust funds:				
Bank loans	-	-	172	172
Corporate and other	-	66,783	-	66,783
Domestic equity	34,546	-	-	34,546
International equity	590,782	-	257	591,039
Mortgage debt security	-	99,520	21,784	121,304
Opportunistic-fixed income	105	52,400	1,494	53,999
U.S. government and agency	-	132,176	-	132,176
Total investments in the fair value hierarchy	\$ 7,676,400	\$ 6,150,215	\$ 42,400	13,869,015
Alternative investments measured at NAV				4,528,673
Total investments				\$ 18,397,688

## New York City Fire Pension Funds

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2023 and 2022

#### ***Equity and Debt (Fixed Income) Securities***

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 short-term 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 fair value on the last trading day of the period. These prices are obtained from various pricing sources by the Funds' 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 Hedge Funds. These are investments for which exchange quotations are not readily available and are valued at estimated fair value, as determined in good faith by the GP.

Investments in non-public equity securities should be valued 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.

Alternative investments that are measured at fair value using the net asset value ("NAV") per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value quantities presented in the table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the entity's financial statements.

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 partner's total committed amount. The total unfunded commitments for the alternative investments as of June 30, 2023 and 2022 amounted to \$1.7 billion and \$2.2 billion, respectively.

**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

The fair value quantities presented in these tables are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the entity's combining financial statements. The following tables below display details of the fair value, unfunded commitments, redemption frequency and redemption notice period.

The below table summarizes the assets that measure fair value using NAV as a Practical Expedient:

(In thousands)

Asset	Fair Value as of June 30, 2023	Unfunded Commitments as of June 30, 2023	Fair Value as of June 30, 2022	Unfunded Commitments as of June 30, 2022	Redemption Frequency (ranges if eligible)	Redemption Notice Period (ranges if eligible)
Infrastructure	\$ 372,979	\$ 221,951	\$ 275,604	\$ 241,034	N/A	N/A
Private equity	1,744,526	770,174	1,657,719	855,347	N/A	N/A
Private real estate	1,178,865	512,469	1,117,567	633,010	Quarterly	30 - 90 days
Opportunistic fixed income	682,276	243,089	616,087	490,141	N/A	N/A
Hedge funds	951,281	-	861,696	-	Monthly, Quarterly, Semiannually	3 - 90 days
Fixed income investment company	55,439	-	-	-	Monthly	15 days
	<u>\$ 4,985,366</u>	<u>\$ 1,747,683</u>	<u>\$ 4,528,673</u>	<u>\$ 2,219,532</u>		

## New York City Fire Pension Funds

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2023 and 2022

#### NOTE 4 – TRANSFER TO VARIABLE SUPPLEMENTS FUNDS

The ACNY provides that the QPP transfers to the VSFs an amount equal to certain excess earnings on equity investments, limited to the unfunded actuarial present value (“APV”) of accumulated plan benefits for each VSF. Excess earnings are defined as the amount by which earnings on equity investments of the QPP exceed what those earnings would have been had such funds been invested at a yield comparable to that available from fixed-income securities (“Hypothetical Fixed Income Security Earnings”) less any cumulative deficiencies. The VSFs also receive credit for investment earnings on VSF assets.

The calculation of the Hypothetical Fixed Income Security Earnings requires the determination of the Hypothetical Interest Rate (“HIR”), which is computed by the Comptroller.

For Fiscal Year 2023, the excess earnings of the QPP are reported on the combined financial statements for the year ended June 30, 2023 to be equal to \$0, where \$0 was reported as a liability from the QPP to the FFVSF and \$0 was reported as a liability from the QPP to the FOVSF.

For Fiscal Year 2022, the excess earnings of the QPP are reported on the combined financial statements for the year ended June 30, 2022 to be equal to \$0, where \$0 was reported as a liability from the QPP to the FFVSF and \$0 was reported as a liability from the QPP to the FOVSF.

In addition, Chapter 583 of the Laws of 1989 states that if the assets of the FFVSF or FOVSF are less than the amount required to pay the retirees’ guaranteed supplemental benefit payments, then an amount sufficient to pay such benefits shall be appropriated from the Contingent Reserve Fund of the QPP.

The amounts shown for the APV of accumulated plan benefits are the measure of the present value of scheduled supplemental benefits estimated to be payable in the future as a result of employee service-to-date. It is calculated as the actuarial present value of credited projected benefits, prorated on service and is intended to help users assess the funded status of the VSFs on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due and make comparisons among VSFs.

Actuarial valuations of the VSFs are performed annually as of June 30.

**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

A comparison of the APV of accumulated plan benefits as calculated by the Funds' Chief Actuary (the "Actuary") with the net position restricted for benefits for the FFVSF and the FOVSF as of June 30, 2022 and 2021, is as follows:

	FFVSF		FOVSF	
	2022	2021	2022	2021
	(In millions)			
APV of accumulated plan benefits for:				
Retirees currently receiving benefits	\$ 324.9	\$ 321.4	\$ 157.3	\$ 150.0
Active members	111.0	116.2	121.1	122.2
Total APV of accumulated plan benefits	435.9	437.6	278.4	272.2
Net position held in trust for benefits <sup>1</sup>	452.1	568.7	333.3	414.3
(Overfunded) unfunded APV of accumulated plan benefits	\$ (16.2)	\$ (131.1)	\$ (54.9)	\$ (142.1)

<sup>1</sup> See Note 2 for valuation of investments in the calculation of net position restricted for benefits. Reflects net position not inclusive of the SKIM amounts payable for the respective year and includes an adjustment made for accrued benefits payable for the respective year.

For purposes of the June 30, 2022 and 2021 actuarial valuations of the VSFs, Chapter 125/00 has been taken into account in the determination of the unfunded APV of accumulated plan benefits relative to the Supplementation benefit increases that began Fiscal Year 2001 and to the automatic COLA that began Fiscal Year 2002 (see Note 1).

Sections 13-384 and 13-394 of the ACNY provide that the Boards of Trustees of the VSFs shall adopt, upon the recommendation of the Actuary, actuarial assumptions as to interest rate, mortality of retirees and estimated number of active members of the QPP in service as of each June 30 who will retire for service with 20 or more years of service as Firefighters and Fire Officers, for use in making annual valuations of liabilities.



**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

The following actuarial assumptions represent the recommendations of the Actuary and were used in the actuarial calculations to determine the preceding APV of accumulated plan benefits as of June 30, 2022 and 2021:

	June 30, 2022 <sup>1</sup>	June 30, 2021
Investment rate of return	7.0% per annum. <sup>2</sup>	7.0% per annum. <sup>2</sup>
Post-retirement mortality	Tables adopted by the Board of Trustees during Fiscal Year 2019.	Tables adopted by the Board of Trustees during Fiscal Year 2019.
Active service: withdrawal, death, and disability	Tables adopted by the Board of Trustees during Fiscal Year 2019.	Tables adopted by the Board of Trustees during Fiscal Year 2019.
Service retirement	Tables adopted by the Board of Trustees during Fiscal Year 2019.	Tables adopted by the Board of Trustees during Fiscal Year 2019.
Percentage of all active FIRE members estimated to retire for service with 20 or more years of service as Firefighters	70%	70%
Percentage of all active FIRE Officers estimated to retire for service with 20 or more years of service as FIRE Officers	100%	100%
Cost-of-living adjustments <sup>2</sup>	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.

<sup>1</sup> Preliminary.

<sup>2</sup> Developed assuming a long-term Consumer Price Inflation assumption of 2.5% per year.

**NOTE 5 – QPP CONTRIBUTIONS**

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, are intended to ultimately be enough to accumulate assets to pay benefits when due.

**Member Contributions** – Tier 1 and Tier 2 members contribute by salary deductions on the basis of a normal rate of contribution which is assigned by the QPP at membership. A member's normal rate is dependent upon age and actuarial tables in effect at the time of membership. These member contributions are reduced by 5.0% under the ITHP program.

**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

Members may voluntarily increase their rates of contribution by 50% for the purpose of purchasing an additional annuity. Members are permitted to borrow up to 90% of their own contributions including accumulated interest.

Tier 3 and Tier 3 Modified members contribute 3.0% of salary until they have 25 years of credited service.

**Employer Contributions** – Statutory Contributions to the QPP, determined by the Actuary in accordance with State statutes and City laws, are generally funded by the Employer within the appropriate fiscal year. The Statutory Contribution for the year ended June 30, 2023, based on an actuarial valuation as of June 30, 2021 was \$1.4 billion and the Statutory Contribution for the year ended June 30, 2022, based on an actuarial valuation as of June 30, 2020 was \$1.4 billion. The Statutory Contributions for Fiscal Years 2023 and 2022 were equal to the Actuarial Contributions. Refer to the Schedule of Employer Contributions in the accompanying required supplementary information for more information on the actuarial methods and assumptions applied by the Actuary to determine the Statutory Contributions.

**NOTE 6 – NET PENSION LIABILITY**

The components of the net pension liability of the Employer at June 30, 2023 and 2022 for the Funds were as follows:

June 30, 2023	(In thousands)			
	QPP	FFVSF	FOVSF	TOTAL
Total pension liability*	\$ 25,946,254	\$ 458,436	\$ 296,493	\$ 26,701,183
Fiduciary net position**	18,653,779	445,230	338,457	19,437,466
Employers' net pension liability	<u>\$ 7,292,475</u>	<u>\$ 13,206</u>	<u>\$ (41,964)</u>	<u>\$ 7,263,717</u>
Fiduciary net position as a percentage of the total pension liability	71.89%	97.12%	114.15%	72.80%

June 30, 2022	(In thousands)			
	QPP	FFVSF	FOVSF	TOTAL
Total pension liability*	\$ 24,968,435	\$ 466,163	\$ 292,696	\$ 25,727,294
Fiduciary net position**	17,472,164	452,127	333,347	18,257,638
Employers' net pension liability	<u>\$ 7,496,271</u>	<u>\$ 14,036</u>	<u>\$ (40,651)</u>	<u>\$ 7,469,656</u>
Fiduciary net position as a percentage of the total pension liability	69.98%	96.99%	113.89%	70.97%

\* Includes Liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

\*\* Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

## New York City Fire Pension Funds

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2023 and 2022

#### **Actuarial Methods and Assumptions**

The total pension liability as of June 30, 2023 and 2022 was calculated from the actuarial valuations as of June 30, 2022 (Preliminary) and June 30, 2021 (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 Systems ("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 23, 2019, the Actuary issued a Report titled "Proposed Changes in Actuarial Assumptions and Methods for Determining Employer Contributions for Fiscal Years Beginning on and After July 1, 2018 for the New York City Fire Pension Fund." The actuarial assumptions and methods described in that report are referred to as the "2019 A&M."

On July 19, 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, 2022 total pension liability was calculated from the Preliminary June 30, 2021 actuarial valuation, which was based on 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 Entry Age Normal ("EAN") cost method of funding is utilized by the Funds' 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.

**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

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

The obligations of FIRE to the FFVSF and the FOVSF are recognized through a methodology where the PV of future VSF transfers from FIRE to the FFVSF and FOVSF is included directly as an actuarial liability of FIRE. This amount is computed as the excess, if any, of the PV of benefits of the FFVSF and FOVSF over the AVA of the FFVSF and FOVSF, respectively. Under EAN, a portion of the PV of future VSF transfers is reflected in the PV of future normal costs and a portion is reflected in the UAL.

***Expected Rate of Return on Investments***

The long-term expected rate of return on the Funds' investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (i.e., expected returns, net of 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 allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table as of June 30, 2023 and 2022:

Asset Class	As of June 30, 2023		As of June 30, 2022	
	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	27.0%	5.5%	27.0%	5.1%
Developed public market equities	9.0	5.7%	9.0	5.5%
Emerging public market equities	6.0	10.2%	6.0	9.3%
Fixed income	31.0	2.8%	31.0	1.4%
Private Markets (Alternative Investments)				
Private equity	8.0	10.1%	8.0	9.8%
Private real estate	7.0	4.5%	7.0	4.8%
Infrastructure	3.0	5.0%	3.0	4.5%
Hedge funds	5.0	4.3%	5.0	3.5%
Opportunistic-fixed income	4.0	6.7%	4.0	6.2%
Total	100.0%		100.0%	

***Discount Rate***

The discount rate used to measure the total pension liability was 7.0%. The projection of cash flows used to determine the discount rate assumes 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 Funds' fiduciary net position was projected to be available to make all projected future benefit payments of current active and non-active members. Therefore, the long-term expected rate of return on the Funds' investments was applied to all periods of projected benefit payments to determine the total pension liability.

**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

The following presents the net pension liability of the Employer for the Funds, calculated using the discount rate of 7.0%, as well as what the Employer's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.0%) or 1-percentage-point higher (8.0%) than the current rate:

Net Pension Liability – June 30, 2023 (In thousands)	1% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)
QPP	\$ 10,233,621	\$ 7,292,475	\$ 4,820,813
FFVSF	55,955	13,206	(23,585)
FOVSF	<u>(16,957)</u>	<u>(41,964)</u>	<u>(63,744)</u>
Total	<u>\$ 10,272,619</u>	<u>\$ 7,263,717</u>	<u>\$ 4,733,484</u>
Net Pension Liability – June 30, 2022 (In thousands)	1% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)
QPP	\$ 10,340,774	\$ 7,496,271	\$ 5,106,913
FFVSF	56,474	14,036	(22,545)
FOVSF	<u>(16,442)</u>	<u>(40,651)</u>	<u>(61,649)</u>
Total	<u>\$ 10,380,806</u>	<u>\$ 7,469,656</u>	<u>\$ 5,022,719</u>

**NOTE 7 – MEMBER LOANS**

Tier 1 and Tier 2 members are permitted to borrow up to 90% of their own contributions including accumulated interest. The balance of QPP member loans receivable at June 30, 2023 and 2022 was \$12.9 million and \$11.7 million, respectively. Members repay their loans at the statutory rate of 4% per annum. Upon termination of employment before retirement, certain members are entitled to refunds of their own contributions including, for new program members, accumulated interest less any loans outstanding. Certain prior year loans to retirees were removed from member loans receivables. Such balances should be reduced at the effective date of retirement as a result of payoff or future benefit reductions.

**NOTE 8 – RELATED PARTIES**

Pursuant to statute and resolutions, the Comptroller has been appointed as custodian for the assets of the Funds. Securities are held by certain banks under custodial agreements with the Comptroller. The Comptroller, the Financial Information Services Agency, and the Office of Payroll Administration also provide cash receipt and cash disbursement services to the Funds. Actuarial services are provided to the Funds by the New York City Office of the Actuary. The City's Corporation Counsel provides legal services to the Funds. Other administrative services are also provided by The City. The aforementioned services may be provided by employees or officers of The City who may also be participants in the Funds. The cost of providing such services amounted to \$4.2 million and \$3.6 million in Fiscal Years 2023 and 2022, respectively.

**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

**NOTE 9 – ADMINISTRATIVE AND INVESTMENT EXPENSES**

In Fiscal Year 2023, there were \$13.0 million in administrative expenses paid out of the corpus of the fund. In Fiscal Year 2022, there were \$12.7 million in administrative expenses paid out of the corpus of the fund. During Fiscal Year 2021, in accordance with Chapter 298 of the New York State Laws of 2016, the QPP Plan provided corpus funding for administrative expenses in the amount of \$10.3 million. Additionally, services, as set out in Note 8 on “Related Parties” are provided by various City Agencies. The City defrayed the cost associated with these services. Investment expenses charged to the investment earnings of the QPP, exclusive of expenses relating to securities-lending transactions amounted to approximately \$178.5 million and \$140.4 million in 2023 and 2022, respectively.

In March 2018, the Funds entered into a lease agreement for office space. The agreement is for a term of 15 years and 4 months. Future minimum rental payments for the next four years and thereafter is approximately (In thousands):

<u>Fiscal Year Ending June 30th,</u>	<u>Beginning Balance</u>	<u>Annual Year- End Interest Accrual</u>	<u>Total Annual Payment</u>	<u>Ending Balance</u>
2024	\$ 11,249	\$ 232	\$ 1,151	\$ 10,330
2025	10,330	212	1,179	9,363
2026	9,363	191	1,179	8,375
2027	8,375	169	1,179	7,365
Thereafter	7,365	514	7,879	-

Rent expenses for the years ended June 30, 2023 and 2022 was \$1.09 million and \$1.05 million, respectively.

**NOTE 10 – CONTINGENT LIABILITIES AND OTHER MATTERS**

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

**Other Matters** – During Fiscal Years 2023 and 2022, certain events described below took place which, in the opinion of FIRE management, could have the effect of increasing benefits to members and/or their beneficiaries and therefore would increase the obligations of the Funds. The effect of such events has not been fully quantified. However, it is the opinion of FIRE management that such developments would not have a material effect on the Funds’ combined net position restricted for benefits or cause changes in the Funds’ net position restricted for benefits.

**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 NYCERS are conducted every two years. Refer to Note 6 for the results of the most recent actuarial studies for FIRE.

**Revised Actuarial Assumptions and Methods** – In accordance with the ACNY and with appropriate practice, the Boards of Trustees of the five actuarially-funded NYCERS are to periodically review and adopt actuarial assumptions as proposed by the Actuary for use in the determination of Employer Contributions.

## New York City Fire Pension Funds

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2023 and 2022

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. Milliman is performing the current experience study that covers the period through June 30, 2021.

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

Chapter 18 of the Laws of 2012 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 FIRE.

Chapter 3 of the Laws of 2013 ("Chapter 3/13") implemented changes in the actuarial procedures for determining Employer Contributions beginning Fiscal Year 2012. Chapter 3/13 continued the OYLM, employed the Entry Age Actuarial Cost Method ("EAACM"), 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 ("Chapter 489/13") 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 the New York City Fire Department and are otherwise eligible to receive retirement service credit for such service. Such members would not be required to make member contributions to receive such credit.

Chapter 41 of the Laws of 2016 ("Chapter 427/14") 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 pre-membership 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 ("Chapter 326/16") extended the deadline to file a Notice of Participation in the World Trade Center Rescue, Recovery, and Clean-up Operations to September 11, 2018.

Chapter 298 of the Laws of 2016 ("Chapter 298/16") amended the Accidental Disability Retirement and Ordinary Disability Retirement benefits for Tier 3 and Tier 3 Modified members with dates of membership prior to June 15, 2016 who elect to participate in the Enhanced Disability Benefits. Tier 3 Modified members with dates of membership June 15, 2016 and later are mandated into the Enhanced Disability Benefits. Members electing or mandated into this benefit will pay an extra 2% of wages.

Chapter 89 of the Laws of 2020 ("Chapter 89/20") provides death benefits to statutory beneficiaries of members whose death was a result of or was contributed to by 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



## New York City Fire Pension Funds

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2023 and 2022

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 775 of the Laws of 2022 amends the section of law colloquially referred to as the "Basket Clause" and raises the permissible limit on the allocation of certain investments from 25% of assets to 35%.

Chapter 782 of the Laws of 2022 permits parents of a member to collect Special Accidental Death Benefit if the member has no spouse or child under the age of 18 (or 23 if the child is a student).

#### **COVID-19**

The outbreak of COVID-19 has been declared a pandemic by the World Health Organization. The Governor declared a state of emergency in the State on March 7, 2020 and the Mayor declared a state of emergency in The City on March 12, 2020, each of which is still in effect. The ultimate impact of the COVID-19 pandemic on the Funds cannot be determined at this time.

Chapter 78 of the Laws of 2021 establishes a coronavirus disease 2019 (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.

Governor Kathy Hochul updated New Yorkers on the CDC's approval of an updated COVID-19 vaccine and urged New Yorkers to get the shot once it is available. The 2023-24 vaccine, previously authorized by the federal Food and Drug Administration, is expected to be available at pharmacies and physicians' offices, as well as other health care providers, throughout New York State in the coming days.

Title II, Subtitle B, Section 2202(a) of the CARES Act of March 2020 made loans and distributions with improved terms, including waived penalties and deferred repayment options, available for members adversely affected by COVID-19 through December 31, 2020.

The following outlines the changes to Tier 3 and Tier 3 Modified provisions with the Enhanced Disability legislation:

#### **1. Member Contributions**

- Tier 3 Enhanced Members contribute 3% of pensionable earnings plus an additional contribution rate to help fund the enhanced disability benefit. Currently, the additional contribution rate is 2% that can be raised to 3% based on a financial analysis by the Office of the Actuary every three years. At no time can the total contribution rate exceed 6%.
- Taxability
  - Base Member Contributions
    - Pre-tax
  - Increased Member Contributions for Enhanced Disability Provisions
    - Pre-tax for members appointed June 15, 2016 and later (i.e., the date new members are mandated into the Plan).
    - Post-tax for those who were eligible to elect the Enhanced Disability Plan provisions and elected such provisions.



## New York City Fire Pension Funds

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2023 and 2022

#### 2. Accidental Disability Retirement (“ADR”)

- The ADR benefit for Tier 3 Enhanced Members is 75% of their Five-Year Final Average Salary (“FAS5”).
- Tier 3 Enhanced Members have statutory presumptions (i.e., Heart/HHAT/Lung).

#### 3. Ordinary Disability Retirement (“ODR”)

- The ODR benefit for Tier 3 Enhanced Members is the greater of:
  - 33 1/3% of FAS5 or
  - FAS5 multiplied by years of credited service (not greater than 22 years)

#### 4. Escalation

- Tier 3 Enhanced Members who retire for ODR or ADR are not subject to escalation. Tier 3 Enhanced Members are subject to COLA, the same as Tier 1 and 2 members.

#### 5. Social Security Offset

- Tier 3 Enhanced Members who retire for ODR or ADR are not subject to the Social Security offset.
- Tier 3 Enhanced Members who retire for a Service or Vested Retirement are subject to the Social Security offset.

#### 6. Final Average Salary

- Tier 3 Enhanced Members have FAS5 calculations.
- The Tier 3 Original members who opt into the Tier 3 Enhanced benefit have their FAS5 applied for ODR or ADR, but their Three-Year Final Average Salary (“FAS3”) applied for Service or Vested Retirements.

Additionally, Chapter 298/16 allows the Board of Trustees of FIRE to establish a budget for the administration of FIRE and authorized payment from the assets of FIRE to cover such Administrative Expenses. The Administrative Expenses will be charged against FIRE in the first instance and then reimbursed with interest by The City of New York as an Employer Contribution in the following fiscal year. This structure is commonly referred to as a “corpus-funded entity.” Accordingly, starting in Fiscal Year 2019, Administrative Expenses will be reflected in the Employer Contribution and the UAAL Payments.

Chapter 61 of the Laws of 2017 permits FIRE members subject to RSSL Article 14 (“Eligible Members”), who would be ineligible for disability retirement benefits solely on account of being eligible for a normal service retirement benefit, to be eligible for disability benefits. It also relaxed the safeguards provisions regarding restrictions on post-retirement employment for Eligible Members who are awarded ADR and modified the process for reducing or eliminating an ADR benefit based on post-retirement earnings.

**New York City Fire Pension Funds**

**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2023 and 2022**

The following changes apply to all Tier 3 members (Original, Revised and Enhanced):

**1. Eligibility for ADR**

- Members no longer cease to be eligible for ADR at 22 years and can apply at any time as long as they are active.

**2. Safeguards**

- RSSL § 507(d) no longer applies to Tier 3 ADR retirees; the Tier 2 safeguard provisions contained in New York City Administrative Code § 13-254 apply. Therefore, all Tier 3 ADR retirees will be treated identically to Tier 2 ADR retirees for Safeguards purposes. This includes earnings limitations and re-employment.
- Safeguards remain unchanged for ODR retirees. Thus, they must continue to be in receipt of Social Security Disability benefits to maintain their receipt of pension benefits.

\* \* \* \* \*

## New York City Fire Pension Funds

**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**

**June 30, 2023**  
**(In thousands)**

	<u>QPP*</u>	<u>FFVSF</u>	<u>FOVSF</u>	<u>TOTAL</u>
Total pension liability:				
Service cost	\$ 578,872	\$ 8,707	\$ 5,033	\$ 592,612
Interest	1,729,818	31,573	19,872	1,781,263
Changes of benefit terms	36,206	-	-	36,206
Differences between expected and actual experience	332,835	468	7,055	340,358
Changes of assumptions	-	-	-	-
Benefit payments and withdrawals	<u>(1,699,912)</u>	<u>(48,474)</u>	<u>(28,163)</u>	<u>(1,776,549)</u>
Net change in total pension liability	977,819	(7,726)	3,797	973,890
Total pension liability - beginning	<u>24,968,435</u>	<u>466,162</u>	<u>292,696</u>	<u>25,727,293</u>
Total pension liability - ending (a)	<u>25,946,254</u>	<u>458,436</u>	<u>296,493</u>	<u>26,701,183</u>
Plan fiduciary net position:				
Employer contributions	1,423,679	-	-	1,423,679
Member contributions	118,264	-	-	118,264
Net investment income	1,351,793	41,566	33,257	1,426,616
Benefit payments and withdrawals	(1,699,912)	(48,474)	(28,163)	(1,776,549)
Administrative expenses	(13,020)	-	-	(13,020)
Other changes	<u>811</u>	<u>11</u>	<u>16</u>	<u>838</u>
Net change in plan fiduciary net position	<u>1,181,615</u>	<u>(6,897)</u>	<u>5,110</u>	<u>1,179,828</u>
Accrued transfers to/from VSFs	-	-	-	-
Plan fiduciary net position - beginning	<u>17,472,164</u>	<u>452,127</u>	<u>333,347</u>	<u>18,257,638</u>
Plan fiduciary net position - ending (b) **	<u>18,653,779</u>	<u>445,230</u>	<u>338,457</u>	<u>19,437,466</u>
Employer's net pension liability - ending (a)-(b)	<u>\$ 7,292,475</u>	<u>\$ 13,206</u>	<u>\$ (41,964)</u>	<u>\$ 7,263,717</u>
Plan fiduciary net position as a percentage of the total pension liability	<u>71.89%</u>	<u>97.12%</u>	<u>114.15%</u>	<u>72.80%</u>
Covered payroll	<u>\$ 1,438,282</u>	<u>N/A</u>	<u>N/A</u>	<u>\$ 1,438,282</u>
Employer's net pension liability as a percentage of covered payroll	<u>507.03%</u>	<u>N/A</u>	<u>N/A</u>	<u>505.03%</u>

\*Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

\*\*Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

See Report of Independent Certified Public Accountants.

New York City Fire Pension Funds

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

June 30, 2022  
(In thousands)

	QPP*	FFVSF	FOVSF	TOTAL
Total pension liability:				
Service cost	\$ 572,460	\$ 8,824	\$ 5,035	\$ 586,319
Interest	1,673,848	32,102	20,250	1,726,200
Differences between expected and actual experience	171,135	(2,124)	(3,862)	165,149
Changes of assumptions	-	-	-	-
Benefit payments and withdrawals	<u>(1,551,182)</u>	<u>(44,087)</u>	<u>(25,536)</u>	<u>(1,620,805)</u>
Net change in total pension liability	866,261	(5,285)	(4,113)	856,863
Total pension liability - beginning	<u>24,102,174</u>	<u>471,448</u>	<u>296,809</u>	<u>24,870,431</u>
Total pension liability - ending (a)	<u>24,968,435</u>	<u>466,163</u>	<u>292,696</u>	<u>25,727,294</u>
Plan fiduciary net position:				
Employer contributions	1,446,992	-	-	1,446,992
Member contributions	134,469	-	-	134,469
Net investment income	(1,454,918)	(72,525)	(55,414)	(1,582,857)
Benefit payments and withdrawals	(1,551,182)	(44,088)	(25,536)	(1,620,806)
Administrative expenses	(12,711)	-	-	(12,711)
Other changes	<u>953</u>	<u>-</u>	<u>-</u>	<u>953</u>
Net change in plan fiduciary net position	<u>(1,436,397)</u>	<u>(116,613)</u>	<u>(80,950)</u>	<u>(1,633,960)</u>
Accrued transfers to/from VSFs	-	-	-	-
Plan fiduciary net position - beginning	<u>18,908,561</u>	<u>568,740</u>	<u>414,297</u>	<u>19,891,598</u>
Plan fiduciary net position - ending (b) **	<u>17,472,164</u>	<u>452,127</u>	<u>333,347</u>	<u>18,257,638</u>
Employer's net pension liability - ending (a)-(b)	<u>\$ 7,496,271</u>	<u>\$ 14,036</u>	<u>\$ (40,651)</u>	<u>\$ 7,469,656</u>
Plan fiduciary net position as a percentage of the total pension liability	<u>69.98%</u>	<u>96.99%</u>	<u>113.89%</u>	<u>70.97%</u>
Covered payroll	<u>\$ 1,401,378</u>	<u>N/A</u>	<u>N/A</u>	<u>\$ 1,401,378</u>
Employer's net pension liability as a percentage of covered payroll	<u>534.92%</u>	<u>N/A</u>	<u>N/A</u>	<u>533.02%</u>

\*Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

\*\*Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

See Report of Independent Certified Public Accountants.

## New York City Fire Pension Funds

**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**

**June 30, 2021**  
**(In thousands)**

	<u>QPP*</u>	<u>FFVSF</u>	<u>FOVSF</u>	<u>TOTAL</u>
Total pension liability:				
Service cost	\$ 557,190	\$ 8,645	\$ 4,994	\$ 570,829
Interest	1,619,391	33,008	20,282	1,672,681
Differences between expected and actual experience	(18,712)	(7,733)	(1,068)	(27,513)
Changes of assumptions	117,706	(2,933)	(1,612)	113,161
Benefit payments and withdrawals	<u>(1,475,836)</u>	<u>(44,143)</u>	<u>(20,726)</u>	<u>(1,540,705)</u>
Net change in total pension liability	799,739	(13,156)	1,870	788,453
Total pension liability - beginning	<u>23,302,435</u>	<u>484,604</u>	<u>294,939</u>	<u>24,081,978</u>
Total pension liability - ending (a)	<u>24,102,174</u>	<u>471,448</u>	<u>296,809</u>	<u>24,870,431</u>
Plan fiduciary net position:				
Employer contributions	1,436,977	-	-	1,436,977
Member contributions	112,566	-	-	112,566
Net investment income	3,757,865	119,157	86,235	3,963,257
Benefit payments and withdrawals	(1,475,835)	(44,144)	(20,726)	(1,540,705)
Administrative expenses	(10,345)	-	-	(10,345)
Other changes	<u>758</u>	<u>-</u>	<u>-</u>	<u>758</u>
Net change in plan fiduciary net position	<u>3,821,986</u>	<u>75,013</u>	<u>65,509</u>	<u>3,962,508</u>
Accrued transfers to/from VSFs	-	-	-	-
Plan fiduciary net position - beginning	<u>15,086,575</u>	<u>493,727</u>	<u>348,788</u>	<u>15,929,090</u>
Plan fiduciary net position - ending (b) **	<u>18,908,561</u>	<u>568,740</u>	<u>414,297</u>	<u>19,891,598</u>
Employer's net pension liability - ending (a)-(b)	<u>\$ 5,193,613</u>	<u>\$ (97,292)</u>	<u>\$ (117,488)</u>	<u>\$ 4,978,833</u>
Plan fiduciary net position as a percentage of the total pension liability	<u>78.45%</u>	<u>120.64%</u>	<u>139.58%</u>	<u>79.98%</u>
Covered payroll	<u>\$ 1,348,006</u>	<u>N/A</u>	<u>N/A</u>	<u>\$ 1,348,006</u>
Employer's net pension liability as a percentage of covered payroll	<u>385.28%</u>	<u>N/A</u>	<u>N/A</u>	<u>369.35%</u>

\*Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

\*\*Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

See Report of Independent Certified Public Accountants.

New York City Fire Pension Funds

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

June 30, 2020  
(In thousands)

	<u>QPP*</u>	<u>FFVSF</u>	<u>FOVSF</u>	<u>TOTAL</u>
Total pension liability:				
Service cost	\$ 559,171	\$ 8,526	\$ 4,958	\$ 572,655
Interest	1,562,741	33,410	20,386	1,616,537
Differences between expected and actual experience	150,563	(3,291)	(3,547)	143,725
Benefit payments and withdrawals	<u>(1,447,071)</u>	<u>(44,850)</u>	<u>(25,802)</u>	<u>(1,517,723)</u>
Net change in total pension liability	825,404	(6,205)	(4,005)	815,194
Total pension liability - beginning	<u>22,477,031</u>	<u>490,809</u>	<u>298,944</u>	<u>23,266,784</u>
Total pension liability - ending (a)	<u>23,302,435</u>	<u>484,604</u>	<u>294,939</u>	<u>24,081,978</u>
Plan fiduciary net position:				
Employer contributions	1,419,270	-	-	1,419,270
Member contributions	106,821	-	-	106,821
Net investment income	681,383	21,517	15,839	718,739
Benefit payments and withdrawals	(1,447,071)	(44,850)	(25,802)	(1,517,723)
Administrative expenses	(9,131)	-	-	(9,131)
Other changes	<u>(17,315)</u>	<u>12,792</u>	<u>7,365</u>	<u>2,842</u>
Net change in plan fiduciary net position	<u>733,957</u>	<u>(10,541)</u>	<u>(2,598)</u>	<u>720,818</u>
Accrued transfers to/from VSFs	15,000	(15,000)	-	-
Plan fiduciary net position - beginning	<u>14,337,618</u>	<u>519,268</u>	<u>351,386</u>	<u>15,208,272</u>
Plan fiduciary net position - ending (b) **	<u>15,086,575</u>	<u>493,727</u>	<u>348,788</u>	<u>15,929,090</u>
Employer's net pension liability - ending (a)-(b)	<u>\$ 8,215,860</u>	<u>\$ (9,123)</u>	<u>\$ (53,849)</u>	<u>\$ 8,152,888</u>
Plan fiduciary net position as a percentage of the total pension liability	<u>64.74%</u>	<u>101.88%</u>	<u>118.26%</u>	<u>66.15%</u>
Covered payroll	<u>\$ 1,336,843</u>	<u>N/A</u>	<u>N/A</u>	<u>\$ 1,336,843</u>
Employer's net pension liability as a percentage of covered payroll	<u>614.57%</u>	<u>N/A</u>	<u>N/A</u>	<u>609.86%</u>

\*Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

\*\*Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

See Report of Independent Certified Public Accountants.

## New York City Fire Pension Funds

**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**

**June 30, 2019**  
**(In thousands)**

	<u>QPP*</u>	<u>FFVSF</u>	<u>FOVSF</u>	<u>TOTAL</u>
Total pension liability:				
Service cost	\$ 467,493	\$ 10,961	\$ 6,373	\$ 484,827
Interest	1,460,537	37,366	25,708	1,523,611
Differences between expected and actual experience	154,208	6,872	(20,300)	140,780
Changes of assumptions	697,113	(64,235)	(61,110)	571,768
Benefit payments and withdrawals	<u>(1,376,090)</u>	<u>(45,218)</u>	<u>(24,806)</u>	<u>(1,446,114)</u>
Net change in total pension liability	1,403,261	(54,254)	(74,135)	1,274,872
Total pension liability - beginning	<u>21,073,770</u>	<u>545,063</u>	<u>373,079</u>	<u>21,991,912</u>
Total pension liability - ending (a)	<u>22,477,031</u>	<u>490,809</u>	<u>298,944</u>	<u>23,266,784</u>
Plan fiduciary net position:				
Employer contributions	1,398,565	-	-	1,398,565
Member contributions	108,015	-	-	108,015
Net investment income	933,889	27,979	20,480	982,348
Benefit payments and withdrawals	(1,376,090)	(45,218)	(24,806)	(1,446,114)
Administrative expenses	(9,861)	-	-	(9,861)
Other changes	<u>2,057</u>	<u>-</u>	<u>-</u>	<u>2,057</u>
Net change in plan fiduciary net position	<u>1,056,575</u>	<u>(17,239)</u>	<u>(4,326)</u>	<u>1,035,010</u>
Accrued transfers to/from VSF's	14,000	(14,000)	-	-
Plan fiduciary net position - beginning	<u>13,267,043</u>	<u>550,507</u>	<u>355,712</u>	<u>14,173,262</u>
Plan fiduciary net position - ending (b) **	<u>14,337,618</u>	<u>519,268</u>	<u>351,386</u>	<u>15,208,272</u>
Employer's net pension liability - ending (a)-(b)	<u>\$ 8,139,413</u>	<u>\$ (28,459)</u>	<u>\$ (52,442)</u>	<u>\$ 8,058,512</u>
Plan fiduciary net position as a percentage of the total pension liability	<u>63.79%</u>	<u>105.80%</u>	<u>117.54%</u>	<u>65.36%</u>
Covered payroll	<u>\$ 1,302,872</u>	<u>N/A</u>	<u>N/A</u>	<u>\$ 1,302,872</u>
Employer's net pension liability as a percentage of covered payroll	<u>624.73%</u>	<u>N/A</u>	<u>N/A</u>	<u>618.52%</u>

\*Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

\*\*Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

See Report of Independent Certified Public Accountants.

## New York City Fire Pension Funds

**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**

**June 30, 2018**  
**(In thousands)**

	<u>QPP*</u>	<u>FFVSF</u>	<u>FOVSF</u>	<u>TOTAL</u>
Total pension liability:				
Service cost	\$ 419,209	\$ 12,234	\$ 4,926	\$ 436,369
Interest	1,422,180	37,221	25,208	1,484,609
Changes of benefit terms	14,335	(2,416)	(317)	11,602
Differences between expected and actual experience	141,892	(12,073)	(5,183)	124,636
Benefit payments and withdrawals	<u>(1,308,467)</u>	<u>(46,976)</u>	<u>(24,090)</u>	<u>(1,379,533)</u>
Net change in total pension liability	689,149	(12,010)	544	677,683
Total pension liability - beginning	<u>20,384,622</u>	<u>557,073</u>	<u>372,535</u>	<u>21,314,230</u>
Total pension liability - ending (a)	<u>21,073,771</u>	<u>545,063</u>	<u>373,079</u>	<u>21,991,913</u>
Plan fiduciary net position:				
Employer contributions	1,200,417	-	-	1,200,417
Member contributions	108,338	-	-	108,338
Net investment income	1,188,860	35,406	25,465	1,249,731
Benefit payments and withdrawals	(1,308,467)	(46,976)	(24,090)	(1,379,533)
Administrative expenses	(6,412)	-	-	(6,412)
Other changes	<u>9,411</u>	<u>-</u>	<u>-</u>	<u>9,411</u>
Net change in plan fiduciary net position	<u>1,192,147</u>	<u>(11,570)</u>	<u>1,375</u>	<u>1,181,952</u>
Accrued transfers to/from VSF's	(15,000)	15,000	-	-
Plan fiduciary net position - beginning	<u>12,089,896</u>	<u>547,077</u>	<u>354,337</u>	<u>12,991,310</u>
Plan fiduciary net position - ending (b) **	<u>13,267,043</u>	<u>550,507</u>	<u>355,712</u>	<u>14,173,262</u>
Employer's net pension liability - ending (a)-(b)	<u>\$ 7,806,728</u>	<u>\$ (5,444)</u>	<u>\$ 17,367</u>	<u>\$ 7,818,651</u>
Plan fiduciary net position as a percentage of the total pension liability	<u>62.96%</u>	<u>101.00%</u>	<u>95.34%</u>	<u>64.45%</u>
Covered payroll	<u>\$ 1,164,528</u>	<u>N/A</u>	<u>N/A</u>	<u>\$ 1,164,528</u>
Employer's net pension liability as a percentage of covered payroll	<u>670.38%</u>	<u>N/A</u>	<u>N/A</u>	<u>671.40%</u>

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\*\*Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

See Report of Independent Certified Public Accountants.



## New York City Fire Pension Funds

**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**

**June 30, 2017**  
**(In thousands)**

	<u>QPP*</u>	<u>FFVSF</u>	<u>FOVSF</u>	<u>TOTAL</u>
Total pension liability:				
Service cost	\$ 415,221	\$ 12,180	\$ 5,081	\$ 432,482
Interest	1,375,677	38,029	25,099	1,438,805
Differences between expected and actual experience	148,046	(13,683)	115	134,478
Benefit payments and withdrawals	(1,265,817)	(47,667)	(21,859)	(1,335,343)
Net change in total pension liability	673,127	(11,141)	8,436	670,422
Total pension liability - beginning	19,711,495	568,214	364,099	20,643,808
Total pension liability - ending (a)	<u>20,384,622</u>	<u>557,073</u>	<u>372,535</u>	<u>21,314,230</u>
Plan fiduciary net position:				
Employer contributions	1,061,170	-	-	1,061,170
Member contributions	108,368	-	-	108,368
Net investment income	1,284,871	46,755	40,095	1,371,721
Benefit payments and withdrawals	(1,265,817)	(47,667)	(21,859)	(1,335,343)
Administrative expenses	-	-	-	-
Other changes	47,284	-	-	47,284
Net change in plan fiduciary net position	<u>1,235,876</u>	<u>(912)</u>	<u>18,236</u>	<u>1,253,200</u>
Accrued transfers to/from VSF's	(45,743)	23,914	21,829	-
Plan fiduciary net position - beginning	10,899,763	524,075	314,272	11,738,110
Plan fiduciary net position - ending (b) **	<u>12,089,896</u>	<u>547,077</u>	<u>354,337</u>	<u>12,991,310</u>
Employer's net pension liability - ending (a)-(b)	<u>\$ 8,294,726</u>	<u>\$ 9,996</u>	<u>\$ 18,198</u>	<u>\$ 8,322,920</u>
Plan fiduciary net position as a percentage of the total pension liability	<u>59.31%</u>	<u>98.21%</u>	<u>95.12%</u>	<u>60.95%</u>
Covered payroll	<u>\$ 1,145,919</u>	<u>N/A</u>	<u>N/A</u>	<u>\$ 1,145,919</u>
Employer's net pension liability as a percentage of covered payroll	<u>723.85%</u>	<u>N/A</u>	<u>N/A</u>	<u>726.31%</u>

\*Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

\*\*Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

See Report of Independent Certified Public Accountants.

## New York City Fire Pension Funds

**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**

**June 30, 2016**  
**(In thousands)**

	<u>QPP*</u>	<u>FFVSF</u>	<u>FOVSF</u>	<u>TOTAL</u>
Total pension liability:				
Service cost	\$ 414,614	\$ 11,652	\$ 5,002	\$ 431,268
Interest	1,332,473	38,716	24,546	1,395,735
Differences between expected and actual experience	324,429	3,728	(4,548)	323,609
Changes of assumptions	386,534	12,421	6,544	405,499
Benefit payments and withdrawals	<u>(1,290,862)</u>	<u>(46,407)</u>	<u>(21,826)</u>	<u>(1,359,095)</u>
Net change in total pension liability	1,167,188	20,110	9,718	1,197,016
Total pension liability - beginning	<u>18,544,307</u>	<u>548,104</u>	<u>354,381</u>	<u>19,446,792</u>
Total pension liability - ending (a)	<u>19,711,495</u>	<u>568,214</u>	<u>364,099</u>	<u>20,643,808</u>
Plan fiduciary net position:				
Employer contributions	1,054,478	-	-	1,054,478
Member contributions	116,619	-	-	116,619
Net investment income	197,398	4,669	1,037	203,104
Benefit payments and withdrawals	(1,290,862)	(46,407)	(21,826)	(1,359,095)
Other changes	<u>43,673</u>	<u>-</u>	<u>-</u>	<u>43,673</u>
Net change in plan fiduciary net position	<u>121,306</u>	<u>(41,738)</u>	<u>(20,789)</u>	<u>58,779</u>
Accrued transfers to/from VSF's	(36,873)	18,739	18,134	-
Plan fiduciary net position - beginning	<u>10,815,330</u>	<u>547,074</u>	<u>316,927</u>	<u>11,679,331</u>
Plan fiduciary net position - ending (b) **	<u>10,899,763</u>	<u>524,075</u>	<u>314,272</u>	<u>11,738,110</u>
Employer's net pension liability - ending (a)-(b)	<u>\$ 8,811,732</u>	<u>\$ 44,139</u>	<u>\$ 49,827</u>	<u>\$ 8,905,698</u>
Plan fiduciary net position as a percentage of the total pension liability	<u>55.30%</u>	<u>92.23%</u>	<u>86.31%</u>	<u>56.86%</u>
Covered payroll	<u>\$ 1,129,470</u>	<u>N/A</u>	<u>N/A</u>	<u>\$ 1,129,470</u>
Employer's net pension liability as a percentage of covered payroll	<u>780.17%</u>	<u>N/A</u>	<u>N/A</u>	<u>788.48%</u>

\*Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

\*\*Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

See Report of Independent Certified Public Accountants.

New York City Fire Pension Funds

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

June 30, 2015  
(In thousands)

	QPP*	FFVSF	FOVSF	TOTAL
Total pension liability:				
Service cost	\$ 403,514	\$ 11,500	\$ 4,561	\$ 419,575
Interest	1,251,448	37,447	23,920	1,312,815
Differences between expected and actual experience	180,533	(4,324)	(4,862)	171,347
Benefit payments and withdrawals	(1,150,505)	(47,819)	(22,117)	(1,220,441)
Net change in total pension liability	684,990	(3,196)	1,502	683,296
Total pension liability - beginning ***	17,859,317	551,300	352,879	18,763,496
Total pension liability - ending (a)	18,544,307	548,104	354,381	19,446,792
Plan fiduciary net position:				
Employer contributions	988,784	-	-	988,784
Member contributions	108,582	-	-	108,582
Net investment income	271,430	18,888	12,249	302,567
Benefit payments and withdrawals	(1,150,505)	(47,819)	(22,117)	(1,220,441)
Other changes	41,201	-	-	41,201
Net change in plan fiduciary net position	259,492	(28,931)	(9,868)	220,693
Accrued transfers to/from VSF's	(40,000)	30,000	10,000	-
Plan fiduciary net position - beginning	10,595,838	546,005	316,795	11,458,638
Plan fiduciary net position - ending (b) **	10,815,330	547,074	316,927	11,679,331
Employer's net pension liability - ending (a)-(b)	\$ 7,728,977	\$ 1,030	\$ 37,454	\$ 7,767,461
Plan fiduciary net position as a percentage of the total pension liability	71.46%	0.19%	11.82%	66.51%
Covered payroll	\$ 1,111,744	N/A	N/A	\$ 1,111,744
Employer's net pension liability as a percentage of covered payroll	695.21%	N/A	N/A	698.67%

\*Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

\*\*Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

\*\*\*The beginning total pension liability does not agree to the prior year ending total pension liability because amounts were revised to include costs and liabilities associated with the Special Accidental Death Benefits payable under Section 208-F of the General Municipal Law.

See Report of Independent Certified Public Accountants.

## New York City Fire Pension Funds

**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**

**June 30, 2014**  
**(In thousands)**

	<u>QPP*</u>	<u>FFVSF</u>	<u>FOVSF</u>	<u>TOTAL</u>
Total pension liability:				
Service cost	\$ 397,037	\$ 11,403	\$ 4,471	\$ 412,911
Interest	1,153,702	37,757	23,818	1,215,277
Benefit payments and withdrawals	(1,099,162)	(50,822)	(22,014)	(1,171,998)
Net change in total pension liability	451,577	(1,662)	6,275	456,190
Total pension liability - beginning	16,624,736	552,962	346,604	17,524,302
Total pension liability - ending (a)	17,076,313	551,300	352,879	17,980,492
Plan fiduciary net position:				
Employer contributions	969,956	-	-	969,956
Member contributions	108,859	-	-	108,859
Net investment income	1,569,013	69,027	51,445	1,689,485
Benefit payments and withdrawals	(1,099,162)	(50,822)	(22,014)	(1,171,998)
Other changes	39,980	-	-	39,980
Net change in plan fiduciary net position	1,588,646	18,205	29,431	1,636,282
Accrued transfers to/from VSF's	(120,000)	110,000	10,000	-
Plan fiduciary net position - beginning	9,127,192	417,800	277,364	9,822,356
Plan fiduciary net position - ending (b) **	10,595,838	546,005	316,795	11,458,638
Employer's net pension liability - ending (a)-(b)	<u>\$ 6,480,475</u>	<u>\$ 5,295</u>	<u>\$ 36,084</u>	<u>\$ 6,521,854</u>
Plan fiduciary net position as a percentage of the total pension liability	62.05%	99.04%	89.77%	63.73%
Covered payroll	<u>\$ 1,102,396</u>	<u>N/A</u>	<u>N/A</u>	<u>\$ 1,102,396</u>
Employer's net pension liability as a percentage of covered payroll	<u>587.85%</u>	<u>N/A</u>	<u>N/A</u>	<u>591.61%</u>

\*Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

\*\*Includes liabilities from Special Accidental Death Benefits pursuant to Section 208-F of the General Municipal Law.

See Report of Independent Certified Public Accountants.

New York City Fire Pension Funds

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
 QUALIFIED PENSION PLAN  
 SCHEDULES OF EMPLOYER CONTRIBUTIONS

Fiscal years ended June 30,  
 (in thousands)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	\$ 1,423,601	\$ 1,446,992	\$ 1,436,977	\$ 1,419,270	\$ 1,398,565	\$ 1,200,417	\$ 1,061,170	\$ 1,054,478	\$ 988,784	\$ 969,956
Contributions <sup>1</sup> in relation to the actuarially determined contribution	1,423,601	1,446,992	1,436,977	1,419,270	1,398,565	1,200,417	1,061,170	1,054,478	988,784	969,956
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered payroll <sup>2</sup>	\$ 1,438,282	\$ 1,401,378	\$ 1,348,006	\$ 1,336,843	\$ 1,302,872	\$ 1,164,528	\$ 1,145,919	\$ 1,129,470	\$ 1,111,744	\$ 1,102,396
Contributions as a percentage of covered payroll	98.98%	103.25%	106.60%	106.17%	107.34%	103.08%	92.60%	93.36%	88.94%	87.99%

<sup>1</sup> Employer Contributions made to the QPP only (excludes contributions made to the Excess Benefit Plan).

<sup>2</sup> Projected payroll at time 1.0 under previous roll-forward methodology through 2018. Actual payroll at valuation date (time = 0) beginning in 2019.

See Report of Independent Certified Public Accountants.

**New York City Fire Pension Funds**  
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**QUALIFIED PENSION PLAN**  
**SCHEDULES OF EMPLOYER CONTRIBUTIONS**

**Fiscal years ended June 30,**  
**(in thousands)**

**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 2023 contributions were determined using an actuarial valuation as of June 30, 2021). The methods and assumptions used to determine the actuarially determined contributions are as follows:

Valuation Dates	June 30, 2021		June 30, 2020		June 30, 2019		June 30, 2018		June 30, 2017	
	Entry age	Increasing dollar Level dollar	Entry age	Increasing dollar Level dollar	Entry age	Increasing dollar Level dollar	Entry age	Increasing dollar Level dollar	Entry age	Increasing dollar Level dollar
Actuarial cost method										
Amortization method for unfunded actuarial accrued liabilities:										
Initial unfunded	11 years (closed)		12 years (closed)		13 years (closed)		14 years (closed)		15 years (closed)	
Post-2010 unfunded	5 years (closed)		6 years (closed)		7 years (closed)		8 years (closed)		9 years (closed)	
Initial unfunded	6 years (closed)		7 years (closed)		8 years (closed)		9 years (closed)		10 years (closed)	
2011 Actuarial gain/loss	7 years (closed)		8 years (closed)		9 years (closed)		10 years (closed)		11 years (closed)	
2012 Actuarial gain/loss	8 years (closed)		9 years (closed)		10 years (closed)		11 years (closed)		12 years (closed)	
2013 Actuarial gain/loss	9 years (closed)		10 years (closed)		11 years (closed)		12 years (closed)		13 years (closed)	
2014 Actuarial gain/loss	10 years (closed)		11 years (closed)		12 years (closed)		13 years (closed)		14 years (closed)	
2015 Actuarial gain/loss	11 years (closed)		12 years (closed)		13 years (closed)		14 years (closed)		15 years (closed)	
2016 Actuarial gain/loss	12 years (closed)		13 years (closed)		14 years (closed)		15 years (closed)		16 years (closed)	
2017 Actuarial gain/loss	13 years (closed)		14 years (closed)		15 years (closed)		16 years (closed)		17 years (closed)	
2018 Actuarial gain/loss	14 years (closed)		15 years (closed)		16 years (closed)		17 years (closed)		18 years (closed)	
2019 Actuarial gain/loss	15 years (closed)		16 years (closed)		17 years (closed)		18 years (closed)		19 years (closed)	
2020 Actuarial gain/loss	16 years (closed)		17 years (closed)		18 years (closed)		19 years (closed)		20 years (closed)	
2021 Actuarial gain/loss	17 years (closed)		18 years (closed)		19 years (closed)		20 years (closed)		21 years (closed)	
2021 415 Limit	2 Years (closed)	NA	2 Years (closed)	NA	2 Years (closed)	NA	2 Years (closed)	NA	2 Years (closed)	NA
2021 SADB for Parents	15 years (closed)		15 years (closed)		15 years (closed)		15 years (closed)		15 years (closed)	
Actuarial asset valuation method <sup>1</sup>	Five-year moving average of fair values with a "Market Value Restart" as of June 30, 2019.		Five-year moving average of fair values with a "Market Value Restart" as of June 30, 2019.		Five-year moving average of fair values with a "Market Value Restart" as of June 30, 2019.		Five-year moving average of fair values with a "Market Value Restart" as of June 30, 2019.		Modified six-year moving average of fair values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	

<sup>1</sup> As of June 30, 2014 valuation, the AVA is constrained to be within a corridor of 80% to 120% of the fair value.

New York City Fire Pension Funds  
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**QUALIFIED PENSION PLAN**  
**SCHEDULES OF EMPLOYER CONTRIBUTIONS**

**Fiscal years ended June 30,**  
**(In thousands)**

**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 2023 contributions were determined using an actuarial valuation as of June 30, 2021). The methods and assumptions used to determine the actuarially determined contributions are as follows:

Valuation Dates	June 30, 2016		June 30, 2015		June 30, 2014		June 30, 2013		June 30, 2012	
	Entry age	Increasing dollar Level dollar	Entry age	Increasing dollar Level dollar	Entry age	Increasing dollar Level dollar	Entry age	Increasing dollar Level dollar	Entry age	Increasing dollar Level dollar
Actuarial cost method										
Amortization method for unfunded actuarial accrued liabilities:										
Initial unfunded										
Post-2010 unfunded										
Initial unfunded										
2011 Actuarial gain/loss	16 years (closed)		17 years (closed)		18 years (closed)		19 years (closed)		20 years (closed)	
2012 Actuarial gain/loss	10 years (closed)		11 years (closed)		12 years (closed)		13 years (closed)		14 years (closed)	
2013 Actuarial gain/loss	11 years (closed)		12 years (closed)		13 years (closed)		14 years (closed)		15 years (closed)	
2014 Actuarial gain/loss	12 years (closed)		13 years (closed)		14 years (closed)		15 years (closed)		NA	
2014 Assumption change	13 years (closed)		14 years (closed)		15 years (closed)		NA		NA	
2015 Actuarial gain/loss	18 years (closed)		19 years (closed)		20 years (closed)		NA		NA	
2016 Actuarial gain/loss	14 years (closed)		15 years (closed)		NA		NA		NA	
2016 SADB	15 years (closed)		NA		NA		NA		NA	
2016 Enhanced ADR	22 years (closed)		NA		NA		NA		NA	
2017 Actuarial gain/loss	NA		NA		NA		NA		NA	
2017 VSF escalation offset	NA		NA		NA		NA		NA	
2017 Non-uniformed service	NA		NA		NA		NA		NA	
2017 Assumptions/methods	NA		NA		NA		NA		NA	
2018 Actuarial gain/loss	NA		NA		NA		NA		NA	
2019 Actuarial gain/loss	NA		NA		NA		NA		NA	
2019 Assumptions/methods	NA		NA		NA		NA		NA	
2020 Actuarial gain/loss	NA		NA		NA		NA		NA	
2021 Actuarial gain/loss	NA		NA		NA		NA		NA	
2021 415 Limit	NA		NA		NA		NA		NA	
2021 SADB for Parents	NA		NA		NA		NA		NA	
Actuarial asset valuation method <sup>1</sup>	Modified six-year moving average of fair values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of fair values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of fair values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of fair values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of fair values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of fair values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of fair values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of fair values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of fair values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of fair values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AVA is defined to recognize Fiscal Year 2011 investment performance.

<sup>1</sup> As of June 30, 2014 valuation, the AVA is constrained to be within a corridor of 80% to 120% of the fair value.

New York City Fire Pension Funds

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
 QUALIFIED PENSION PLAN  
 SCHEDULES OF EMPLOYER CONTRIBUTIONS

Fiscal years ended June 30,  
 (In thousands)

Valuation Dates	June 30, 2021	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017
Actuarial assumptions: Assumed rate of return <sup>2</sup>	7.0% per annum, net of investment expenses.	7.0% per annum, net of investment expenses.	7.0% per annum, net of investment expenses.	7.0% per annum, net of investment expenses.	7.0% per annum, net of investment expenses.
Post-retirement mortality <sup>3</sup>	Tables adopted by Board of Trustees during Fiscal Year 2019.	Tables adopted by Board of Trustees during Fiscal Year 2019.	Tables adopted by Board of Trustees during Fiscal Year 2019.	Tables adopted by Board of Trustees during Fiscal Year 2019.	Tables adopted by Board of Trustees during Fiscal Year 2019.
Active service: withdrawal, death, disability, service retirement <sup>3</sup>	Tables adopted by Board of Trustees during Fiscal Year 2019.	Tables adopted by Board of Trustees during Fiscal Year 2019.	Tables adopted by Board of Trustees during Fiscal Year 2019.	Tables adopted by Board of Trustees during Fiscal Year 2019.	Tables adopted by Board of Trustees during Fiscal Year 2019.
Salary increases <sup>2</sup>	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.
Cost-of-living adjustments <sup>2</sup>	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.

<sup>2</sup> Developed using a long-term Consumer Price Inflation assumption of 2.5% per year.

<sup>3</sup> As of June 30, 2019, applied 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 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.

See Report of Independent Certified Public Accountants.



New York City Fire Pension Funds

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
 QUALIFIED PENSION PLAN  
 SCHEDULES OF EMPLOYER CONTRIBUTIONS

Fiscal years ended June 30,  
 (In thousands)

Valuation Dates	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013	June 30, 2012
Actuarial assumptions: Assumed rate of return <sup>2</sup>	7.0% per annum, net of investment expenses.	7.0% per annum, net of investment expenses.	7.0% per annum, net of investment expenses.	7.0% per annum, net of investment expenses.	7.0% per annum, net of investment expenses.
Post-retirement mortality <sup>3</sup>	Tables adopted by Board of Trustees during Fiscal Year 2016.	Tables adopted by Board of Trustees during Fiscal Year 2016.	Tables adopted by Board of Trustees during Fiscal Year 2016.	Tables adopted by Board of Trustees during Fiscal Year 2012.	Tables adopted by Board of Trustees during Fiscal Year 2012.
Active service: withdrawal, death, disability, service retirement <sup>3</sup>	Tables adopted by Board of Trustees during Fiscal Year 2012.	Tables adopted by Board of Trustees during Fiscal Year 2012.	Tables adopted by Board of Trustees during Fiscal Year 2012.	Tables adopted by Board of Trustees during Fiscal Year 2012.	Tables adopted by Board of Trustees during Fiscal Year 2012.
Salary increases <sup>2</sup>	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year.
Cost-of-living adjustments <sup>2</sup>	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.	1.5% per annum for AutoCOLA. 2.5% per annum for Escalation.

<sup>2</sup> Developed using a long-term Consumer Price Inflation assumption of 2.5% per year.

<sup>3</sup> 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.

See Report of Independent Certified Public Accountants.

## New York City Fire Pension Funds

**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULE OF INVESTMENT RETURNS**

The following table displays annual money-weighted rate of return, net of investment expense, for the Funds for each of the past ten fiscal years:

<u>Fiscal Years Ended</u>	<u>QPP</u>	<u>FFVSF</u>	<u>FOVSF</u>
June 30, 2023	7.75%	9.74%	10.33%
June 30, 2022	(7.64%)	(13.34%)	(13.76%)
June 30, 2021	24.86%	25.39%	25.43%
June 30, 2020	4.80%	4.35%	4.54%
June 30, 2019	7.11%	5.70%	5.93%
June 30, 2018	9.34%	7.28%	7.75%
June 30, 2017	12.82%	13.48%	14.53%
June 30, 2016	1.37%	0.88%	0.24%
June 30, 2015	3.28%	4.13%	4.02%
June 30, 2014	17.51%	18.03%	19.57%

See Report of Independent Certified Public Accountants.

**New York City Fire Pension Funds**  
**Additional Supplementary Information**  
**Schedule of Investment Expenses**  
**For Fiscal Year Ended June 30, 2023**

**Schedule 4**

		<b>TOTAL FEES</b>
US EQUITIES	\$	4,124,272
NON-US EQUITIES		9,827,962
FIXED INCOME		4,779,888
OPPORTUNISTIC FIXED INCOME		10,121,325
HEDGE FUNDS		26,264,623
PRIVATE EQUITIES		45,379,520
PRIVATE REAL ESTATE		21,896,987
INFRASTRUCTURE		9,662,163
<b>TOTAL MANAGEMENT EXPENSES</b>		<b>132,056,740</b>
 <b>CONSULTANT EXPENSES:</b>		
SP GLOBAL MARKET INTELLIGENCE LLC RESEARCH FEE 12-29-2022		<b>10,955</b>
OTHER CONSULTING FEES		<b>1,337,214</b>
<b>TOTAL CONSULTANT EXPENSES</b>		<b>1,348,169</b>
 <b>LEGAL EXPENSES:</b>		
<b>TOTAL LEGAL EXPENSES</b>		<b>223,375</b>
 <b>TOTAL CONSULTANT &amp; LEGAL EXPENSES</b>		 <b>1,571,544</b>
 <b>OTHER EXPENSES - ALT. INV. GAIN &amp; LOSS</b>		 <b>39,119,498</b>
<b>OTHER MISCELLANEOUS EXPENSES</b>		<b>5,732,958</b>
<b>TOTAL OTHER MISCELLANEOUS EXPENSES</b>		<b>44,852,456</b>
 <b>TOTAL INVESTMENT EXPENSES FIRE QPP</b>	<b>\$</b>	 <b>178,480,740</b>
 <b>TOTAL INVESTMENT EXPENSES FFVSF</b>	<b>\$</b>	 <b>242,771</b>
<b>TOTAL INVESTMENT EXPENSES FOVSF</b>	<b>\$</b>	<b>175,719</b>
 <b>GRAND TOTAL</b>	<b>\$</b>	 <b>178,899,230</b>

See Report of Independent Certified Public Accountants.

**New York City Fire Pension Funds  
Additional Supplementary Information  
Schedule of Administrative Expenses  
For Fiscal Year Ended June 30, 2023**

**Schedule 5**

**EXPENSE TYPE:**

**PERSONNEL SERVICES**

Salaries and fringe Benefits paid to Personnel	\$ 6,464,143
<b>TOTAL PERSONNEL SERVICES</b>	<b>6,464,143</b>

**PROFESSIONAL SERVICES**

Consultants <sup>1</sup>	2,375,580 *
Medical Board and Medical Consultants	1,054,942
Trading & Investment Services	1,291,353
<b>TOTAL PROFESSIONAL SERVICES</b>	<b>4,721,875</b>

**RENTALS**

Office Space & Equipment	1,212,228
<b>TOTAL RENTALS</b>	<b>1,212,228</b>

**COMMUNICATION & GENERAL SERVICES**

Communication & Utilities	227,547
Office Supplies and Materials	125,773
Postage & General	268,366
<b>TOTAL COMMUNICATION</b>	<b>621,685</b>

<b>FIRE DIRECT EXPENSES FY 2023</b>	<b>\$ 13,019,932</b>
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**EXPENSES INCURRED BY OTHER CITY AGENCIES:  
ON BEHALF OF FIRE PENSION FUND:**

Financial Information Services	591,385
Office of the Actuary	1,526,812
Law Department	60,977
Office of the Comptroller	1,827,390
Office of Payroll Administration	62,468
Office of Management and Budget	102,365
<b>TOTAL OTHER EXPENSES</b>	<b>\$ 4,171,397</b>

<b>TOTAL ADMINISTRATIVE EXPENSES :</b>	<b>\$ 17,191,329</b>
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\* For details see Schedule of Payments to Consultants Schedule 6

See Report of Independent Certified Public Accountants

**New York City Fire Pension Funds  
Additional Supplementary Information  
SCHEDULE OF PAYMENTS TO CONSULTANTS  
Fire Qualified Pension Fund  
Fiscal Year Ended June 30, 2023**

**Schedule 6**

<b>Nature of Services</b>	<b>Firm Name</b>	<b>Total Fees</b>
<b>Consultant Services</b>		
	<b>Blue Diamond Solutions Inc.</b>	<b>\$ 119,942</b>
	<b>Butler Associates LLC</b>	<b>20,000</b>
	<b>GRM Document Management Services</b>	<b>45,277</b>
	<b>FDNY Support Services</b>	<b>790,600</b>
	<b>Net '@ work Inc</b>	<b>4,775</b>
	<b>PB I, LLC</b>	<b>7,105</b>
	<b>NYSID</b>	<b>66,747</b>
	<b>Rutter Associates LLC</b>	<b>1,973</b>
	<b>AI Smarter World</b>	<b>2,376</b>
	<b>Knowledge Builders, Inc</b>	<b>33,222</b>
	<b>Pitta Bishop &amp; Del Giorno LLC</b>	<b>5,000</b>
	<b>Welsome Consulting Advisors</b>	<b>19,600</b>
	<b>All Other</b>	<b>1,258,963</b>
	<b>Total payments to Consultants</b>	<b>\$ 2,375,580</b>

See Report of Independent Certified Public Accountants

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**New York City Fire Pension Funds**  
**Annual Comprehensive Financial Report**  
**A Fiduciary Fund of The City of New York**



**Investment Section**

**Part III**

**Fiscal Year Ended June 30, 2023**

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## **INVESTMENT REPORT**

This report is prepared by management based on data provided by the investment managers of the New York City Fire Pension Funds and the Comptroller of the City of New York through the Bureau of Asset Management. The Bureau of Asset Management, in overseeing the Funds' investment portfolio provides investment advice, implements Board decisions and reports on investment performance. The Boards of Trustees of the respective funds are responsible for ensuring that assets of the Funds are managed efficiently and prudently, in full compliance with the Administrative code of the City of New York (ACNY) and the State Retirement and Social Security Laws, for the benefit of the Funds' membership.

### **Investment Policy**

The Qualified Pension Fund's primary purpose is to provide retirement benefits for members and beneficiaries, while the Variable Supplements' Funds provide supplemental payments other than pension benefits for eligible members. These benefits and payments are financed through accumulated employer contributions, member contributions and investment earnings. The Boards of Trustees therefore set investment objectives to assure adequate accumulation of reserves and to protect the long-term value of assets. The Boards' overall philosophy on strategic factors, i.e., risk tolerance, returns, diversification and liquidity requirements determine the objectives of the investment policy adopted. Listed below are key objectives of the Boards' philosophy:

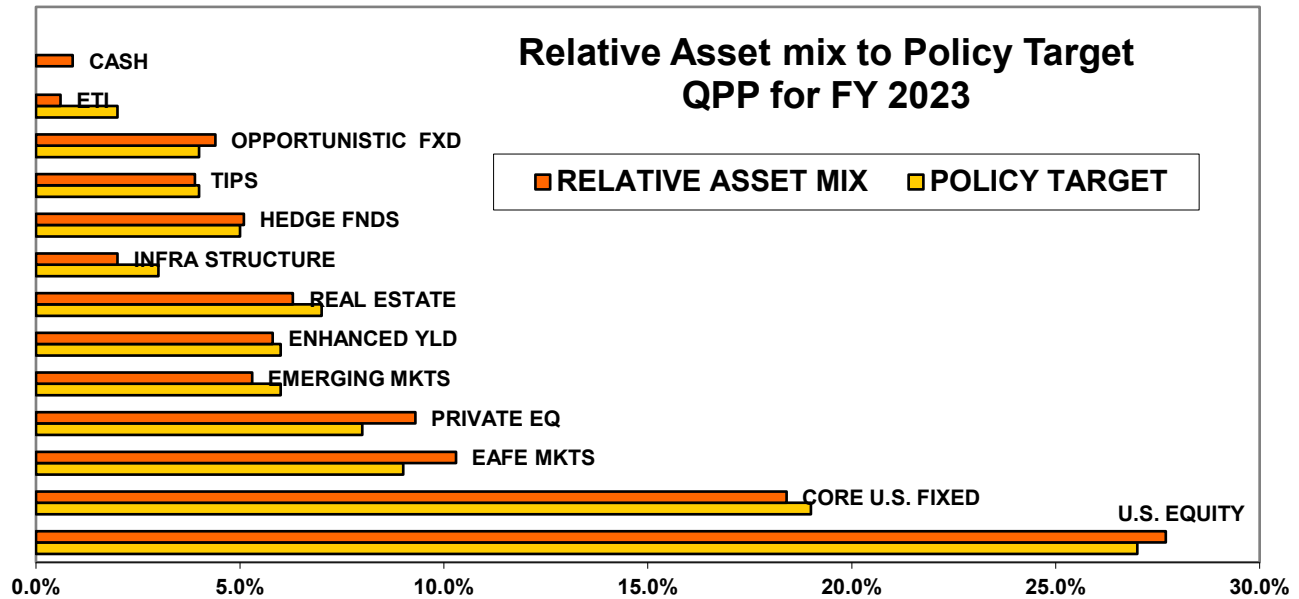
- To ensure that members and beneficiaries receive benefits now and, in the future, the level of investment risk in the portfolio will be prudent and not exceed levels that may jeopardize objectives.
- To enhance portfolio returns moderate risk levels are assumed, since over the long term there is a relationship between the level of risk taken and the rate of return realized.
- To reduce portfolio risk by investing in a broad array of investments and by allocating funds among many asset categories, industries, and geographic locations.
- To maintain liquidity requirements through the structuring of cash flows from contributions, investment income and short-term investments; thereby assuring timely payment of benefits.

The Funds utilize several investment managers to manage the long-term debt and equity portfolio. In addition, the Funds employ independent investment consultants as advisers. The Funds' managers are periodically reviewed for performance and adherence to investment guidelines.

### **Investment Criteria and Asset Allocation**

The Boards' investment policies are implemented using a strategic allocation of assets that meet the objectives of the Funds, while working within the confines of the legislative guidelines. The guidelines dictate that fixed income, equity and other investments may be made as permitted by The New York State Retirement and Social Security Laws (RSSL) §§ 176-178(a) and State Banking Law § 235, the New York City Administrative Code, and the Legal Investments for New York Savings Banks list published by The New York State Banking Department, subject to Note 3, of Notes to the financial statements. Additionally, investments of up to 25% of the Funds' total assets may be invested in instruments not specifically covered by RSSL.

Each Fund’s asset allocation policy is constructed to meet both short-term funding requirements and long-term benefit obligations. The Funds’ portfolio is largely invested in publicly traded securities with additional allocations to private equity, real estate, infrastructure, hedge funds and opportunistic fixed income investments. The percentages assigned to each category of assets held in the Funds are based in part on the results of an analytical study, which indicates the expected rates of return, levels of risk and correlations for various allocations. These allocations are reviewed periodically to address fluctuating market events and new investment opportunities.



The chart above shows a comparison of relative asset mix to policy targets for the QPP as of June 30, 2022. The current targeted policy allocations include investments in the following major categories: U.S equity, Core U.S. fixed income, international equity (EAFE Markets), Private equity, Emerging markets, Enhanced yield bonds, Real Estate investments, Infrastructure investments, Hedge Funds, Treasury inflation protected securities (TIPS), Opportunistic Fixed, Economically Targeted Investments (ETI). The Funds’ assets are periodically re-balanced to keep in line with long-term asset allocation objectives, and actual allocation may vary from policy weights as market values shift and investments are added or terminated. As indicated in the chart, the Fund exceeded targeted allocations of U.S Equity, EAFE Markets, Private Equity, Hedge Funds and Opportunistic fixed while the Emerging Markets met the target allocation. The U.S. Fixed, Enhanced yield, Real estate, Infrastructure, Tips and ETI fell below current targeted allocation levels.

Actual asset allocation in effect on 6/30/2023 for the QPP and the VSF’s are presented in the chart titled "Asset Allocation" (Exhibit 1A -1C). Changes in actual asset allocation for the QPP over the ten years from June 2014 through June 2023 are presented in bar charts showing the major categories and amount of assets held at the end of each fiscal period (Exhibit 1A).

## Summary of Investment Results for fiscal year 2023

The Qualified Pension Fund's investment portfolio of approximately \$18.7 billion returned a gain of 7.8 %<sup>1</sup> on a net basis, for the fiscal year ended June 2023. This gain was above the 7.2% posted by the Fund's policy benchmark and above the actuarial assumed rate of return at 7.0%, for the period. The QPP closed fiscal year 2023 with a net position restricted for pension benefits totaling \$18.7 billion.

The Funds' investment performance reflects a significant gain across most asset classes. For the fiscal period ended June 30, 2023, the fixed income composite as a group returning approximately 0.8% gain for the period. The largest segment within this category, the Total Structured Program of the fixed income group, posting a loss of 1.3%, compared to the benchmark the NYC Custom Structured Index -Fire Benchmark index, which had a loss of .of 1.4%. Total Tips Managers were the worst performers in this category, posted a loss of 1.5%, compared to its BBG BARC AGG (DLY)benchmark loss of 1.4%. Overall, the fixed income sector returned a loss of approximately 0.4% for the quarter ended June 30, 2023.

Total Global Equity were the best performers within the portfolio. The group returned approximately 24.6% for the period, well above its benchmark MSC AC World (Daily Const) which gained 16.5%. The Emerging markets group posted a gain of 7.9%, above its benchmark, the MSCI emerging markets index, which posted a gain of 1.8% over the same period. Total International -World ex USA also posted a gain of 20.7%, above its benchmark World ex USA custom BM, which posted a gain of 16.4%. Total Private Real Estate were among the lowest performers, showing a loss of 1.8% compared to the benchmark, NCREIF NFI-ODCE NET + 100BP. For the quarter ended June 30, 2023, U S Equities posted a gain averaging 7.2%.

For the five-year period ended June 30, 2023, the QPP's portfolio annualized returns remained positive at 6.9% and ahead of the portfolio policy benchmark return at 6.7%.

Investment returns for the Variable Supplements funds loss were greater than the QPP. The Fire Fighters' Variable Supplements Fund, with assets under management of \$ 444.1 million posted a gain of 10.0% for the period; slightly below the gain of 10.1% posted by the policy benchmark. The Fire Officers Variable Supplements Fund with assets under management of \$337.5 million posted gains of approximately 10.3% for the period, slightly higher than the policy benchmark gain of 10.1%.

For the five- year period ended June 30, 2023, the FFVSF's and the FOVSF's annualized returns approximately 5.5 % and 5.6% respectively, while the corresponding policy benchmarks returned 5.5%.

**Schedule 1A-1C** presents our Consolidated Performance Reports, displaying the percentage of portfolio market values and returns for the QPP and the Variable Supplements Funds'. The schedules include returns for each major investment asset class along with the returns for corresponding benchmarks as of June 30, 2023.

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<sup>1</sup> Calculations on the rate of return for investments were prepared using a time -weighted rate of return, based on the market rate of return consistent with Global Investment Performance Standards (GIPS).

## Investment Section

## New York City Fire Pension Funds

The Funds' combined investments including Collateral from securities lending increased from \$20,402.2 million to \$21,665.2 million, by the close of fiscal year 2023. This change is depicted in Exhibit 2, a chart showing changes in total investment at fair value over the ten fiscal periods between 2014 and 2023.

The Funds' Portfolio assets invested during fiscal year 2023 returned net gain of \$ 1428.0 million. The losses were due mainly to the overall performance of the invested assets. Exhibit 3 shows a summary of the changes in investment income over the ten-year period 2014 through 2023.

Listings of the Fund's largest bonds and stocks holdings are presented in Schedule 2A & 3A respectively.

Fees and Brokers' commissions are calculated based on total assets under management for the period. Summaries of Brokers' commissions for investments traded are presented in Schedule 4A.

The Summary of investments presented in Schedule 5A shows the overall fair values of each major investment asset class in the Funds' portfolio, including short-term holdings and collateral from securities lending. The schedule also shows the percentage value of each category in relation to total investments in the Funds for fiscal year 2023.

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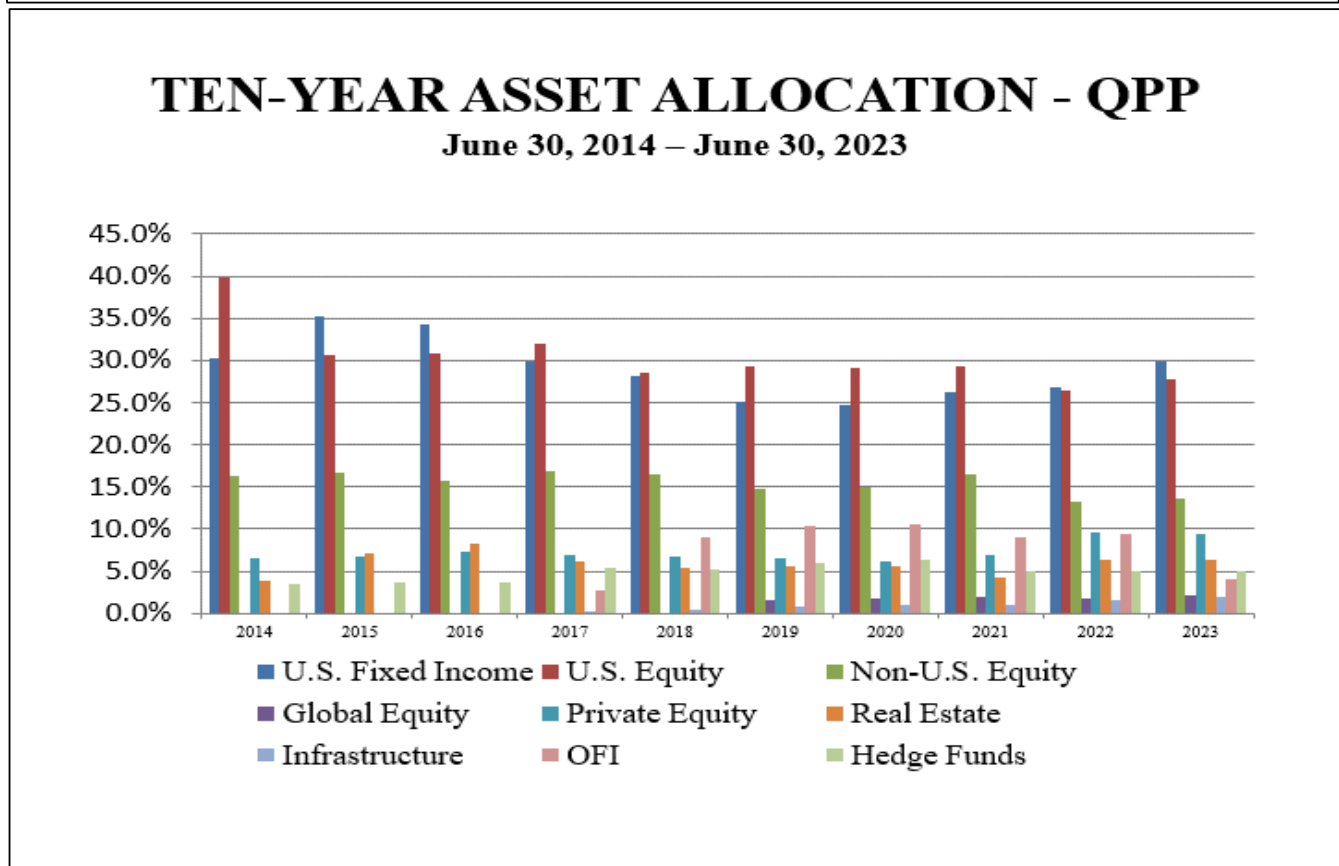
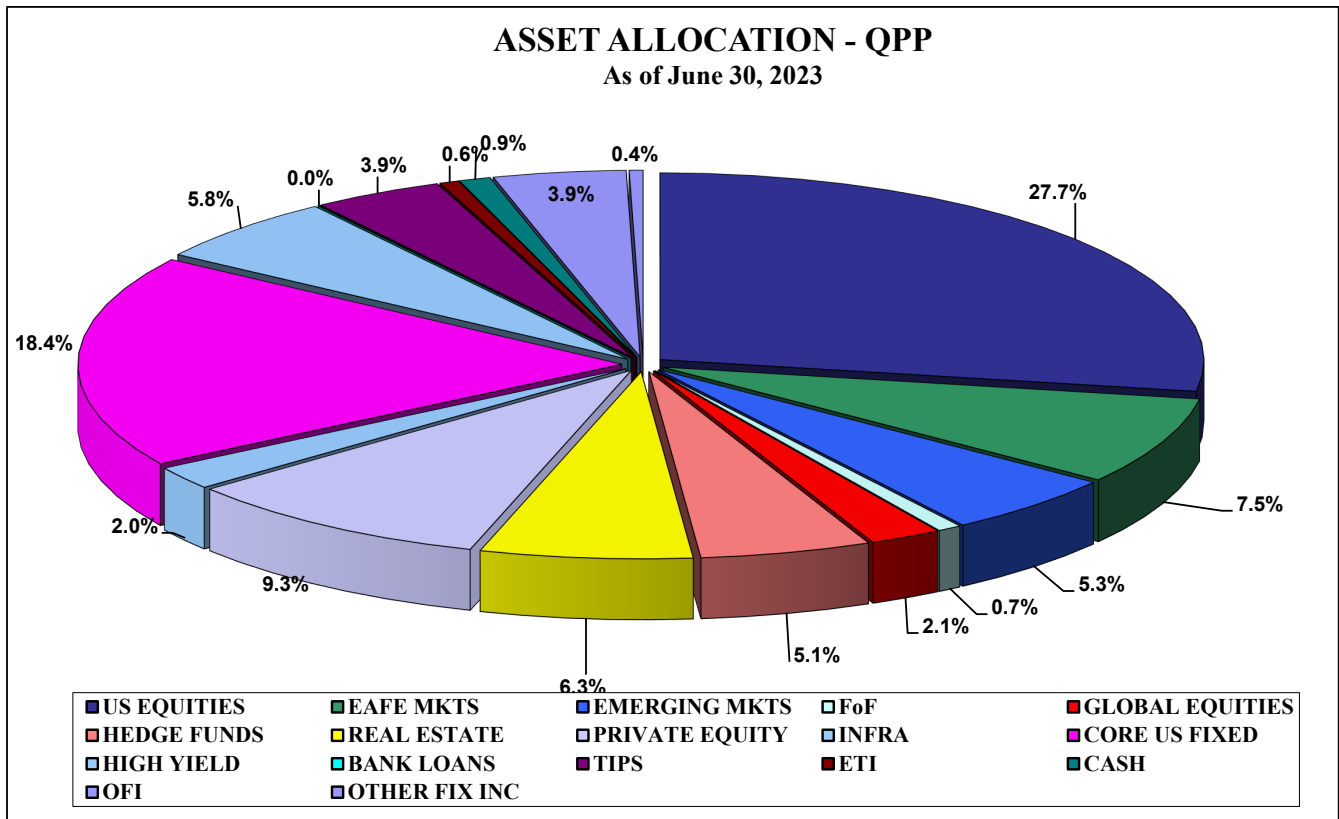


Exhibit 1B

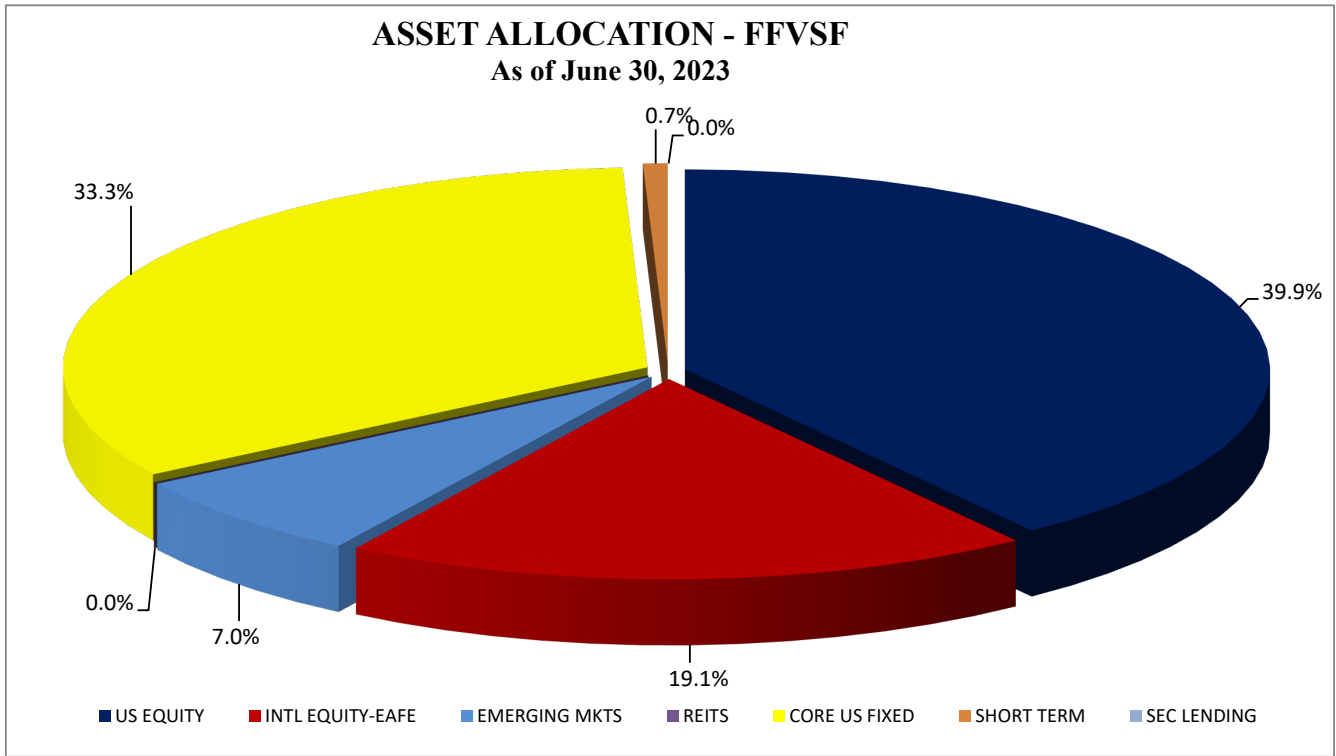
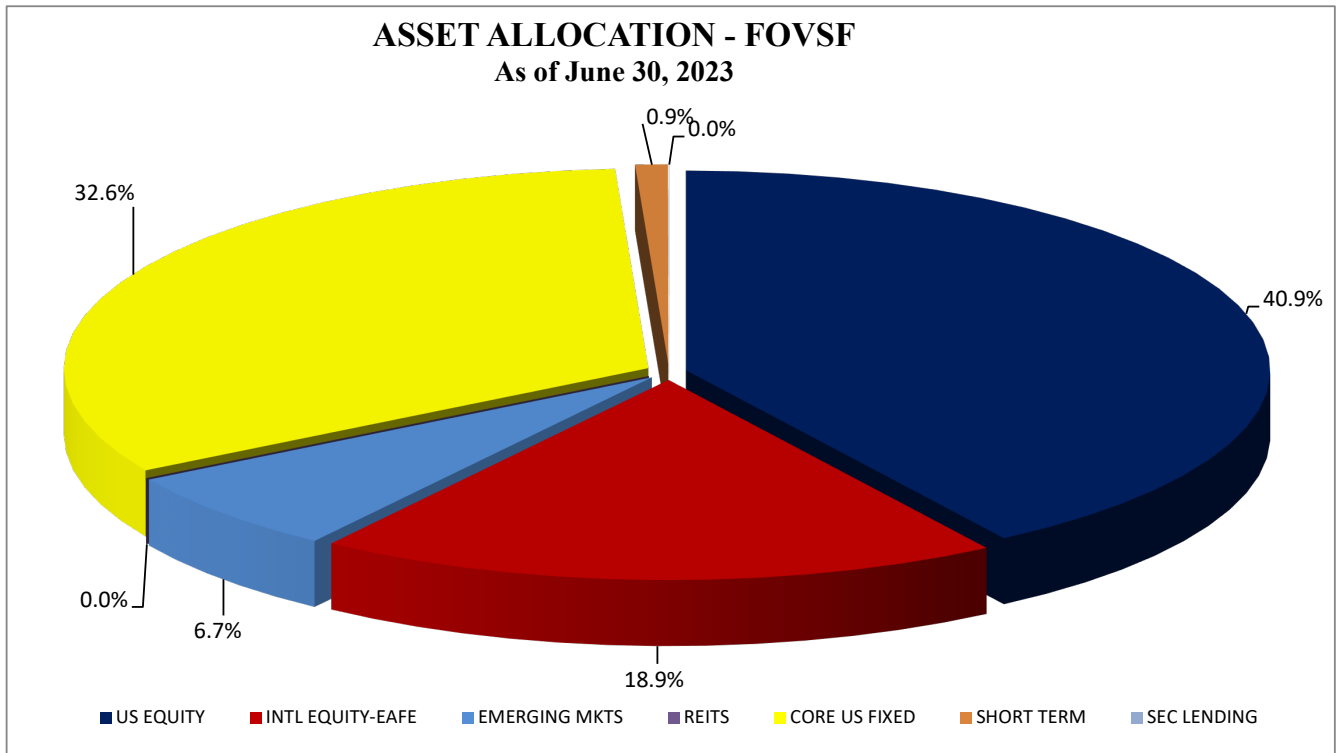


Exhibit 1C



**Investment Section**

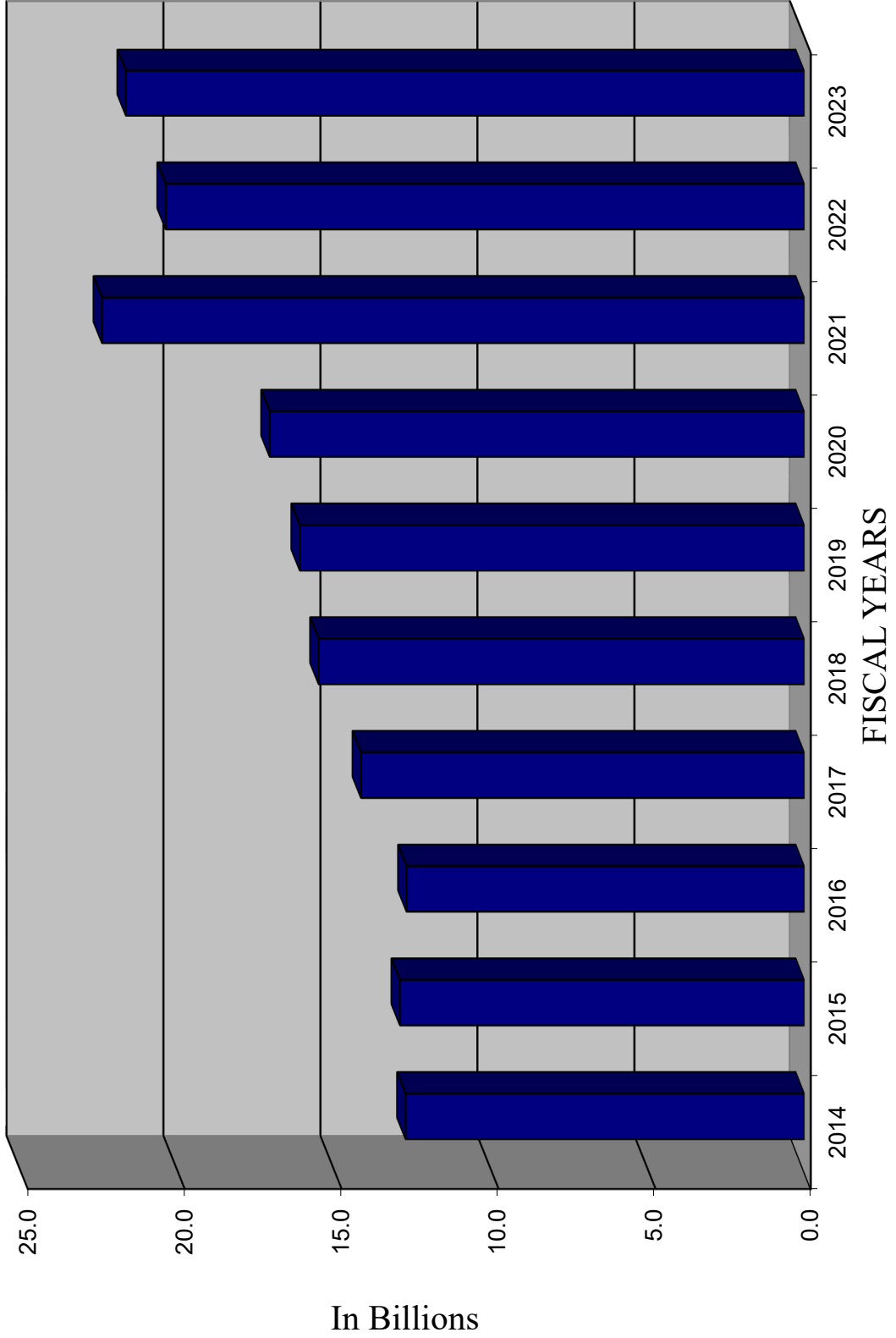
**New York City Fire Pension**

**TOTAL INVESTMENTS**

Fire Funds Combined

(At Fair - Value)

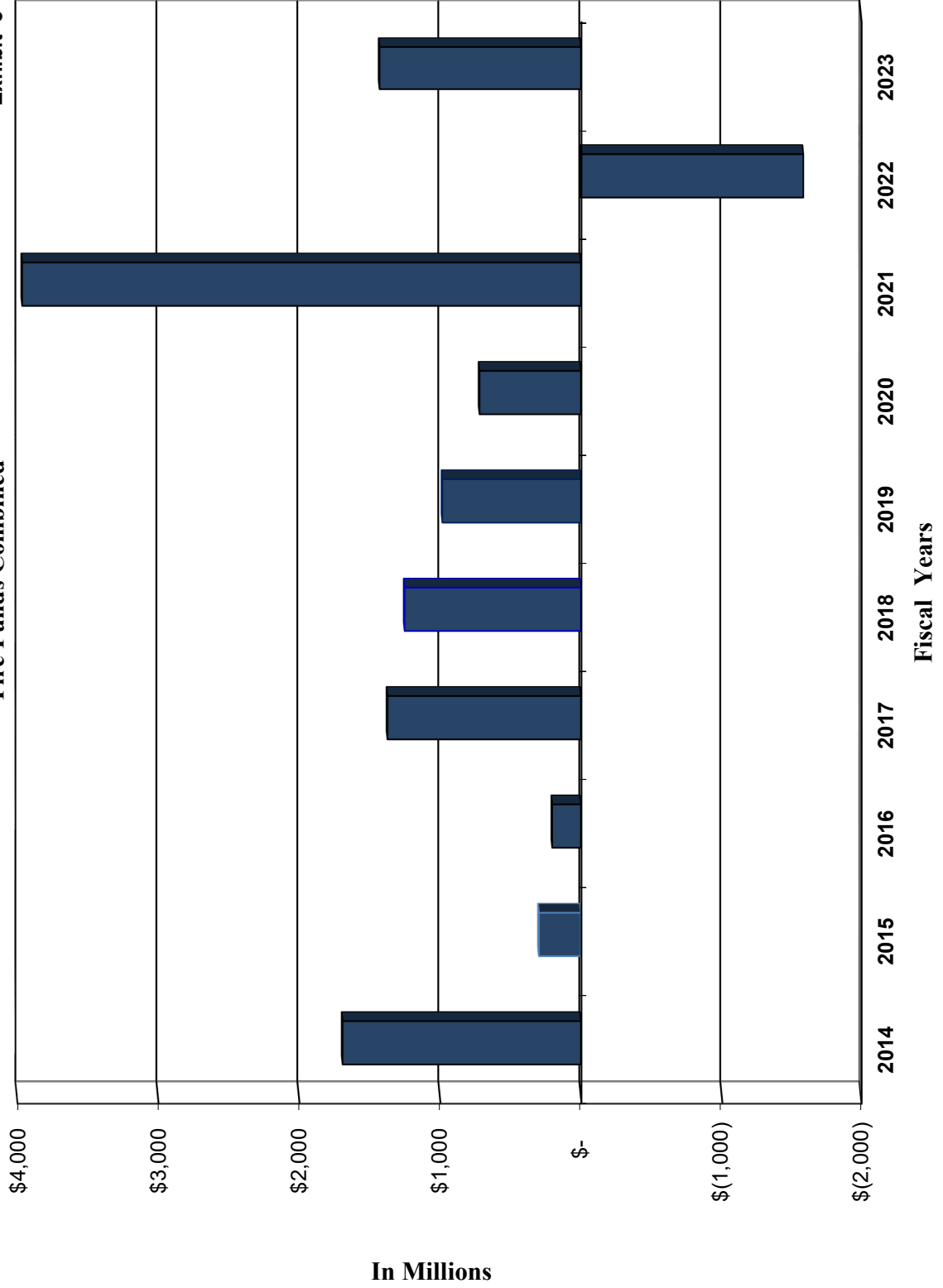
Exhibit 2



INVESTMENT INCOME

Fire Funds Combined

Exhibit 3



In Millions



**Schedule of Portfolio Returns\* Fire QPP**  
**June 30, 2023**

Assets (\$MM)	% Total	Asset Class	3 Mos	YTD	1 YR	3 YRS	5 YRS	10 YRS
			Apr-23 Jun-23	Jan-23 Jun-23	Jul-22 Jun-23	Jul-20 Jun-23	Jul-18 Jun-23	Jul-13 Jun-23
5,194.72	27.71	<b>U.S. Equities</b> Russell 3000	7.16 8.39	14.00 16.17	18.04 18.95	13.80 13.89	10.77 11.39	n/a 12.34
1,414.22	7.54	<b>Total International - World ex-USA</b> World ex-USA Custom BM	3.17 2.67	14.52 10.46	20.74 16.35	8.36 8.87	5.17 4.17	n/a 5.63
991.37	5.29	<b>Total Emerging mkts</b> MSCI Emerging mkts index	3.38 0.90	9.11 4.89	7.91 1.75	4.40 2.32	1.40 0.93	n/a 2.95
132.63	0.71	<b>Total International Fund of Funds</b> MSCI ACWI EX USA IMI Net	2.89 2.38	10.53 9.10	14.97 12.47	8.44 7.33	4.54 3.38	n/a n/a
399.00	2.13	<b>Total Gobal Equity</b> MSC AC World (Daily Const)	6.98 6.18	19.93 13.93	24.61 16.53	7.35 10.99	9.40 8.10	n/a n/a
954.21	5.09	<b>Total Hedge Funds</b> HFRI Fund of Funds Composite Index + 1%	2.32 1.78	0.79 2.80	2.71 4.72	5.24 6.09	5.47 4.35	5.03 4.43
-	-	<b>Total Real Estate Sec.(REITS)</b> DJ US Select Real Estate Securities Index	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
1,745.50	9.31	<b>Total Private Equity</b> NYC R3000+3% Lagged	2.31 7.96	2.72 16.55	-0.19 -5.81	23.53 21.99	16.71 13.74	n/a 14.97
1,180.28	6.30	<b>Total Private Real Estate</b> NCREIF NFI-ODCE NET+100BP	-1.85 -2.64	-4.22 -5.69	-1.77 -9.83	12.78 8.11	9.65 6.61	n/a 8.84
375.01	2.00	<b>Total Infrastructure</b> CPI+ 4%	2.57 1.67	6.32 3.63	8.18 7.22	13.93 9.97	11.86 8.05	n/a n/a
3,445.61	18.38	<b>Total Structured Program</b> NYC Custom Structured Index-Fire	-0.89 -0.92	2.29 2.25	-1.26 -1.36	-4.58 -4.68	1.95 2.62	n/a 2.89
77.66	0.41	<b>Total Core FI-Developing MGRS</b> BBG BARC AGG (DLY)	-0.51 -0.84	2.76 2.09	0.49 -0.94	-3.10 -3.96	1.18 0.77	n/a 1.52
-	-	<b>Total Core FI-Emerging MGRS</b> BBG BARC AGG (DLY)	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
726.64	3.88	<b>Total Tips Managers</b> BBG BARC GBL INF-LK: US TIPS (DLY)	-1.45 -1.42	1.96 1.87	-1.45 -1.40	-0.16 -0.12	2.47 2.49	n/a 2.08
-	-	<b>Total Convertible Bonds</b> ICE BofA ALL US Conv Ex Mandatory	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
108.20	0.58	<b>Total Targeted Investments (No Cash)</b> Fire Custom Benchmark (No Cash)	-1.14 -0.63	2.03 2.03	-1.07 -0.71	-3.37 -3.38	1.12 0.82	1.91 1.57
1,080.72	5.77	<b>Total High Yield</b> High Yield Custom Benchmark	1.74 1.75	5.60 5.38	9.06 9.07	3.68 3.12	3.70 3.34	n/a 4.20
0.95	0.01	<b>Total Bank Loans</b> CSFB Leveraged Loan Index	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a	n/a n/a
741.36	3.95	<b>Total Opportunistic Fixed</b> JPM GHY/CSFB 50/50 BLEND PLUS 300	1.63 3.22	4.49 7.42	3.95 13.02	10.83 8.03	7.11 6.80	n/a 7.45
		<b>Total Fixed Income Segment</b>	-0.39	2.89	0.80	-2.13	2.04	n/a
177.10	0.94	<b>State Street Short Term</b>	1.26	2.39	3.82	1.31	1.53	1.12
0.08	0.00	<b>Cash Account</b>	n/a	n/a	n/a	n/a	n/a	n/a
0.04	0.00	<b>Security Lending</b>	n/a	n/a	n/a	n/a	n/a	n/a
18,745.30	100.00	<b>Total Portfolio</b> <b>Policy Benchmark</b>	2.68 3.25	6.88 8.23	7.76 7.19	7.51 7.01	6.89 6.69	n/a 7.65

\*Calculations on the rate of return for Investments were prepared using a time weighted rate of return, based on the market rate of return consistent with Global Investment Performance Standards (GIPS).

## Investment Section

## New York City Fire Pension Funds

## Schedule 1B

Schedule of Portfolio Returns FFVSF\*  
June 30, 2023

Assets (\$MM)	% Total	Asset Class	3 Mos	YTD	1 YR	3 YRS	5 YRS	10 YRS
			Apr-23 Jun-23	Jan-23 Jun-23	Jul-22 Jun-23	Jul-20 Jun-23	Jul-18 Jun-23	Jul-13 Jun-23
177.25	39.91	<b>U.S. Equities</b> Russell 3000 Daily	8.36 8.39	16.12 16.17	18.68 18.95	13.90 13.89	11.32 11.39	n/a 12.34
84.69	19.07	<b>Total WORLD ex-USA</b> World EX-USA Custom Benchmark	2.87 2.67	10.72 10.46	16.86 16.35	9.33 8.87	4.60 4.17	n/a 5.63
31.26	7.04	<b>Total Emerging Markets</b> MSCI Emerging Markets	0.86 0.90	5.10 4.89	2.05 1.75	2.62 2.32	1.08 0.93	n/a 2.95
147.88	33.30	<b>Total structured Fixed Income</b> BBG U.S. AGG	-0.83 -0.84	2.43 2.09	-0.77 -0.94	-3.94 -3.96	0.82 0.77	n/a 1.52
3.00	0.68	<b>Fire Fighters short term</b>	1.25	2.38	3.89	1.42	1.57	n/a
0.02	0.00	<b>Securities Lending</b>	n/a	n/a	n/a	n/a	n/a	n/a
444.11	100.00	<b>Total Portfolio</b> <b>Policy Benchmark</b>	3.58 3.24	9.40 9.00	9.99 10.13	5.78 5.67	5.53 5.52	n/a 7.08

\*Calculations on the rate of return for Investments were prepared using a time weighted rate of return, based on the market rate of return consistent with Global Investment Performance Standards (GIPS).

## Investment Section

## Schedule 1C

Schedule of Portfolio Returns FOVSF\*  
June 30, 2023

Assets (\$MM)	% Total	Asset Class	3 Mos	YTD	1 YR	3 YRS	5 YRS	10 YRS
			Apr-23 Jun-23	Jan-23 Jun-23	Jul-22 Jun-23	Jul-20 Jun-23	Jul-18 Jun-23	Jul-13 Jun-23
137.91	40.86	<b>U.S. Equities</b> Russell 3000/S&P500	8.28 8.39	15.74 16.17	18.56 18.95	13.83 13.89	11.32 11.39	n/a 12.34
63.87	18.92	<b>Total WORLD ex-USA</b> World EX-USA Custom Benchmark	2.87 2.67	10.72 10.46	16.71 16.35	9.29 8.87	4.47 4.17	n/a 5.63
22.57	6.69	<b>Total Emerging Markets</b> MSCI Emerging Markets	0.86 0.90	5.10 4.89	2.10 1.75	2.60 2.32	1.06 0.93	n/a 2.95
110.15	32.63	<b>Total Structured Fixed Income</b> BBG U.S. AGG	-0.83 -0.84	2.43 2.09	-0.75 -0.94	-3.94 -3.96	0.83 0.77	n/a 1.52
3.04	0.90	<b>Fire Officers' short term</b>	1.25	2.37	3.90	1.34	1.49	n/a
0.02	0.01	<b>Securities Lending</b>	n/a	n/a	n/a	n/a	n/a	n/a
337.54	100.00	<b>Total Portfolio</b> <b>Policy Benchmark</b>	3.63 3.24	9.46 9.00	10.30 10.13	5.83 5.67	5.60 5.52	n/a 7.08

\*Calculations on the rate of return for Investments were prepared using a time weighted rate of return, based on the market rate of return consistent with Global Investment Performance Standards (GIPS).

## List of Largest Bonds Holdings as of June 30, 2023

## Schedule 2A

<u>CUSIP Number</u>	<u>Security Description</u>	<u>Maturity Date</u>	<u>Interest Rate</u>	<u>Par Value</u>	<u>Fair Value</u>
912828YS3	US TREASURY N/B	11/15/2029	1.8%	69,500,000	60,943,160
91282CAH4	US TREASURY N/B	8/31/2027	0.5%	69,500,000	59,623,355
9128286L9	US TREASURY N/B	3/31/2026	2.3%	54,500,000	51,283,410
912828YD6	US TREASURY N/B	8/31/2026	1.4%	55,085,000	50,122,943
91282CCJ8	US TREASURY N/B	6/30/2026	0.9%	50,075,000	45,118,577
9128286B1	US TREASURY N/B	2/15/2029	2.6%	46,035,000	42,656,031
912828Y87	US TREASURY N/B	7/31/2024	1.8%	39,500,000	37,991,100
91282CDK4	US TREASURY N/B	11/30/2026	1.3%	34,500,000	31,083,810
91282CDH1	US TREASURY N/B	11/15/2024	0.8%	26,750,000	25,159,713
91282CGK1	TSY INFL IX N/B	1/15/2033	1.1%	22,291,834	21,352,457
91282CEZ0	TSY INFL IX N/B	7/15/2032	0.6%	22,705,478	20,863,382
91282CFR7	TSY INFL IX N/B	10/15/2027	1.6%	20,222,223	19,923,136
912810SX7	US TREASURY N/B	5/15/2051	2.4%	26,000,000	19,330,480
912828WU0	TSY INFL IX N/B	7/15/2024	0.1%	19,113,587	18,540,561
91282CDX6	TSY INFL IX N/B	1/15/2032	0.1%	20,650,147	18,173,781
91282CCT6	US TREASURY N/B	8/15/2024	0.4%	19,000,000	17,975,710
91282CCB5	US TREASURY N/B	5/15/2031	1.6%	20,540,000	17,454,892
91282CDC2	TSY INFL IX N/B	10/15/2026	0.1%	18,481,334	17,276,166
91282CDN8	US TREASURY N/B	12/15/2024	1.0%	18,000,000	16,940,340
91282CBF7	TSY INFL IX N/B	1/15/2031	0.1%	18,934,013	16,823,059
912828YL8	TSY INFL IX N/B	10/15/2024	0.1%	17,437,450	16,819,118
912828XL9	TSY INFL IX N/B	7/15/2025	0.4%	17,152,937	16,413,989
912828N71	TSY INFL IX N/B	1/15/2026	0.6%	16,895,886	16,109,721
9128283R9	TSY INFL IX N/B	1/15/2028	0.5%	17,148,699	16,038,321
912828H45	TSY INFL IX N/B	1/15/2025	0.3%	16,532,857	15,848,397
91282CGW5	TSY INFL IX N/B	4/15/2028	1.3%	16,181,910	15,655,998
91282CCM1	TSY INFL IX N/B	7/15/2031	0.1%	17,589,434	15,593,209
91282CEJ6	TSY INFL IX N/B	4/15/2027	0.1%	16,651,030	15,410,695
912810SH2	US TREASURY N/B	5/15/2049	2.9%	18,500,000	15,290,620
912828Y38	TSY INFL IX N/B	7/15/2028	0.8%	16,115,497	15,269,111
91282CCX7	US TREASURY N/B	9/15/2024	0.4%	16,000,000	15,080,640
912828ZZ6	TSY INFL IX N/B	7/15/2030	0.1%	16,484,040	14,779,261
9128282L3	TSY INFL IX N/B	7/15/2027	0.4%	15,369,579	14,406,060
9128287D6	TSY INFL IX N/B	7/15/2029	0.3%	15,770,741	14,397,898
912810SK5	US TREASURY N/B	11/15/2049	2.4%	18,800,000	14,037,584
91282CAQ4	TSY INFL IX N/B	10/15/2025	0.1%	14,729,022	13,963,260
912810SN9	US TREASURY N/B	5/15/2050	1.3%	24,600,000	13,832,580
912810SU3	US TREASURY N/B	2/15/2051	1.9%	20,800,000	13,772,720
91282CDB4	US TREASURY N/B	10/15/2024	0.6%	14,500,000	13,661,175
912810SW9	US TREASURY N/B	2/15/2041	1.9%	18,700,000	13,580,127

A complete listing of our portfolio holdings is available from our office upon request

## List of Largest Stocks Holdings as of June 30, 2023

## Schedule 3A

<u>Cusip Number</u>	<u>Security Name</u>	<u>Share/Par Value</u>	<u>Fair Value</u>
037833100	APPLE INC	1,591,623	308,727,113
594918104	MICROSOFT CORP	784,800	267,255,792
023135106	AMAZON.COM INC	943,413	122,983,319
962BFY903	LION INDUSTRIAL TRUST	57,980,509	122,174,789
922VQL904	DE SHAW COMPOSITE FUND, LLC	21,178.76	121,198,856
30303M102	META PLATFORMS INC CLASS A	363,231	104,240,032
67066G104	NVIDIA CORP	235,156	99,475,691
ACI06VJX8	OAK HILL CTR ST PARTNERSHIP	3,482,824	97,917,151
02079K305	ALPHABET INC CL A	686,478	82,171,417
926FDP900	SRS PARTNERS US	12,270,960	83,191,327
ACI06VHR3	APOLLO CENTRE ST PARTNERSHIP	5,671,513	80,523,599
518992995	LASALLE US REALTY	47,923,479	72,902,825
ACI06VJW0	MARATHON CTR ST PARTNERSHIP	1,896,517	72,591,950
88160R101	TESLA INC	273,138	71,499,334
857492599	STATE ST INST TR PL MM INV	70,193,451	70,193,451
976ENK902	TURIYA FUND	43,306	69,555,560
ACI06DFK0	ALPHAQUEST ORIGINAL	49,433	69,319,413
30231G102	EXXON MOBIL CORP	645,226	69,200,489
688910900	TAIWAN SEMICONDUCTOR MANUFAC	3,678,321	68,028,480
933JWW907	FLORIN COURT CAPITAL FUND	33,000,000	62,827,512
084670702	BERKSHIRE HATHAWAY INC CL B	184,218	62,818,338
02079K107	ALPHABET INC CL C	509,646	61,651,877
ACI0B2M46	ARES CENTRE STREET PARTNERSHIP	28,296	56,659,429
944DMJII8	KONTIKI ONSHORE FUND	50,000,000	56,301,350
964KPR905	GRESHAM QUANT ACAR FD LLC	33,875	56,171,788
923CXG908	AFL CIO HOUSING INV TRUST	57,673	55,438,692
944DMJII8	KONTIKI ONSHORE FUND	50,000,000	56,301,350
ACI084PS0	METLIFE CORE PROPERTY FUND	41,000,000	55,402,480
ACI084PS0	METLIFE CORE PROPERTY FUND	41,000,000	55,402,480
ACI082WV9	VISTA EQUITY PARTNERS FUND V	21,926,285	53,166,680
935TNH906	PHARO GAIA FUND LTD CL A S 1	26,825	52,075,501
966ACCI3	BLACK CREEK INDUSTRIAL FUND	41,913,601	49,427,159
931KLY904	APOLLO IX	31,024,116	48,740,623
979GFM909	PROLOGIS INC	36,797,430	48,387,885
ACI06VK08	AG CENTRE ST PARTNERSHIP	25,742	47,740,830
932SBJ900	ICG CENTRE ST PARTNERSHIP	23,100,368	44,599,304
933GHF907	VOLORIDGE FUND	25,000	44,582,499
935XRS909	PLATINUM EQTY CAP PTRS V LP	28,808,134	43,466,318
963ECW903	DL PARTNERS OPPORTUNITIES FUND	39,500	43,095,347
962RLN905	KKR NYC CREDIT B LP	29,801,168	42,428,042
930WSN906	PHARO MACRO FUND LTD. CLASS A	10,587	42,202,981
931PNS904	CVC CAPITAL PARTNERS VII A	19,498,429	40,814,150
933GHE900	BLACKSTONE REAL ESTATE PTNR IX	28,051,898	40,101,927

A complete listing of our portfolio holdings is available from our office upon request

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

Investment Manager	Average Assets Under Management (\$MM)	Total Fees
<b>US Equities</b>		
Altravue-US SCV - Legato	\$ 5.47	\$ 30,207
BlackRock-US LMC R1000 Core	2144.02	40,952
BlackRock-US SC R2000 Growth	0.02	1
BlackRock-US SC R2000 Value	0.01	1
Bridge City-US SCG - Legato	4.00	20,755
Brown-US SCG	58.70	539,075
Cooke and Bieler-US MCV	64.14	176,668
Cooke and Bieler-US SCV	62.24	113,890
Dean-US SCV - Legato	5.00	32,249
Essex-US SCG - Legato	5.54	21,004
Legal General-US LMCE	521.04	363,751
Legato Transition-US	0	-
Lisanti-US SCG - Legato	2.28	21,608
Morgan Stanley-REITS	0	-
Nicholas Investment-US SCG - Legato	3.03	13,581
PanAgora-US SCC	62.67	330,863
PIMCO RAFI-US LMCE	562.53	594,643
Pzena-US SCV	58.56	421,007
QSV-US SCV - Legato	4.88	23,931
SSGA-US LC Russell TOP 200 Core	1239.73	56,175
Transition US All Cap	0	-
Transition US BGI LCG	0	-
Transition US Developing	0	-
Transition US Equity	0	-
Victory-US MCV	67.24	306,067
Wasatch-US SCG	52.76	119,860
Wellington-US MCC	148.78	426,736
Westfield-US MCG	122.08	471,248
<b>Total US Equities</b>	<b>5,194.72</b>	<b>4,124,272</b>
<b>NON-US Equities</b>		
Acadian-EM	149.11	449,283
Acadian-EM	0.03	0
Acadian-WorldxUS SCC	123.76	371,424
Acadian-WorldxUS SCC	0.11	0
Algert-EAFE SCC	21.14	70,331
ARGA-WorldxUS LMCV - Xponance	20.70	83,532
Ativo-EAFE ACG - Xponance - Closed 8/24/2022	0	0
Aubrey-EM ACG - Xponance	14.11	63,905
Baillie Gifford-EAFE Residual Assets	0	0
Baillie Gifford-EM	169.18	834,888
Baillie Gifford-WorldxUS LMCC	252.97	588,837
Baillie Gifford-WorldxUS LMCC	0.19	0
BlackRock MSCI-EM Core	171.80	45,624

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

<b>Investment Manager</b>	<b>Average Assets Under Management (\$MM)</b>	<b>Total Fees</b>
Causeway-WorldxUS LMCC	\$ 252.50	\$ 841,955
Causeway-WorldxUS LMCC	0.64	0
Change Global-EM ACV - Xponance	0	0
Denali-EAFE ACV - Xponance - Closed 8/22/2022	0	0
DFA-EM	0	0
DFA-EM	0	0
Dundas-EAFE ACG - Xponance	0.05	45,446
Fidelity-WorldxUS SCC	0	0
Fiera-Global	174.72	898,534
Foresight-EAFE LMCV - Xponance	18.81	71,762
Haven-EAFE-CAD ACV - Xponance	13.70	1,329
Martin-EAFE ACG - Xponance	14.85	59,443
Metis-EAFE ACV - Xponance - Closed 9/28/2022	0	0
Morgan Stanley-Global	147.64	590,331
Nordea-Global MCG	76.64	307,402
North of South-EM ACV - Xponance	16.80	60,592
Osmosis-EAFE ACV - Xponance	17.25	72,189
Parametric-EM	0.14	0
Pzena-EM ACV	281.30	1,773,103
Redwood-EAFE ACG - Xponance	16.36	48,963
Sands-EM LCG	101.09	525,276
Sprucegrove-WorldxUS LMCC	264.59	530,187
Sprucegrove-WorldxUS LMCC	0.42	0
SSGA-WorldxUS LMC MSCI Core	156.13	22,276
SSGA-WorldxUS SC MSCI	70.47	22,152
Transition EAFE	0	0
Transition EAFE GTM	0	0
Transition EM	0	0
Transition-WorldxUS	0	0
UBS-EM ACC	118.73	599,908
Walter Scott-WorldxUS LMCC	270.90	847,181
Walter Scott-WorldxUS LMCC	0.39	0
Xponance Transition-WorldxUS	0	2,109
<b>Total NON-US Equities</b>	<b>2,937.22</b>	<b>9,827,962</b>
<b>Fixed Income</b>		
AFL-CIO Housing Investment Trust	55.44	184,099
Bain-Bank Loans	0.61	2,209
Barings-Bank Loans	0.37	0
BlackRock-Credit	0	0
BlackRock-Mortgages	515.84	226,131
BlackRock-TIPS	170.30	93,694
BOA PPAR FNMA	1.35	0
Brigade-High Yield	137.43	479,796
Cash Account	0.08	0

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

Investment Manager	Average Assets Under Management (\$MM)	Total Fees
CFSB PPAR FNMA	\$ 0.05	\$ -
CFSB PPAR GNMA	0.30	0
Citibank PPAR FNMA	2.74	0
Citibank PPAR GNMA	0.68	0
CPC Construction Facility	5.49	0
CPC PPAR FNMA	2.56	0
Eaton Vance-High Yield	162.29	464,276
ECLF PPAR FNMA	1.23	0
GIA-Core Plus	33.57	75,424
HDC PPAR FNMA	0	0
JPMC PPAR FNMA	5.82	0
KKR Cash Account - Closed 2/25/2022	0	0
LIIF PPAR FNMA	2.38	0
LIIF PPAR GNMA	0.28	0
LISC PPAR FNMA	2.93	0
LM Capital-Core Plus	29.77	43,468
Mackay Shields-High Yield	163.42	424,213
NCBCI PPAR FNMA	0.01	0
NCBCI PPAR GNMA	0.19	0
Neuberger Berman-Credit	274.72	254,925
Neuberger Berman-Mortgages - Closed 8/22/2022	0	0
NHS PPAR FNMA	0	-
Nomura-High Yield	139.13	416,336
Pinebridge-Credit	146.53	48,533
Prudential-Credit	0	-
Pugh-CorePlus	14.32	29,534
RBC Access MBS	25.57	48,001
Securities Lending	0.04	-
Shenkman-High Yield	176.03	591,548
Short Term	177.10	-
SSGA-Credit 1-3Y	0	-
SSGA-Credit Int Gov Bond Index	0	-
SSGA-IT Treasury 1-10Y	929.20	93,325
SSGA-LI Treasury	21.07	10,600
SSGA-LT Treasury 10Y Plus	500.27	47,660
SSGA-ST Agency 1-3Y	0	-
SSGA-ST Treasury 1-3Y	574.03	55,115
SSGA-TIPS	556.34	29,530
T Rowe Price-Credit	251.37	247,775
T Rowe Price-High Yield	302.41	803,750
Transition High Yield	0	-
Transition Mortgage	0	-
Wellington-Mortgages	232.58	109,946
Wells Fargo PPAR FNMA	1.16	-
<b>Total Fixed Income</b>	<b>5,617.00</b>	<b>4,779,888</b>

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

Investment Manager	Average Assets Under Management (\$MM)	Total Fees
<b>Opportunistic Fixed Income</b>		
400 Capital Centre Street	\$ 14.60	\$ 107,440
Angelo Gordon Ct St Ptrns	47.74	353,468
Apollo Centre Street Partnership	80.52	665,118
Ares Centre Street Partnership	56.66	347,781
Ave Special Situation Fund VI	1.52	-
Avenue Europe Special Situations Fund	0	-
Brightwood Capital Advisors III	2.41	35,025
Brightwood Capital Advisors IV	18.02	387,951
CarVal Centre Street	9.55	48,248
Contrarian C A	17.52	133,161
Crestline Opportunity Fund V Onshore	0	-
FCO MA Centre Street II ER	22.62	1,255,610
Fortress Ctr St Ptrns	19.66	686,921
GCM Grosvenor Emerging OFI Manager	4.08	22,817
GCM Grosvenor NYC EM OFI 2022-1 Series	0	-
Golden Tree	59.08	1,724,824
ICG Centre Street Partnership	44.60	448,980
KKR NYC Credit B	42.43	338,361
KKR NYC Credit C	6.85	79,148
KLCP Domestic Fund III	17.29	765,755
Maranon Centre Street Partnership	26.83	888,202
Marathon Centre Street Partnership	89.96	590,935
Napier Park Centre St CLO Partnership	3.00	-
Oak Hill Centre Street Partnership	97.91	609,717
Oaktree Opp Fd IX	24.68	222,883
Torchlight Debt Fund VIII	3.56	-
Torchlight Debt Opp Fd III	0	-
Torchlight Debt Opportunity Fund VI	14.68	129,379
Torchlight Debt Opportunity Fund VII	13.75	252,061
Torchlight Investors	1.84	27,540
<b>Total Opportunistic Fixed Income</b>	<b>741.36</b>	<b>10,121,325</b>
<b>Hedge Funds</b>		
AlphaQuest Original	69.31	3,115,531
Altimeter Partners Fund	22.28	45,209
Brevan Howard Series B - Closed 6/09/2023	0	-
Brevan Howard Series L2	0	-
Brevan Howard Special Opportunities SPC	10.29	-
Brevan Howard TYNE SP	0	-
Caledonia Fund US	26.91	1,065,755
Caspian Select Credit Fund	30.50	92,949
D.E. Shaw Composite Fund	121.19	13,716,668
DL Partners Opp	43.10	3,744



**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

<b>Investment Manager</b>	<b>Average Assets Under Management (\$MM)</b>	<b>Total Fees</b>
Fir Tree Value Fund - Closed 6/09/2023	\$ -	\$ -
Florin Court Capital	62.83	3,216,930
Gemsstock Fund	35.53	-
Gotham Asset Management	0	-
Gresham Quant ACAR Fund	56.17	1,831,266
GSA Trend Fund	0	(108,913)
Jefferies Strc Alpha B	0	-
Key Square Partners	32.58	564,201
Kontiki Onshore Fund	56.30	-
Lansdowne Euro Absolute Opp Fd	0	(33,028)
Luxor Capital Partners	37.93	286,348
Maple Rock US Fund	38.61	-
Permal Asset Management	0	-
Permal City Plan Fund	0	-
Perry Partners - Closed 6/09/2023	0	-
Pharo Gaia Fund	52.08	-
Pharo Macro Fund	42.20	-
SRS Partners US	83.19	1,552,705
Standard General Fund II	9.79	62,571
Turiya Fund	69.55	237,422
Voloridge Fund	44.58	511,433
Voloridge Trading Aggressive Fund	9.29	103,832
<b>Total Hedge Funds</b>	<b>954.21</b>	<b>26,264,623</b>
<b>Private Equity</b>		
ACON Equity Partners III	0.02	107
Aisling Capital II	0.04	383
Aisling Capital III	0.02	1,369
Altaris Health Partners III	1.76	60,223
American Securities Partners VI	11.89	8,432
American Securities Partners VII	18.95	22,592
Ampersand 2011	0.04	1,162
Apax Digital II	0.09	525,336
Apax IX USD	21.41	164,751
Apax X USD	20.04	496,751
Apax XI USD	0	356,526
Apollo Investment Fund IX	48.74	1,310,350
Apollo Investment Fund V	0.13	4,149
Apollo Investment Fund VI	0.36	10,776
Apollo Investment Fund VII	0.27	(6,215)
Apollo Investment Fund VIII	14.88	(677,034)
Apollo Investment Fund X	0	-
Apollo X Co-Invest	0	-
Ares Corporate Opportunities Fund I	0	648
Ares Corporate Opportunities Fund II	0	904

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

Investment Manager	Average Assets Under Management (SMM)		Total Fees
Ares Corporate Opportunities Fund III	\$	0.10	\$ 4,069
Ares Corporate Opportunities Fund IV		5.58	474,802
Ares Corporate Opportunities Fund V		16.44	62,054
Arlington Capital Partners II		0.04	137
Arsenal Capital Partners II		0	(626)
ASF IX B		0	2,113
ASF IX B NYC Co-Invest		0	-
ASF VI B		4.36	(284,917)
ASF VI B NYC Co-Invest		2.25	11,874
ASF VII B		9.64	105,092
ASF VII B NYC Co-Invest		5.13	4,551
ASF VIII B		23.59	334,247
ASF VIII B NYC Co-Invest		10.90	7,306
Atlantic Equity Partners IV		1.46	995
Aurora Equity Partners III		0	-
Avista Capital Partners		0	66
Avista Capital Partners II		0.39	2,272
AXA Secondary Fund V		0.11	4,975
BC European Capital IX		9.36	1,565,048
BC European Capital X		19.01	105,569
BC European Capital X SideCar		9.67	(13,370)
BC Partners XI		11.12	102,282
BC Partners XI Co-Invest		8.90	32,868
BDCM Opportunity Fund III		15.71	39,725
Blackstone Capital Partners IV		0.05	8,204
Blackstone Capital Partners V		0.08	(1,023)
Blackstone Capital Partners VI		3.46	156,643
Blackstone Capital Partners VIII		15.89	368,052
Blackstone Mezzanine Partners II		0	-
Blue Wolf Capital Fund II		0.02	6,259
Bridgepoint Europe III		0	-
Bridgepoint Europe IV		1.15	6,000
Bridgepoint Europe V		6.45	751,436
Bridgepoint Europe V Co-Invest		1.97	1,272
Bridgepoint Europe VI		31.24	193,913
Bridgepoint Europe VI Co-Invest		7.96	38,748
Bridgepoint Europe VII		0	201,764
Bridgepoint Europe VII-Wigmore Co-Invest		0	-
Capital Partners PE Income Fund		0	-
Capital Point Partners		0.88	19,128
Carlyle Partners IV		0	-
Carlyle Partners V		0.48	100,888
Carlyle Partners VI		8.84	623,377
Carlyle Partners VI SideCar		1.16	1,209
Catterton Partners VI		1.20	10,077

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

Investment Manager	Average Assets Under Management (SMM)	Total Fees
CCMP Capital Investors II	\$ -	\$ -
Centerbridge Capital Partners III	4.09	82,738
Clayton Dubilier Rice Fund XII	0	-
Clearlake Capital Partners VI	16.55	(53,571)
Clearlake Capital Partners VII	21.29	513,112
Coller International Partners V	0	7,330
ComVest Investment Partners IV	2.65	55,081
Constellation Venture Capital III	0	1,708
Crestview Partners II	3.14	167,990
Crestview Partners III	20.57	428,040
Crestview Partners III SideCar	9.80	14,257
Crestview Partners IV	10.44	204,853
Crestview Partners IV SideCar	3.90	71,127
CVC Capital Partners IX A	0	-
CVC Capital Partners VI B	29.05	3,229,305
CVC Capital Partners VII A	41.33	108,071
CVC Capital Partners VIII A	23.46	581,505
CVC European Equity Partners III	0.69	874
CVC European Equity Partners V	0.28	4,016
Cypress Merchant Banking Partners II	0	-
EQT IX Co-Invest	5.98	72,836
EQT IX USD	22.51	328,448
EQT VI	0.02	171,259
EQT VII	16.37	462,600
EQT VIII	23.98	278,272
EQT VIII Co-Invest	9.97	18,522
EQT X Co-Invest	1.81	11,471
EQT X USD	0	598,674
Euro Choice III	0	-
Euro Choice IV	0.15	(158,513)
Fairview Emerging Managers Tranche 1	0.03	(109)
Fairview Emerging Managers Tranche 2	2.40	5,707
Falconhead Capital Partners II	0.13	(10,642)
FdG Capital Partners	0	-
FdG Capital Partners II	0.11	-
Fenway Partners Capital Fund III	0	-
First Reserve Fund XI	0	403
First Reserve Fund XII	0	4,870
FirstMark Capital I (fka FirstMark IV)	2.08	-
FS Equity Partners V	0.72	14,863
FS Equity Partners VI	5.54	(6,950)
FTV IV	2.23	6,832
FTV V	7.38	38,455
FTV VI	5.47	42,186
FTV VII	9.68	747,157

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

Investment Manager	Average Assets Under Management (SMM)	Total Fees
FTV VII Co-Investment	\$ 1.58	\$ 2,071
FTVENTURES III	0.78	4,058
GCM Emerging Manager Fund	3.67	60,939
GF Capital Private Equity Fund	1.77	3,213
GI Partners Fund III	0	1,414
Gleacher Mezzanine Fund II	0	(530)
Grain Comm Opp Fd II	7.46	43,984
Grain Communications Opportunity FD III	3.27	127,371
Green Equity Investors IX	0	7,621
Green Equity Investors IX Co-Invest	0	-
Green Equity Investors VI	26.71	(74,748)
Green Equity Investors VII	21.09	628,827
Green Equity Investors VIII	22.75	393,905
Green Equity Investors VIII Co-Invest	6.40	4,677
Grey Mountain Partners Fund III	0.07	(1,150)
GSO Capital Opportunities Fund	0.15	2,590
HarbourVest Centre Street Co-Investment	25.44	131,369
Heartwood Partners II	0.60	32,190
Heartwood Partners III	2.45	22,735
Hg Genesis 10 A	2.05	342,498
Hg Genesis 9 A	10.16	200,603
Hg N1 Co-Invest	2.44	(51)
Hg Saturn 3 A	1.76	151,776
Highland Consumer Fund I	0.13	(38)
ICV Partners III	1.67	13,976
ICV Partners IV	3.01	53,316
Incline Equity Partners III	0.02	(828)
Insight Partners XII	19.32	1,033,215
Insight Partners XII Buyout Annex Fund	6.56	264,730
Integrum Capital Partners	0.32	243,566
Integrum Capital Partners Co-Invest	0	-
Intermedia Partners VII	0	-
JP Morgan Fleming Tranche A	0.35	2,728
KKR Americas Fund XII	32.87	164,834
KKR Asian Fund IV	11.41	301,079
KKR Europe V	15.33	169,226
KKR European Fund VI USD	1.77	-
KKR North America Fund XIII SCSP	12.52	835,332
Landmark - NYC Fund I	4.59	10,130
Landmark Equity Partners XI	0	-
Landmark Equity Partners XIV	0.96	48,641
Landmark Equity Partners XV	5.52	698,669
Levine Leichtman Capital Partners IV	0.47	131
Lexington Capital Partners IX	20.30	398,888
Lexington Capital Partners IX Co-Invest	5.63	16,383

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

<b>Investment Manager</b>	<b>Average Assets Under Management (SMM)</b>	<b>Total Fees</b>
Lexington Capital Partners VII	\$ 1.14	\$ 28,322
Lexington Capital Partners VIII	23.84	455,525
Lexington Capital Partners X	3.24	548,674
Lexington Capital Partners X Co-Invest	8.09	19,003
Lightbay Investment Partners II	0.34	127,656
Lincolnshire Equity Fund II	0	-
Lincolnshire Equity Fund III	0.78	3,548
Lincolnshire Equity Fund IV	0.70	2,112
Lindsay Goldberg V	10.53	488,072
Markstone Capital Partners	0.02	-
Medica III Investments (International)	0.27	-
MidOcean Partners III	0.02	48,032
Milestone Partners III	0.48	(35,966)
Mill City Fund II	0.75	7,075
Montreux Equity Partners IV	3.73	130,371
NB New York City Growth Fund IA	0	-
New 2ND Capital Fund III	0	424,156
New 2ND Capital Fund III Sidecar	0.26	-
New Mainstream Capital II	0.61	(15,947)
New Mountain Partners II	0	2,004
New Mountain Partners III	0.48	13,024
NGN BioMed Opportunity II	2.40	7,842
NMS Fund III	2.55	65,524
Nordic Capital XI	0	-
Nordic Capital XI Co-Invest	0	-
NorthBound Emerging Manager Custom Fund	0.42	11,461
NYC-NorthBound Emerging Managers Program	14.49	99,577
Olympus Capital Asia III	0.41	(3,281)
Olympus Growth Fund VI	12.96	57,008
One Rock Capital Partners III	8.09	338,324
Onex Partners III	0.85	12,479
Paladin Homeland Security Fund	0	-
Paladin III	2.88	24,469
Palladium Equity Partners III	0.01	3,453
Palladium Equity Partners IV	9.47	230,201
Palladium Equity Partners V	5.38	128,461
Patriot Financial Partners II	0.37	4,669
Patriot Financial Partners III	2.88	37,371
PCG Clean Energy Tech Fund East	0.72	6,546
PECP V Co-Investment	16.06	6,111
PECP VI Co-Investment	0	-
Pegasus Partners IV	0.97	3,742
Pegasus Partners V	3.59	65,136
Permira IV	1.25	68
Permira VIII	4.63	530,383

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

Investment Manager	Average Assets Under Management (SMM)	Total Fees
Pine Brook Capital Partners	\$ 0.45	\$ 6,382
Platinum Equity Capital Partners IV	21.88	3,581
Platinum Equity Capital Partners V	43.47	510,842
Platinum Equity Capital Partners VI	2.12	673,906
Platinum Equity Capital Partners-C III	4.65	153,767
Platinum Equity Small Cap Fund	10.25	90,891
Platinum Equity Titan IV Co-Investors	3.50	1,157
Post Capital Equity Partners II	0	(405)
Prism Venture Partners V	0	-
PSG V	26.77	2,101,930
PSG VI	0	-
Psilos Group Partners III	0	-
Raine Partners II	3.09	197,535
Raine Partners III	4.51	56,473
Raine Partners IV	0	210,813
Reverence Capital Partners II	4.25	53,674
Reverence Capital Partners II Co-Invest	2.52	9,566
Reverence Capital Partners III	3.25	178,577
Reverence Capital Partners III Co-Invest	1.32	51,324
Riverstone/Carlyle Global Energy&PowerIV	0	(989)
RRE Ventures IV	0.72	1,657
Scale Venture Partners III	1.88	980
SCP Private Equity Partners II	1.20	5,060
SCP Vitalife Partners II	0.92	18,499
Siris Partners III	4.55	26,077
Siris Partners IV	21.20	257,089
Snow Phipps Group	2.26	2,426
Snow Phipps Group II	4.12	98,120
Stellex Capital Partners	4.37	535,061
Stellex Capital Partners II	8.03	79,405
Summit Partners Growth Equity VIII-A	14.62	97,230
Terra Firma Capital Partners III	0	(956)
The Fourth Civven Fund	0	-
The Resolute Fund V	21.58	349,519
Thoma Bravo Fund XV	20.15	498,057
Thoma Bravo XV Co-Invest	5.12	(12,046)
Thomas, McNerney & Partners II	0	(10,692)
TPG Rise Climate	0	-
TPG Rise Climate Co-Invest	0	-
Trident V	7.37	700,879
Trilantic Capital Partners IV	0.37	5,354
Trilantic Capital Partners V	3.37	240,530
Trilantic Capital Partners VI N. America	25.44	513,975
United States Power Fund III	0.15	2,001
USPF II Institutional Fund	0.06	(1,749)

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

<b>Investment Manager</b>	<b>Average Assets Under Management (SMM)</b>	<b>Total Fees</b>
Valor Equity Partners III	\$ 1.12	\$ 12,093
Valor Equity Partners IV	9.61	95,824
Valor Equity Partners V	6.86	148,707
Valor Equity Partners VI	2.93	306,453
Vista Equity Partners Fund III	0.31	124,994
Vista Equity Partners Fund IV	21.21	1,640,151
Vista Equity Partners Fund V	53.17	911,105
Vista Equity Partners Fund VI	38.44	816,179
Vista Equity Partners Fund VII	37.19	440,034
Vista Equity Partners Fund VIII	3.56	340,403
Vista Foundation Fund II	1.16	13,722
Vista VIII Co-Invest	2.07	75
Vistria Fund III	3.57	32,105
Vistria Fund IV	9.16	387,003
Warburg Pincus Financial Sector Fund	30.18	900,416
Warburg Pincus Financial Sector II	12.18	383,437
Warburg Pincus Global Growth	31.20	607,953
Warburg Pincus XI	14.93	74,995
Warburg Pincus XII	34.79	2,164,376
WCAS XI	0.51	499
WCAS XII	12.65	861,154
WCAS XIII	15.23	844,189
WCAS XIV	3.00	776,953
WCAS XIV N Co-Invest	0	-
Webster Capital III	0.17	8,271
Wellspring Capital Partners V	2.40	7,522
Yucaipa American Alliance Fund I	0.04	(10,075)
Yucaipa American Alliance Fund II	12.24	35,358
Yucaipa Corporate Initiatives Fund II	0.07	164,513
<b>Total Private Equity</b>	<b>1,745.50</b>	<b>45,379,520</b>
<b>Private Real Estate</b>		
Aermont Capital Real Estate Fund IV	5.90	50,556
AG Realty Fund VII	0.02	13,760
Almanac Realty Securities IX	2.41	229,110
Almanac Realty Securities IX Sidecar	0.73	13,062
Almanac Realty Securities VIII	6.68	68,067
Almanac Realty Securities VIII SideCar	5.03	13,288
American Value Partners Fund I	0	(997)
ARA Asia Dragon Limited	0	-
Ares European Real Estate Fund III	0.06	1,930
Ares Industrial Real Estate Fund	49.43	850,070
Artemis Co-Investment	3.55	730,746
Artemis Income & Growth	6.10	60,043
Artemis Real Estate Healthcare II	4.74	264,070

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

Investment Manager	Average Assets Under Management (SMM)	Total Fees
Avanath Affordable Housing II	\$ -	\$ (1,847.67)
BIG Real Estate Fund I	3.00	46,338
Blackstone RE Partners Europe III	0.39	(8,623)
Blackstone RE Partners Europe IV	4.34	70,425
Blackstone RE Partners Europe VI	13.00	321,258
Blackstone RE Partners Europe VII	0	-
Blackstone Real Estate Partners IV	0.04	(92)
Blackstone Real Estate Partners IX	40.10	543,419
Blackstone Real Estate Partners VI	0.14	14,507
Blackstone Real Estate Partners VII	5.61	34,037
Blackstone Real Estate Partners VIII	23.86	298,828
Blackstone Real Estate Partners X	1.56	192,000
Brookfield Premier Real Estate Partners	35.12	845,024
Brookfield Strategic RE Partners I	3.46	326,904
Brookfield Strategic RE Partners III	30.05	327,062
Brookfield Strategic RE Partners IV-B	23.06	1,474,649
Canyon Johnson Urban Fund I	0	-
Canyon Johnson Urban Fund II	0	-
Canyon Johnson Urban Fund III	0	150
Carlyle Property Investors	36.08	274,409
Carlyle Realty Partners IX	3.33	498,973
Carlyle Realty Partners V	0.01	(143,931)
Carlyle Realty Partners VI	1.73	11,374
Carlyle Realty Partners VII	3.67	47,838
CIREP Centre Street	23.78	575,407
CIREP Centre Street II	4.87	794,721
Colony Investors VIII	0	1,453
Colony Realty Partners II	0	-
Cortland Growth and Income	34.94	153,386
DivcoWest Fund III	0	23,936
DivcoWest Fund IV	1.45	854,165
DivcoWest Fund V	8.34	177,192
Divcowest Fund VI-A	8.38	727,206
DRA Growth and Income Fund IX	5.47	108,182
DRA Growth and Income Fund X	13.18	208,205
Elmtree U.S. Net Lease Fund IV	6.63	169,445
EPISO IV	8.84	165,961
EQT Exeter Industrial Core-Plus Fund IV	4.21	39,838
EQT Exeter Industrial Value Fund VI	0	-
Exeter Core Industrial Club Fund II	11.30	65,374
Exeter Industrial Core Fund III	22.42	255,902
Exeter Industrial Value Fund IV	1.46	5,824
Exeter Industrial Value Fund V	14.75	183,821
GreenOak Asia USD III	9.71	223,947
H/2 Special Opportunities II	0.17	8,313



**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

Investment Manager	Average Assets Under Management (SMM)	Total Fees
H/2 Special Opportunities III	\$ 3.96	\$ 45,265
H/2 Special Opportunities IV	18.85	176,204
Harrison St Core Prop SideCar	4.30	29,092
Harrison Street Core Prop Fd	8.90	197,948
Heitman America Real Estate Trust	10.55	66,850
Heitman Capital Management LLC	9.60	52,765
Jamestown Premier Property Fund	5.18	52,148
JP Morgan Special Situation Property	7.62	180,970
JP Morgan Strategic Property Fund	22.78	250,815
Kayne Anderson Core Real Estate	12.46	87,907
KKR RE Security Dislocation Opp CoInvest	1.81	7,655
KKR Real Estate Credit Opp Prtnrs Agg I	20.28	174,359
KKR Real Estate Partners Americas II	6.57	56,910
KKR Real Estate Partners Americas III	22.08	307,790
KKR Real Estate Partners Europe II USD	9.91	87,866
KTR Industrial Fund III	0	-
LaSalle Centre Street RE Co-Inv Core	10.94	30,338
LaSalle Centre Street RE Co-Inv Non Core	9.81	46,720
LaSalle Property Fund	72.90	383,674
LBA Logistics Value Fund IX	8.64	359,375
Lion Industrial Trust	122.17	886,525
Lone Star Real Estate Fund III	0.11	57,658
Lone Star Real Estate Fund V	2.65	30,269
MetLife Core Property Fund	55.40	294,636
Metropolitan Workforce Housing Fund, LLC	0.06	924
NYC Asset #1 - Vanbarton (fka Emmes)	3.10	85,350
NYC Asset #2 - Related (fka Sandy)	5.56	80,466
NYC Asset #3 - Hudson	3.97	59,514
PGIM Real Estate Capital VII	6.17	138,677
Pramerica Real Estate VI	3.91	53,048
Prologis Targeted U.S. Logistic Fund	48.39	368,404
Prudential PRISA	11.69	112,120
Prudential PRISA II	36.23	331,804
PW Real Estate Fund III	3.75	2,896,662
Rialto Real Estate Fund IV - Debt	19.43	423,682
Rialto Real Estate Fund V - Debt	0	-
RREEF America III	0	-
RREEF America REIT II	12.00	197,473
Silverpeak Legacy Partners III	0.11	5,995
Stockbridge Real Estate Fund III A	8.13	26,307
Taconic New York City Investment Fund	1.49	16,168
The City Investment Fund	0	3,959
Thor Urban Operating Fund II	0.07	655
TPG RE Thematic Advantage Core-Plus IV	18.80	249,153
TPG Real Estate Partners IV	1.87	228,779

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

<b>Investment Manager</b>	<b>Average Assets Under Management (SMM)</b>	<b>Total Fees</b>
UBS Trumbull Property Fund	\$ 13.62	\$ 114,234
USAA Eagle Real Estate Feeder 1	31.50	147,335
Walton Street Real Estate Fund VI	2.18	3,550
Waterton Residential Property Venture XV	0	-
Westbrook Fund XI	4.28	203,028
Westbrook Real Estate Fund VIII	0.66	9,004
Westbrook Real Estate Fund X	0	-
Westbrook Real Estate Fund X Co-Inv	2.74	68,272
<b>Total Private Real Estate</b>	<b>1,180.28</b>	<b>21,896,987</b>
<b>Total Private Real Estate</b>		
<b>Real Estate Equity Securities</b>		
Adelante-REITS		
Morgan Stanley-REITS	0.00	0
<b>Total Real Estate Equity Securities</b>	<b>-</b>	<b>-</b>
<b>Infrastructure</b>		
Actis Energy 4	2.88	927,289
Ardian Infra Fund V Co-Invest Eden	4.03	2,197
Ardian Infra Fund V Co-Invest Lemon	2.58	(1)
Ardian Infrastructure Fund V	13.06	97,711
Ardian Infrastructure Fund VI B	0	-
ASF VII Infrastructure B	12.31	112,994
ASF VIII Infrastructure B	3.62	485,433
Axium Infrastructure Canada II Class E	10.27	86,157
Axium Infrastructure Canada II Class H	13.70	58,610
Axium Infrastructure US II Class A	7.03	231,292
Axium Infrastructure US II Class G	10.56	83,783
Basalt Infrastructure Partners IV A	0	-
BIF IV Co-Invest Elite	0	-
BIF IV Co-Invest Snow	2.88	661
BIS NYC Infra Emerging Manager Opp Fund	4.04	5,631
Blackrock Global Infra Fund IV D	4.14	450,176
Brookfield Infra Fund III Co-Invest	3.24	1,078
Brookfield Infra Fund IV-B	20.23	242,977
Brookfield Infrastructure Fund II	11.8	422,112
Brookfield Infrastructure Fund III	15.11	196,462
Brookfield Infrastructure Fund V-B	3.36	298,753
DIF Infrastructure VII	4.50	230,743
EIG Energy Partners Co-Invest	0	-
EIG Energy Ptnrs Gbl Private Debt FD A	5.46	125,846
EQT Infra IV Co-Inv F SCSP Connect	5.79	2,057
EQT Infra IV Co-Inv G SCSP Lightspeed	4.18	3,426
EQT Infra IV Co-Inv Saber	2.23	9,361

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

<b>Investment Manager</b>	<b>Average Assets Under Management (SMM)</b>	<b>Total Fees</b>
EQT Infra V Co-Invest H SCSP Beckham	\$ -	\$ -
EQT Infrastructure III	5.16	652,071
EQT Infrastructure IV	20.84	424,247
EQT Infrastructure V NO.2 USD SCSP	29.49	873,160
EQT Infrastructure VI NO.2 USD SCSP	0	-
Global Energy & Power Infra Fund II	3.34	204,088
Global Energy & Power Infra Fund III	15.78	165,394
Global Infra Partners IV-A/B	20.08	474,200
Global Infra Partners V-A-B	0	-
Global Infrastructure Partners III	22.87	1,805,938
IFM Global Infrastructure	19.89	154,114
Infra Via European Fund V	6.04	46,201
KKR Global Infrastructure Investors II	5.79	28,665
KKR Global Infrastructure Investors III	14.15	66,099
KKR Global Infrastructure Investors IV	18.23	438,718
Stonepeak Infra IV Co-Invest Patagonia	5.92	1,450
Stonepeak Infra IV Co-Invest Tiger	3.42	953
Stonepeak Infrastructure Fund IV	17.00	252,116
<b>Total Infrastructure</b>	<b>375.00</b>	<b>9,662,163</b>
<b>Total Management Expenses</b>	<b>18,745.30</b>	<b>132,056,740</b>
<b>Consultant Expenses</b>		
SP GLOBAL MARKET INTELLIGENCE LLC RESEARCH FEE 12-29-		10,955
OTHER CONSULTING FEES		1,337,214
<b>Total Consultant Expenses</b>		<b>1,348,169</b>
<b>Legal Expenses</b>		
DEAL: BRIGHTWOOD CAPITAL FUND V		2,380
DEAL: NYC RETIREMENT SYSTEM		2,880
DEAL: CIREP CENTRE STREET		2,662
DEAL: PERMIRA VIII 1		2,890
DEAL: BC PARTNERS XI LP		95
DEAL: THE RESOLUTE FUND V		348
DEAL: BLACKSTONE CAPITAL		48
DEAL: GREEN EQUITY IX		4,175
DEAL: ASF VIII B		360
DEAL: ARDIAN INFRASTRUCTURE V		1,551
DEAL: INFRAVIA EUROPEAN FUND V SCSP		26
DEAL: EQT VIII CO-INVESTMENT FUND		177
DEAL: ONEX III		104
DEAL: VISTRIA FUND IV, LP		21
DEAL: HG GENESIS 10 A.SATURN 3 A.N1 CO-INVEST		3,932
DEAL: APOLLO INVESTMENT FUND IX L.P.		17

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

Investment Manager	Average Assets Under Management (SMM)	Total Fees
DEAL: KKR STRATEGIC PARTNERSHIP		\$ 29
DEAL: HG GENESIS 10 A.SATURN 3 A.N1 CO-INVEST		27
DEAL: KKR STRATEGIC PARTNERSHIP		33
DEAL: KLCP DOM FUND III LP		5,215
DEAL: ARTEMIS SIDECAR		219
DEAL: WCAS IX		97
DEAL: PLATINUM EQ W CO INVEST		3,525
DEAL: ARTEMIS SIDECAR		129
DEAL: AXINFRA US II LP		1,433
DEAL: RUSSIAN SANCTIONS		1,690
DEAL: RUSSIAN SANCTIONS		495
DEAL: RUSSIAN SANCTIONS		289
DEAL: EQT EXETER VI		4,103
DEAL: VOLORIDGE SUSTAINABILITY FUND		1,389
DEAL: GCM OFI 2		3,334
DEAL: EQT X NO. 2		4,016
DEAL: VOLORIDGE SUSTAINABILITY FUND		1,110
DEAL: EQT INFRASTRUCTURE V		87
DEAL: GEMSSTOCK FUND LP		1,117
DEAL: KEY SQUARE PARTNERS LP		214
DEAL: GENERAL SEC		332
DEAL: NB EMP		45
DEAL: NB EMP		31
DEAL: KKR GLOBAL INFRASTRUCTURE INVESTORS III		21
DEAL: GCM OFI 2		2,385
DEAL: GRAIN COMMUNICATIONS OPPORTUNITY FUND II		285
DEAL: GCM OFI 2		382
DEAL: FIRST RESERVE FUND XII, LP		141
DEAL: BROOKFIELD INFRASTRUCTURE V		1,947
DEAL: CVC CAPITAL VIII		43
DEAL: FLORIN COURT CAPITAL FUND		1,145
DEAL: BLACKSTONE RE X LP		2,312
DEAL: ARTEMIS INCOME AND GROWTH SIDECAR FUND		51
DEAL: ASF VIII B		17
DEAL: ARTEMIS RE PARTNERS HEALTHCARE II		4,035
DEAL: APAX XI USD LP		1,980
DEAL: ARDIAN INFRA V - FIBRA		83
DEAL: THOMA BRAVO XV		58
DEAL: TRILANTIC CAPITAL V		475
DEAL: KKR NORTH AMERICA FUND		28
DEAL: YACAIPA AMERICAN I		1,525
DEAL: YACAIPA AMERICAN I		755
DEAL: YACAIPA AMERICAN I		2,601
DEAL: YACAIPA AMERICAN I		2,682
DEAL: YACAIPA AMERICAN I		77

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

Investment Manager	Average Assets Under Management (SMM)	Total Fees
DEAL: YACAIPA AMERICAN I		\$ 887
DEAL: YACAIPA AMERICAN I		2,589
DEAL: BLACKROCK INFRASTRUCTURE EMERGING		592
LEXINGTON CAPITAL PARTNERS IX CO INV		328
BLACKSTONE REAL ESTATE PARTNERS IX		378
LEXINGTON CAPITAL PARTNERS IX		363
LEXINGTON CAPITAL PARTNERS X		2,293
DEAL: TPG RISE CLIMATE, L.P.		259
BLACKROCK INFRASTRUCTURE EMERGING		166
DEAL: BLACKROCK INFRASTRUCTURE EMERGING		223
DEAL: TPG RISE CLIMATE, L.P.		313
EQT IX NO 2 USD SCSP		1,259
LEXINGTON VIII		240
DEAL: BLACKSTONE REAL ESTATE PARTNERS VIII		95
DEAL: BLACKROCK INFRASTRUCTURE EMERGING		89
DEAL: TPG RISE CLIMATE, L.P.		13,603
BLACKROCK INFRASTRUCTURE EMERGING MANAGER		236
DEAL: TPG RISE CLIMATE, L.P.		73
BLACKSTONE RE PARTNERS EUROPE VI SCSP		355
DEAL: BLACKROCK INFRASTRUCTURE EMERGING		152
LEXINGTON CAPITAL PARTNERS X		2,881
DEAL: TPG RISE CLIMATE, L.P.		61
DEAL: BLACKROCK INFRASTRUCTURE EMERGING MANAGER		867
DEAL: BROOKFIELD STRATEGIC R/E PARTNERS IV		149
DEAL: BLACKROCK INFRASTRUCTURE EMERGING MANAGER		222
DEAL: BROOKFIELD PREMIER REAL ESTATE PARTNERS LP		19
DEAL: BROOKFIELD STRATEGIC R/E PARTNERS IV		55
DEAL: BLACKROCK INFRASTRUCTURE EMERGING MANAGER		157
DEAL: BROOKFIELD STRATEGIC R/E PARTNERS IV		63
DEAL: BROOKFIELD STRATEGIC R/E PARTNERS IV		26
DEAL: BROOKFIELD STRATEGIC R/E PARTNERS IV		162
DEAL: MARATHON SEPARATE ACCOUNT		26
DEAL: ARES CENTRE STREET PARTNERSHIP		70
DEAL: MARATHON SEPARATE ACCOUNT		254
DEAL: ARES CENTRE STREET PARTNERSHIP		750
DEAL: YUCAIPA AMERICAN ALLIANCE FUND I		504
DEAL: KKR ASIAN FUND IV		2,290
DEAL: GEMSSTOCK FUND LP		704
DEAL: BLACKSTONE REAL ESTATE PARTNERS IX, L.P.		70
DEAL: MARATHON SEPARATE ACCOUNT		202
DEAL: GEMSSTOCK FUND LP		122
DEAL: GEMSSTOCK FUND LP		1,225
DEAL: KKR ASIAN FUND IV		1,218
DEAL: FIRST RESERVE FUND XII, LP		48
DEAL: ICG CENTRE STREET		113

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

Investment Manager	Average Assets Under Management (SMM)	Total Fees
DEAL: BREVAN HOWARD		\$ 10,377
DEAL: MARANON CAPITAL, L.P.		29
DEAL: EQT INFRASTRUCTURE V		11
DEAL: BDCM OPPORTUNITY III		398
DEAL: BDCM OPPORTUNITIES III		85
DEAL: IP XII LP AND IP XII BUYOUT ANNEX FUND LP		887
DEAL: HEDGE FUND STRUCTURING		124
DEAL: KKR GLOBAL INF INV IV		558
DEAL: LUXEMBOURG VS JERSEY		1,760
DEAL: NEUBERGER BERMAN		52
DEAL: FLORIN COURT		165
DEAL: OAK HILL SEPARATE		55
DEAL: KKR GLOBAL INFRA IV		297
DEAL: LEXINGTON CAPITAL PARTNERS X		2,178
DEAL: TPG RE THEMATIC AD		241
DEAL: KKR STRATEGIC PART		52
DEAL: GRESHAMQUANT ACAR		841
DEAL: NEUBERGER BERMAN		23
DEAL: FLORIN COURT		123
DEAL: KKR STRATEGIC		33
DEAL: OAK HILL SEPARATE		123
DEAL: NYC SOVEREIGN IMMUNITY		161
DEAL: NYC SOVEREIGN IMMUNITY		51
DEAL: YUCAIPA LITIGATION		1,063
DEAL: PGIM REAL ESTATE CAPITAL VII, SCSP		346
DEAL: FORM SIDE LETTER		1,353
DEAL: KKR STRATEGIC PARTNERSHIP		131
DEAL: FLORIN COURT		38
DEAL: NB EMP		15
DEAL: KKR ASIAN FUND IV		116
DEAL: ARES INDUSTRIAL REAL ESTATE FUND LP		418
DEAL: EQT X (NO.2) USD SCSP		59
DEAL: ELMTREE U.S. NET IV		229
DEAL: NYC SOV IMMUN		9
DEAL: CENTRE STREET CARVAL PARTNERSHIP LP		652
DEAL: CENTRE STREET CARVAL PARTNERSHIP LP		17,000
DEAL: EQT X (NO.2) USD SCSP		36
DEAL: ARES INDUSTRIAL RE		68
DEAL: KKR ASIAN FUND IV		11
DEAL: NEUBERGER BERMAN EMERG		12
DEAL: KKR STRATEGIC PARTNERSHIP		45
DEAL: BDCM III		104
DEAL: CENTRE STREET CARVAL PARTNERSHIP LP		100
DEAL: KKR EUROPEAN VI (USD) SCSP		1,260
DEAL: YUCAIPA LITIGATION		514

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

Investment Manager	Average Assets Under Management (SMM)	Total Fees
DEAL: DIF INFRASTRUCTURE VII		\$ 7,381
DEAL: HEITMAN MFN (RE TRUST)		47
DEAL: YUCAIPA AMERICAN ALLIANCE FUND I		1,271
DEAL: ALMANAC REALTY SECURITIES IX		294
DEAL: YUCAIPA AMERICAN ALLIANCE FUND I		425
DEAL: TORCHLIGHT DEBT FUND VIII, LP		3,777
DEAL: USAA EAGLE REAL ESTATE FEEDER 1, LP		120
DEAL: YUCAIPA AMERICAN ALLIANCE FUND I		296
DEAL: KKR REPA III MFN		946
DEAL: EQT X (NO.2) USD SCSP		53
DEAL: KKR STRATEGIC PARTNERSHIP		20
DEAL: RAINE PARTNERS IV L		71
DEAL: CONTRARION		569
DEAL: REPA II		38
DEAL: AXINFRA US II LP		368
DEAL: EQT VIII CO-INV FUND		16
DEAL: FTV VII SIDE CAR		335
DEAL: BASALT INFRA PART IV A		1,906
DEAL: INSIGHT PARTNERS XII		4,000
DEAL: NYC SOVEREIGN IMMUNITY		875
DEAL: NYC SOVEREIGN IMMUNITY		395
DEAL: BLACKROCK GLOBAL IV		4,398
DEAL: BLACKROCK GLOBAL IV		41
DEAL: KKR B-PIECE STR SEP ACCT		199
DEAL: FLORIN COURT MFN		406
DEAL: VALOR EQUITY PARTNERS VI		3,333
DEAL: INTEGRUM CAPITAL PARTNERS		2,160
DEAL: APOLLO INV FUND X, L.P.		4,190
DEAL: ARDIAN INFRA FUND V S.C.A.		66
DEAL: INFRALEMON SCA - GNYL		1,303
DEAL: INTEGRUM SIDECAR		803
DEAL: THE RESOLUTE FUND V		37
DEAL: BRIGHTWOOD CAPITAL FUND V		10
DEAL: APAX XI USD LP		210
DEAL: CVC CAPITAL PARTNERS VIII		50
DEAL: W C A STOWE XII, L.P.		46
DEAL: DIF INFRASTRUCTURE VII		118
DEAL: CLEARLAKE CP VI		53
DEAL: BRIGHTWOOD C F III, LP		94
DEAL: VISTA EQ PTRS FUND VIII, LP		11,814
DEAL: EQT INFRASTRUCTURE VI		1,978
DEAL: YUCAIPA AMER ALLIANCE FD I		941
DEAL: MAPLE ROCK US FUND LP		11,825
DEAL: ASF IX B NYC CO-INVEST L.P.		1,222
DEAL: ASF IX		2,268

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

<b>Investment Manager</b>	<b>Average Assets Under Management (SMM)</b>	<b>Total Fees</b>
<b>Total Legal Expenses</b>		<b>\$ 223,375</b>
<b>Total Consultant &amp; Legal Expenses</b>		<b>1,571,544</b>
<b>Other Expenseses - Alt. Inv. Gain &amp; Loss</b>		<b>39,119,498</b>
<b>Other Miscellaneous Expenses</b>		
TAX EXPENSE- EQUITY DOMESTIC		4,611
TAX EXPENSE- EQUITY DOM CTF		0
TAX EXP. EQ INTL CTF		950,984
TAX EXP. EQ INTL		4,378,271
MISC TAX EXP OPPORT FI CTF		415
MISC TAX EXPF I OTHER		8,077
MISC. EXPENSES - EQUITY DOMESTIC CTF		0
MISC. EXPENSES FI-MORT.		-
MISC. EXPENSES - EQ INTL CTF		5,543
MISC. EXPENSES - EQ INTL		4,524
MISC. EXPENSES - OPPORT FI CTF		8
MISC. EXPENSES -FIXED INC OTHER		1,243
OTHER EXPENSE FI-CASH		31,571
CUSTODY FEES FI-CASH		2,268
CUSTODY FEES- EQUITY DOMESTIC		13,554
CUSTODY FEES FI OTHER CTF		91
CUSTODY FEES FI Mortgage CTF		6
CUSTODY FEES- EQUITY DOMESTIC CTF		698
CUSTODY FEES- F I MORTGAGE		19,630
CUSTODY FEES- FIXED INC.-TIPS		380
CUSTODY FEES- EQUITY INTL CTF		30,262
CUSTODY FEES-EQUITY INTL		115,770
CUSTODY FEES-OPPORT. F I CTF		12
CUSTODY FEES-FIXED INC OTHER		24,288
CUSTODY FEES- PVT EQ REAL ESTATE		175
CUSTODY FEES-HEDGE FUND		10
FX SERVICE FEE FI-CASH		2
FX SERVICE FEE INTERNATIONAL		-
FX SERVICE FEE EQ INTL		105,405
FX SERVICE FEE ALT EQUITY		11,178
FX SERVICE FEE ALT INV INFRASTRUCTURE		6,483
FX SERVICE FEE REAL EST		3,435
HARD DOLLAR COMPENSATION BANK CHGS FI-GOVT.		11,024
HARD DOLLAR COMPENSATION BANK CHGS FI-Shor Term.		169
HARD DOLLAR COMPENSATION EQ DOM		287
HARD D. COMPEN BANK - FI OTHER CTF		17
HARD D COMPEN CHGS-EQUITY DOM CTF		0
HARD D. COMPEN BANK FI- MORT		-



**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

<b>Investment Manager</b>	<b>Average Assets Under Management (SMM)</b>	<b>Total Fees</b>
HARD D COMPEN.CHGS- EQ INTL CTF		\$ 559
HARD D COMPEN.CHGS-EQUITY INTL		779
HARD D COMPEN.CHGS-OPPORT FI CTF		127
HARD D COMPEN CHGSPVT EQUITY		129
HARD D COMPEN CHG FIXED INC OTHER		973
HARD DOLLAR COMP BANK CHGS- PVT EQ REAL		-
Total Miscellaneous Expenses		<u>5,732,958</u>
<b>Total Other Miscellaneous Expenses</b>		<u>44,852,456</u>
<b>Total Investment Expenses</b>	<u>\$ 18,745.30</u>	<u>\$ 178,480,740</u>
<b>Firefighter Variable Supplement Fund</b>		
INVESTMENT MANAGEMENT FEES DOM EQUITY		-
INVESTMENT MGMT FEES FIXED OTHR CTF		6,682
INV MANAGEMENT FEES DOM EQUITY CTF		447
INVESTMENT MGMT FEES EQ INTL CTF		19,388
TAX EXPENSE DOM EQUITY		101
TAX EXPENSE EQ DOM CTF		86
ITAX EXPENSE EQ INTL CTF		202,812
MISC EXPENSE FI CASH GP		7
MISC EXPENSE MUT FUND FIXED		126
MISC EXPENSE MUT FUND EQUITY		6
MISC EXPENSE EQ INTL CTF		2,308
CUSTODY FEES DOM EQUITY		5,236
CUSTODY FEES FI OTHER CTF		0
CUSTODY FEES EQ DOM CTF		664
CUSTODY FEES EQ INTL CTF		3,699
CUSTODY FEES EQUITY INTL		1,087
HARD DOLLAR COMP FEES- FIXED OTHR CTF		4
HARD DOLLAR COMPENSATION EQ DOM CTF		13
HARD DOLLAR COMP FEES EQ INTL CTF		105
<b>TOTAL FIREFIGHTER VSF Expenses</b>		<u>\$ 242,771</u>
<b>Fire Officer Variable Supplement Fund</b>		
MANAGEMENT FEES EQUITY DOM		-
MANAGEMENT FEES FI OTHER CTF		4,355
MANAGEMENT FEES EQ DOM CTF		427
MANAGEMENT FEES EQ INTL CTF		14,372
TAX EXPENSE EQUITY DOM		85
TAX EXPENSE EQ DOM CTF		85
TAX EXPENSE EQ INTL CTF		145,917
MISC EXPENSE EQ DOM		-
MISC EXPENSE FI OTHR CTF		87
MISC EXPENSE EQ DOM CTF		5

**Schedule of Management Fees and Expenses  
For Fiscal Year Ended June 30, 2023**

## Schedule 4A

<b>Investment Manager</b>	<b>Average Assets Under Management (SMM)</b>	<b>Total Fees</b>
MISC EXPENSE EQ INTL CTF		\$ 1,736
OTHER EXPENSE C/D FAIL FLOAT		4
CUSTODY FEES-EQUITY DOM		5,252
CUSTODY FEES- FI OTHER CTF		0
CUSTODY FEES-EQ DOM CTF		625
CUSTODY FEES-EQ INTL CTF		2,679
HARD DOLLAR COMPENSATION FEES -FI OTHR CTF		3
HARD DOLLAR COMPENSATION FEES -EQ DOM CTF		13
HARD DOLLAR COMP FEES EQ INT'L.CTF		74
<b>TOTAL FIRE OFFICER VSF Expenses</b>		<b>\$ 175,719</b>
<b>GRAND TOTAL</b>		<b>\$ 178,899,230</b>

**Schedule of Broker's Commission QPP  
For Fiscal Year Ended June 30, 2023**

<b>Broker Name</b>	<b>Number of Shares Traded</b>	<b>Commission Paid</b>	<b>Average Cost per Share</b>
ABEL NOSER	63,940.00	\$ 3,160.30	\$ 0.05
ABN AMRO CLEARING BANK N.V.	185,422.48	1,899.96	0.01
ACADEMY SECURITIES INC	11,280.00	341.29	0.03
ALLEN & COMPANY LLC	129.00	3.87	0.03
ARQAAM CAPITAL LIMITED	285,301.00	1,494.13	0.01
ARQAAM SECURITIES LLC	291,434.00	471.57	0.00
BANCO ITAU SA	331,900.00	1,263.66	0.00
BANCO PACTUAL S.A.	3,461,060.60	8,962.38	0.00
BANCO S3 MEXICO SA	170,995.00	349.32	0.00
BANCO SANTANDER (BRASIL) S.A.	196,700.00	468.58	0.00
BANCO SANTANDER CENTRAL HISPANO	112,202.39	542.32	0.00
BANCO SANTANDER CHILE	601,383.14	35.42	0.00
BANCO SANTANDER MEXICANO, S.A.	-	-	-
BANK OF AMERICA CORPORATION	1,163,741.00	12,097.33	0.01
BANK OF AMERICA INTL NY UNITED STATES	1,000.00	3.50	0.00
BARCLAYS BANK PLC	70.90	2.76	0.04
BARCLAYS CAPITAL	989,387.44	8,413.85	0.01
BARCLAYS CAPITAL INC	43,712.00	531.72	0.01
BARCLAYS CAPITAL INC./LE	303,902.05	1,678.40	0.01
BARCLAYS CAPITAL LE	792,682.50	6,555.00	0.01
BERENBERG CAPITAL MARKETS LLC	150.00	6.00	0.04
BERNSTEINAUTONOMOUS LLP	6,636,761.58	20,167.20	0.00
BMO CAPITAL MARKETS	376,963.69	12,286.11	0.03
BMO CAPITAL MARKETS CORP.	12,874.00	197.01	0.02
BMO NESBITT BURNS INC	1,545.00	34.00	0.02
BNP PARIBAS	2,183.00	137.07	0.06
BNP PARIBAS ARBITRAGE	11,846.00	431.23	0.04
BNP PARIBAS PRIME BROKERAGE, INC.	317,235.65	967.35	0.00
BNP PARIBAS SECURITIES (ASIA) LTD.	2,076,251.80	1,038.33	0.00
BNP PARIBAS SECURITIES CO., LTD	300.00	342.68	1.14
BNP PARIBAS SECURITIES INDIA PRIVATE LIM	120,474.79	130.68	0.00
BNP PARIBAS SECURITIES SERVICES	2,582,040.24	8,562.90	0.00
BOFA SECURITIES, INC	394,294.87	8,614.47	0.02
BOFA SECURITIES, INC.	11,159,340.40	66,256.97	0.01
BRADESCO S.A. CTVM	690,896.08	1,745.90	0.00
BTG PACTUAL CASA DE BOLSA	19,746.38	41.63	0.00
BTIG, LLC	135,678.00	3,388.54	0.02
CABRERA CAPITAL MARKETS	331,167.26	10,093.55	0.03
CACEIS BANK	5,647.00	773.14	0.14
CANACCORD GENUITY INC.	55,494.00	1,898.97	0.03
CANACCORDGENUITY LLC	31,138.00	692.62	0.02
CANTOR FITZGERALD + CO.	126,380.83	1,463.37	0.01
CANTOR FITZGERALD EUROPE	128,976.51	402.78	0.00
CARNEGIE A S	40,632.00	2,059.00	0.05
CARNEGIE INVESTMENT BANK AB	76,750.00	1,520.84	0.02
CARNEGIE SECURITIES FINLAND	42,330.00	424.25	0.01
CASTLEOAK SECURITIES LP	17,237.60	119.14	0.01
CGS-CIMB SECURITIES (HONG KONG) LTD	256,100.00	130.75	0.00
CHINA INTERNATIONAL CAPITAL CO	434,210.00	1,026.32	0.00

**Schedule of Broker's Commission QPP  
For Fiscal Year Ended June 30, 2023**

<b>Broker Name</b>	<b>Number of Shares Traded</b>	<b>Commission Paid</b>	<b>Average Cost per Share</b>
CIBC WORLD MKTS INC	83,572.16	\$ 450.64	\$ 0.01
CIMB SECURITIES LTD., KOREA BRANCH	6,485.00	189.57	0.03
CIMB-GK SECURITIES PTE.LTD.	3,724,600.00	1,165.08	0.00
CITATION GROUP	700.00	24.50	0.04
CITIBANK CANADA	1,446.00	32.89	0.02
CITIBANK N.A.	40,467.00	391.02	0.01
CITIBANK SOUTH AFRICA	80,631.00	584.00	0.01
CITIGROUP GLOBAL MARKETS INC	360,587.69	4,158.61	0.01
CITIGROUPGLBL MARKET KOERA SECS LTD	42,172.09	1,677.05	0.04
CITIGROUPGLOBAL MARKETS AUSTRALIA PTY	111,167.36	33.82	0.00
CITIGROUPGLOBAL MARKETS EUROPE AG	727,952.46	15,269.98	0.02
CITIGROUPGLOBAL MARKETS INC	32,807,756.37	4,451.72	0.00
CITIGROUPGLOBAL MARKETS INC.	56,402.22	43.35	0.00
CITIGROUPGLOBAL MARKETS INDIA	304,471.88	1,849.02	0.01
CITIGROUPGLOBAL MARKETS LIMITED	5,316,629.77	26,868.12	0.01
CITIGROUPGLOBAL MARKETS TAIWAN	134,083.19	1,304.49	0.01
CL SECURITIES TAIWAN COMPANY LIMITED	1,669,687.09	4,682.96	0.00
CLSA AMERICAS	9,521.00	237.43	0.02
CLSA AUSTRALIA PTY LTD	641,584.98	777.68	0.00
CLSA SECURITIES KOREA LTD.	236,533.04	7,979.84	0.03
CLSA SECURITIES MALAYSIA SDN BHD	1,222,600.00	333.21	0.00
CLSA SINGAPORE PTE LTD.	2,093,743.99	7,918.67	0.00
CLSA UK	1,868,417.00	4,218.69	0.00
COMPASS POINT	7,494.00	299.76	0.04
COWEN AND COMPANY, LLC	563,475.44	6,619.48	0.01
COWEN ANDCOMPANY, LLC	45,825.97	1,683.91	0.04
CRAIG-HALLUM	27,164.00	1,289.32	0.05
CREDIT LYONNAIS SECURITIES INDIA	1,666,502.50	11,264.13	0.01
CREDIT LYONNAIS SECURITIES(ASIA)	52,586,477.16	32,593.09	0.00
CREDIT SUISSE	3,426.44	16.29	0.00
CREDIT SUISSE FIRST BOSTON	104,261.33	1,919.39	0.02
CREDIT SUISSE FIRST BOSTON (EUROPE)	2,855.69	605.70	0.21
CREDIT SUISSE FIRST BOSTON SA CTVM	333,800.00	1,369.34	0.00
CREDIT SUISSE INTERNATIONAL	784,438.59	1,735.59	0.00
CREDIT SUISSE SECS INDIA PRIVATE LTD	51,855.22	466.94	0.01
CREDIT SUISSE SECURITIES (USA) LLC	2,321,378.81	17,107.01	0.01
CREDIT SUISSE SECURITIES CANADA INC	1,244.00	36.78	0.03
CS FIRST BOSTON (HONG KONG) LIMITED	709,964.41	534.44	0.00
CSFB AUSTRALIA EQUITIES LTD	486,616.07	121.92	0.00
DAIWA CAPITAL MARKETS AMERICA INC.	273,060.00	5,950.09	0.02
DAIWA SBCM EUROPE	121,472.00	2,351.98	0.02
DAIWA SECURITIES (HK) LTD.	462,489.00	1,971.31	0.00
DAIWA SECURITIES COMPANY LTD	8,511.00	484.81	0.06
DAIWA SECURITIES SB CAPITAL MARKETS	216,728.49	844.68	0.00
DAIWA SECURITIES SMBC CATHY CO	5,000.00	71.98	0.01
DAIWA SECURITIES SMBC INDIA PR	14,636.00	150.46	0.01
DANSKE BANK A.S.	2,882.00	228.67	0.08
DANSKE BANK A/S	237,944.00	280.89	0.00
DAVIDSON D.A. + COMPANY INC.	5,278.00	180.86	0.03

**Schedule of Broker's Commission QPP  
For Fiscal Year Ended June 30, 2023**

Broker Name	Number of Shares Traded	Commission Paid	Average Cost per Share
DBS VICKERS SECURITIES (SINGAPORE)	651,000.00	\$ 2,993.55	\$ 0.00
DEUTSCHE BANK SECURITIES INC	45,515.00	549.03	0.01
DREXEL HAMILTON LLC	8,025.00	160.50	0.02
DRIVEWEALTH INSTITUTIONAL LLC	820.00	8.20	0.01
DSP MERRILL LYNCH LTD	292,733.07	2,993.34	0.01
EUROMOBILIARE SIM S.P.A.	39,106.00	938.88	0.02
EVERCORE ISI	152,392.00	4,282.47	0.03
EXANE S.A.	1,018,258.82	5,036.35	0.00
FIDELITY CAPITAL MARKETS	119,913.55	1,922.69	0.02
FIDELITY CLEARING CANADA ULC	287,020.00	1,306.89	0.00
FINANCIALBROKERAGE GROUP (FBG)	3,283,353.00	5,511.78	0.00
FLOW CORRETORA DE MERCADORIAS LTDA.	101,503.40	376.60	0.00
GOLDMAN SACHS (ASIA) L.L.C.	3,414,086.00	1,744.64	0.00
GOLDMAN SACHS (ASIA) LLC	23,198.00	656.72	0.03
GOLDMAN SACHS (INDIA)	464,517.84	3,664.83	0.01
GOLDMAN SACHS + CO LLC	17,189,773.40	46,346.54	0.00
GOLDMAN SACHS AUSTRALIA PTY LTD	128,320.67	132.72	0.00
GOLDMAN SACHS DO BRASIL CORRETORA	134,600.00	782.69	0.01
GOLDMAN SACHS INTERNATIONAL	1,218,310.54	3,775.75	0.00
GOLDMAN SACHS INTL FINANCE LONDON	1,627.00	69.96	0.04
GOODBODY STOCKBROKERS	33,273.51	43.41	0.00
GUGGENHEIM CAPITAL MARKETS LLC	4,120.00	164.80	0.04
GUZMAN AND COMPANY	190,189.00	5,705.67	0.03
HAITONG INTERNATIONAL SECURITIES COMPANY	153,483.28	1,854.36	0.01
HANWHA SECURITIES SEOUL	175,543.00	10,172.20	0.06
HEIGHT SECURITIES, LLC	600.00	12.00	0.02
HONGKONG AND SHANGHAI BANKING CORPORATIC	14,800.00	97.39	0.01
HSBC BANKPLC	1,950,779.21	8,268.04	0.00
HSBC BROKERAGE (USA) INC.	3,236.00	28.97	0.01
HSBC SECURITIES (USA) INC.	28,675,127.00	11,350.02	0.00
HSBC SECURITIES (USA), INC.	298.02	2.09	0.01
HSBC SECURITIES INDIA HOLDINGS	1,299,590.00	1,421.87	0.00
HYUNDAI SECURITIES	18,774.00	1,564.62	0.08
ICBCFS LLC	6,876.00	238.23	0.03
ICICI SECURITIES LIMITED	2,882,774.00	6,377.44	0.00
INDIA INFOLINE LTD	6,013.00	241.92	0.04
INSTINET	349,124.00	3,663.97	0.01
INSTINET AUSTRALIA CLEARING SRVC PTY LTD	3,706,074.26	2,697.83	0.00
INSTINET EUROPE LIMITED	846.49	24.42	0.03
INSTINET LLC	1,703,675.44	4,284.97	0.00
INSTINET PACIFIC LIMITED	43,024,794.54	14,590.43	0.00
INSTINET SINGAPORE SERVICES PT	764,670.73	1,580.99	0.00
INSTINET U.K. LTD	10,225,762.03	50,147.26	0.00
INTERNAL SWAP	33,222.00	939.51	0.03
INTL FCSTONE DTVM LTDA.	185,800.00	2,142.09	0.01
INVESTEC MARKETS(PROPRIETARY)LIMITED	82,179.00	402.18	0.00
ITG AUSTRALIA LTD.	230,804.29	130.22	0.00
ITG CANADA	3,601.87	18.97	0.01
ITG INC	235.00	1.64	0.01

**Schedule of Broker's Commission QPP  
For Fiscal Year Ended June 30, 2023**

Broker Name	Number of Shares Traded	Commission Paid	Schedule 4B
			Average Cost per Share
J P MORGAN INDIA PRIVATE LTD	489,765.49	\$ 1,656.59	\$ 0.00
J P MORGAN SECURITIES INC	2,025,567.34	10,397.64	0.01
J.P. MORGAN SECURITIES (TAIWAN) LTD	465,973.23	268.71	0.00
J.P. MORGAN SECURITIES LIMITED	128,884.58	1,208.38	0.01
J.P. MORGAN SECURITIES LLC	964,344.51	13,652.66	0.01
J.P. MORGAN SECURITIES PLC	4,578,412.35	22,507.54	0.00
J.P.MORGAN SECURITIES(FAR EAST)LTD SEOUL	25,308.00	543.58	0.02
JANNEY MONTGOMERY SCOTT INC.	40,594.00	813.38	0.02
JARDEN SECURITIES LIMITED	64,772.41	21.01	0.00
JEFFERIESHONG KONG LIMITED	83,841.00	191.32	0.00
JEFFERIESINDIA PRIVATE LIMITED	565,258.27	6,814.59	0.01
JEFFERIESINTERNATIONAL LTD	2,835,105.20	15,610.20	0.01
JEFFERIESLLC	2,591,595.44	24,820.21	0.01
JMP SECURITIES	18,462.00	376.24	0.02
JOH. BERENBERG, GOSSLER & CO. KG	111,890.00	3,859.35	0.03
JONESTRADING INSTITUTIONAL SERVICES LLC	142,392.00	2,129.38	0.01
JP MORGANBROKING HK LIMITED	164,000.00	428.41	0.00
JP MORGANSECURITIES AUSTRALIA LTD	1,511,326.46	1,631.42	0.00
JP MORGANSECURITIES SINGAPORE	1,821,500.00	5,003.28	0.00
JPMORGAN SECURITIES(ASIA PACIFIC)LTD	8,927,206.21	22,001.21	0.00
KEEFE BRUYETTE + WOODS INC	32,727.00	1,220.33	0.04
KEPLER CHEUVREUX	95,495.00	3,864.30	0.04
KEYBANC CAPITAL MARKETS INC	136,085.00	5,354.92	0.04
KIM ENG SECURITIES (HK) LTD.	282,400.00	153.22	0.00
KOREA INVESTMENT AND SECURITIES CO., LTD	6,778.00	480.64	0.07
KOTAK SECURITIES LTD	16,132.00	690.64	0.04
LARRAIN VIAL	181,996.96	57.79	0.00
LEERINK PARTNERS LLC	24,681.00	932.95	0.04
LIQUIDNET INC	245,161.00	6,332.88	0.03
LIQUIDNETCANADA INC	6,100.00	18.57	0.00
LIQUIDNETEUROPE LIMITED	60,046.03	4,037.59	0.07
LOOP CAPITAL MARKETS	1,187,911.51	25,369.53	0.02
LUMINEX TRADING AND ANALYTICS	48.00	0.24	0.01
LUMINEX TRADING AND ANALYTICS LLC	66,474.00	1,785.89	0.03
MACQUARIE SECURITIES (USA) INC	29,106.00	511.23	0.02
MACQUARIEBANK LIMITED	953,371.16	1,048.24	0.00
MACQUARIECAPITAL (EUROPE) LTD	25,293.44	64.68	0.00
MACQUARIECAPITAL (USA) INC	409,981.00	1,027.38	0.00
MACQUARIECAPITAL SECURITIES S	4,937,138.19	4,930.34	0.00
MACQUARIESEC NZ LTD	49,201.84	20.60	0.00
MACQUARIESECURITIES (INDIA) PVT LTD	45,505.98	196.60	0.00
MACQUARIESECURITIES (SINGAPORE)	111,600.00	90.05	0.00
MACQUARIESECURITIES KOREA LIMITED	47,689.23	2,226.13	0.05
MACQUARIESECURITIES LIMITED	205,522.67	520.78	0.00
MAYBANK KIM ENG SECURITIES PTE LTD	33,800.00	11.63	0.00
MERRILL LYNCH CANADA INC	7,770.00	233.10	0.03
MERRILL LYNCH EQUITIES (AUSTRALIA)	701,776.00	3,112.93	0.00
MERRILL LYNCH INTERNATIONAL	5,487,813.12	35,111.79	0.01
MERRILL LYNCH PIERCE FENNER AND S	671,000.00	2,694.84	0.00



**Schedule of Broker's Commission QPP  
For Fiscal Year Ended June 30, 2023**

Broker Name	Number of Shares Traded	Commission Paid	Average Cost per Share
MERRILL LYNCH PROFESSIONAL CLEARING CORP	7,525.48	\$ 272.57	\$ 0.04
MERRILL LYNCH, PIERCE FENNER AND SMITH	4,550,000.00	2,179.50	0.00
MERRILL LYNCH, PIERCE FENNER SMITH	166,636.00	8,331.80	0.05
MIRABAUD SECURITIES LLP	1,824.00	555.59	0.30
MIRAE ASSET SEC USA	-	-	-
MIRAE ASSET SECURITIES CO., LTD.	1,515.77	48.68	0.03
MISCHLER FINANCIAL GROUP, INC-EQUITIES	197,263.52	5,747.61	0.03
MIZUHO SECURITIES USA INC	13,100.00	1,609.62	0.12
MIZUHO SECURITIES USA INC.	50,782.00	1,734.83	0.03
MKM PARTNERS LLC	9,770.00	325.95	0.03
MORGAN STANLEY AND CO INTERNATIONAL	88,216.38	6,812.97	0.08
MORGAN STANLEY AND CO. INTERNATIONAL PLC	6,068,377.33	5,739.64	0.00
MORGAN STANLEY AUSTRALIA SECURITIES LTD	193,772.50	167.24	0.00
MORGAN STANLEY CO INCORPORATED	12,509,323.66	48,521.48	0.00
MORGAN STANLEY INDIA COMPANY PVT LTD	572,704.95	1,409.23	0.00
MORGAN STANLEY TAIWAN LIMITED	1,578,565.40	1,633.40	0.00
NATIONAL BANK FINANCIAL INC	3,000.00	12.54	0.00
NATIONAL FINANCIAL SERVICES CORPORATION	20,087.87	426.95	0.02
NATIONAL FINANCIAL SERVICES LLC	1,809.00	29.61	0.02
NEEDHAM AND COMPANY LLC	62,480.00	2,686.19	0.04
NESBITT BURNS	1,047.00	31.41	0.03
NOMURA FINANCIAL ADVISORY + SEC INDIA	111,882.78	825.86	0.01
NOMURA FINANCIAL INVESTMENT KOREA CO LTD	8,517.62	50.26	0.01
NORTH SOUTH CAPITAL LLC	15,595.00	619.67	0.04
NORTHERN TRUST BROKERAGE INSTITUTION	575.00	17.25	0.03
NORTHLAND SECURITIES INC.	1,000.00	40.00	0.04
NUMIS SECURITIES LIMITED	389,395.76	164.13	0.00
OPPENHEIMER + CO. INC.	39,303.00	1,533.92	0.04
OPTIVER VOF	19,066.62	47.25	0.00
PAREL	118,302.63	4,040.15	0.03
PENSERRA SECURITIES	228,041.00	4,357.81	0.02
PENSERRA SECURITIES LLC	193,581.00	361.32	0.00
PERSHING LLC	3,144,236.39	27,000.04	0.01
PERSHING SECURITIES CANADA LIMITED	11,843.00	263.17	0.02
PERSHING SECURITIES LIMITED	1,643,782.93	16,393.01	0.01
PGM GLOBAL INC.	90,628.00	1,765.94	0.02
PIPER JAFFRAY & CO.	211,865.73	7,245.82	0.03
PIPER, JAFFRAY AND HOPWOOD	241,306.00	755.90	0.00
R.B.C. DOMINION SECURITIES CORPORATION	169.00	5.07	0.03
RAYMOND JAMES AND ASSOCIATES	2,547.00	9.49	0.00
RAYMOND JAMES AND ASSOCIATES INC	173,217.00	6,853.57	0.04
RAYMOND JAMES LTD	7,675.00	230.25	0.03
RBC CAPITAL MARKETS LLC	97,540.00	3,465.11	0.04
RBC CAPITAL MARKETS, LLC	464,326.66	9,327.78	0.02
RBC DOMINION SECURITIES INC.	111,153.87	572.51	0.01
REDBURN (EUROPE) LIMITED	43,516.00	483.71	0.01
ROBERT W.BAIRD CO.INCORPORATED	695,348.00	16,877.45	0.02
ROTH CAPITAL PARTNERS LLC	13,637.00	495.04	0.04
ROYAL BANK OF CANADA EUROPE LTD	231,305.66	4,420.17	0.02

**Schedule of Broker's Commission QPP  
For Fiscal Year Ended June 30, 2023**

Broker Name	Number of Shares Traded	Commission Paid	Average Cost per Share
SAMSUNG SECURITIES CO LTD	11,230.00	\$ 1,387.87	\$ 0.12
SANFORD C BERNSTEIN CO LLC	331,102.00	8,060.26	0.02
SANFORD C. BERNSTEIN (INDIA) PRIVATE LIM	84,441.00	522.20	0.01
SANFORD C. BERNSTEIN AND CO. LLC	19,131,509.00	24,469.90	0.00
SANTANDERINVESTMENT SECURITIES INC	208,300.27	184.75	0.00
SANTANDERSECURITIES SERVICES, S.A	37,659.40	145.55	0.00
SCOTIA CAPITAL INC	100,895.86	519.21	0.01
SCOTIAMCLEOD (U.S.A.) INC.	74,127.02	525.50	0.01
SG AMERICAS SECURITIES LLC	9,192.00	61.16	0.01
SG ASIA SECURITIES (INOIA) PVT LTD	2,297.98	2.81	0.00
SG SECURITIES (HK) LIMITED	762,489.86	463.34	0.00
SIDCO/VIRTU AMERICAS	1,288.00	32.10	0.02
SINOPAC SECURITIES CORPORATION	182,000.00	606.67	0.00
SMBC SECURITIES INC	3,600.00	106.04	0.03
SOCIETE GENERALE	1,621,529.58	1,835.65	0.00
STATE STREET GLOBAL MARKETS, LLC	152,867.00	3,642.60	0.02
STEPHENS INC	74,170.00	2,929.23	0.04
STIFEL NICOLAUS + CO INC	220,209.00	8,097.21	0.04
STRATEGAS SECURITIES LLC	33,824.00	1,199.72	0.04
SUNTRUST CAPITAL MARKETS, INC.	61,163.00	2,081.41	0.03
TELSEY ADVISORY GROUP	57,052.00	2,700.61	0.05
THE BANK OF NEW YORK MELLON	378,392.00	1,102.20	0.00
THE BENCHMARK COMPANY, LLC	8,844.00	442.20	0.05
THE HONGKONG AND SHANGHAI BANKING	12,096.00	1,649.74	0.14
TORONTO DOMINION SECURITIES INC	83,524.61	441.96	0.01
TOURMALINE PARTNERS	868,880.00	5,598.60	0.01
UBS AG	5,798,814.47	25,597.51	0.00
UBS AG LONDON BRANCH	158,654.76	1,951.62	0.01
UBS SECURITIES ASIA LTD	6,684,705.48	2,515.32	0.00
UBS SECURITIES CANADA INC	108,624.82	246.74	0.00
UBS SECURITIES HONG KONG LIMITED	179,000.00	61.85	0.00
UBS SECURITIES INDIA PRIVATE LTD	72,003.10	1,926.37	0.03
UBS SECURITIES LLC	2,067,330.23	10,101.15	0.00
UBS SECURITIES PTE.LTD	84,507.00	35.75	0.00
UBS SECURITIES PTE.LTD., SEOUL	35,288.00	483.43	0.01
UBS SWITZERLAND AG	5,970.91	18.87	0.00
UBS WARBURG AUSTRALIA EQUITIES	96,211.79	72.46	0.00
UOB KAY HIAN PTE LIMITED	226,400.00	343.34	0.00
VIRTU AMERICAS	938.00	5.55	0.01
VIRTU AMERICAS LLC	280,885.09	6,857.89	0.02
VIRTU ITGEUROPE LIMITED	118,585.23	949.88	0.01
VTB BANK EUROPE PLC	(9,606.00)	(31.62)	0.00
WEDBUSH SECURITIES INC	14,733.00	589.32	0.04
WELLS FARGO SECURITIES LLC	202,578.82	1,442.03	0.01
WELLS FARGO SECURITIES, LLC	130,466.64	4,687.69	0.04
WILLIAM BLAIR & COMPANY L.L.C	172,386.00	5,932.75	0.03
WILLIAMS CAPITAL GROUP LP (THE)	15,733.56	547.31	0.03
WOOD AND COMPANY	103,566.00	211.90	0.00
WOOD GUNDY INC.	21,655.00	189.09	0.01



**Investment Section**

**New York City Fire Pension Funds**

**Schedule of Broker's Commission QPP  
For Fiscal Year Ended June 30, 2023**

**Schedule 4B**

<b>Broker Name</b>	<b>Number of Shares Traded</b>	<b>Commission Paid</b>	<b>Average Cost per Share</b>
XP INVESTIMENTOS CCTVM SA	52,200.00	\$ 209.39	\$ 0.00
<b>GRAND TOTAL</b>	<b>391,133,495.16</b>	<b>\$ 1,145,758.41</b>	<b>\$ 0.00</b>

**Schedule of Broker's Commission FFVSF  
For Fiscal Year Ended June 30, 2023**

Schedule 4B

<b>Broker Name</b>	<b>Number of Shares Traded</b>	<b>Commission Paid</b>	<b>Average Cost per Share</b>
ABN AMRO CLEARING BANK N.V.	24,792.83	\$ 11.68	\$ 0.00
BANCO PACTUAL S.A.	1,302.90	3.70	0.00
BANCO SANTANDER CENTRAL HISPANO	18,875.76	77.51	0.00
BANCO SANTANDER CHILE	109,423.86	6.44	0.00
BARCLAYS BANK PLC	33.11	1.29	0.04
BARCLAYS CAPITAL	153,321.03	198.31	0.00
BARCLAYS CAPITAL INC./LE	33,799.13	267.89	0.01
BARCLAYS CAPITAL LE	844.95	2.12	0.00
BERNSTEINAUTONOMOUS LLP	4,760.25	8.86	0.00
BMO CAPITAL MARKETS	207.38	1.46	0.01
BNP PARIBAS PRIME BROKERAGE, INC.	33,165.68	172.77	0.01
BNP PARIBAS SECURITIES (ASIA) LTD.	325,276.58	103.93	0.00
BNP PARIBAS SECURITIES INDIA PRIVATE LIM	21,920.83	23.77	0.00
BNP PARIBAS SECURITIES SERVICES	12,844.28	12.12	0.00
BOFA SECURITIES, INC	26,459.67	7.89	0.00
BOFA SECURITIES, INC.	82,976.37	667.71	0.01
BRADESCO S.A. CTVM	42,973.28	140.74	0.00
BTG PACTUAL CASA DE BOLSA	3,592.93	7.58	0.00
CABRERA CAPITAL MARKETS	2,306.91	5.78	0.00
CANTOR FITZGERALD + CO.	18,772.48	149.12	0.01
CANTOR FITZGERALD EUROPE	1,966.78	3.26	0.00
CASTLEOAK SECURITIES LP	157.65	0.39	0.00
CIBC WORLD MKTS INC	21,210.52	109.21	0.01
CITIBANK N.A.	-	-	-
CITIGROUP GLOBAL MARKETS INC	28,530.40	219.25	0.01
CITIGROUPGLBL MARKET KOERA SECS LTD	1,638.70	26.29	0.02
CITIGROUPGLOBAL MARKETS AUSTRALIA PTY	20,401.49	10.23	0.00
CITIGROUPGLOBAL MARKETS EUROPE AG	13,768.40	40.71	0.00
CITIGROUPGLOBAL MARKETS INC	4,771,650.97	94.19	0.00
CITIGROUPGLOBAL MARKETS INC.	10,262.59	7.89	0.00
CITIGROUPGLOBAL MARKETS INDIA	13,111.92	39.08	0.00
CITIGROUPGLOBAL MARKETS LIMITED	129,783.25	123.73	0.00
CITIGROUPGLOBAL MARKETS TAIWAN	32.79	0.17	0.01
CL SECURITIES TAIWAN COMPANY LIMITED	177,243.07	145.49	0.00
CLSA AUSTRALIA PTY LTD	30,326.48	53.77	0.00
CLSA SECURITIES KOREA LTD.	10,902.70	142.25	0.01
CLSA SINGAPORE PTE LTD.	60,289.56	154.08	0.00
COWEN AND COMPANY, LLC	27,298.27	218.34	0.01
COWEN ANDCOMPANY, LLC	8,775.60	50.19	0.01
CREDIT LYONNAIS SECURITIES INDIA	4,920.12	12.58	0.00
CREDIT LYONNAIS SECURITIES(ASIA)	624,203.85	226.27	0.00
CREDIT SUISSE	1,600.02	7.61	0.00
CREDIT SUISSE FIRST BOSTON	229.52	1.19	0.01
CREDIT SUISSE FIRST BOSTON (EUROPE)	39.24	2.32	0.06
CREDIT SUISSE INTERNATIONAL	134,395.13	175.55	0.00
CREDIT SUISSE SECS INDIA PRIVATE LTD	2,279.74	12.38	0.01
CREDIT SUISSE SECURITIES (USA) LLC	111,093.21	162.46	0.00
CS FIRST BOSTON (HONG KONG) LIMITED	129,126.04	90.05	0.00
CSFB AUSTRALIA EQUITIES LTD	87,447.89	33.81	0.00

**Schedule of Broker's Commission FFVSF  
For Fiscal Year Ended June 30, 2023**

Schedule 4B

<b>Broker Name</b>	<b>Number of Shares Traded</b>	<b>Commission Paid</b>	<b>Average Cost per Share</b>
DAIWA SECURITIES SB CAPITAL MARKETS	9,754.17	\$ 29.30	\$ 0.00
DSP MERRILL LYNCH LTD	11,667.06	98.13	0.01
EXANE S.A.	8,870.42	10.68	0.00
FIDELITY CAPITAL MARKETS	13.30	0.09	0.01
FLOW CORRETORA DE MERCADORIAS LTDA.	18,468.92	68.52	0.00
GOLDMAN SACHS (INDIA)	21,192.85	80.03	0.00
GOLDMAN SACHS + CO LLC	191,448.91	600.78	0.00
GOLDMAN SACHS AUSTRALIA PTY LTD	35,977.54	53.15	0.00
GOLDMAN SACHS INTERNATIONAL	214,352.13	316.41	0.00
GOODBODY STOCKBROKERS	13,882.05	18.69	0.00
HAITONG INTERNATIONAL SECURITIES COMPANY	670.18	3.99	0.01
HSBC BANKPLC	43,847.82	80.85	0.00
HSBC SECURITIES (USA), INC.	6.31	0.04	0.01
INSTINET AUSTRALIA CLEARING SRVC PTY LTD	10,080.40	16.42	0.00
INSTINET EUROPE LIMITED	109.82	3.02	0.03
INSTINET LLC	7,082.51	49.77	0.01
INSTINET PACIFIC LIMITED	519,354.53	134.73	0.00
INSTINET SINGAPORE SERVICES PT	2,305.42	0.18	0.00
INSTINET U.K. LTD	622,866.30	1,818.47	0.00
ITG AUSTRALIA LTD.	17,253.43	34.42	0.00
ITG CANADA	1,381.48	7.29	0.01
J P MORGAN INDIA PRIVATE LTD	8,936.76	19.78	0.00
J P MORGAN SECURITIES INC	142,030.46	121.23	0.00
J.P. MORGAN SECURITIES (TAIWAN) LTD	84,785.53	48.89	0.00
J.P. MORGAN SECURITIES LIMITED	144.02	1.63	0.01
J.P. MORGAN SECURITIES LLC	30,057.92	217.17	0.01
J.P. MORGAN SECURITIES PLC	97,891.71	289.13	0.00
JARDEN SECURITIES LIMITED	10,830.47	3.51	0.00
JEFFERIESINDIA PRIVATE LIMITED	3,858.92	11.49	0.00
JEFFERIESINTERNATIONAL LTD	316,780.49	838.98	0.00
JEFFERIESLLC	58,793.50	91.73	0.00
JP MORGANSECURITIES AUSTRALIA LTD	45,887.06	55.56	0.00
JPMORGAN SECURITIES(ASIA PACIFIC)LTD	26,883.56	8.67	0.00
LARRAIN VIAL	33,115.02	10.51	0.00
LIQUIDNETEUROPE LIMITED	5,426.36	4.75	0.00
LOOP CAPITAL MARKETS	3,144.49	23.43	0.01
MACQUARIEBANK LIMITED	43,425.62	62.55	0.00
MACQUARIECAPITAL (EUROPE) LTD	3,233.55	2.09	0.00
MACQUARIECAPITAL SECURITIES S	94,483.22	58.57	0.00
MACQUARIESEC NZ LTD	10,471.18	6.33	0.00
MACQUARIESECURITIES (INDIA) PVT LTD	7,690.27	25.40	0.00
MACQUARIESECURITIES KOREA LIMITED	176.35	4.89	0.03
MACQUARIESECURITIES LIMITED	459.01	2.34	0.01
MERRILL LYNCH INTERNATIONAL	147,606.04	156.49	0.00
MERRILL LYNCH PROFESSIONAL CLEARING CORP	74.48	0.19	0.00
MIRAE ASSET SECURITIES CO., LTD.	275.80	8.86	0.03
MISCHLER FINANCIAL GROUP, INC-EQUITIES	2,891.68	7.22	0.00
MORGAN STANLEY AND CO INTERNATIONAL	1,825.97	25.32	0.01
MORGAN STANLEY AND CO. INTERNATIONAL PLC	567,282.37	655.06	0.00

**Schedule of Broker's Commission FFVSF  
For Fiscal Year Ended June 30, 2023**

Schedule 4B

<b>Broker Name</b>	<b>Number of Shares Traded</b>	<b>Commission Paid</b>	<b>Average Cost per Share</b>
MORGAN STANLEY AUSTRALIA SECURITIES LTD	58,047.71	\$ 69.82	\$ 0.00
MORGAN STANLEY CO INCORPORATED	130,449.47	591.20	0.00
MORGAN STANLEY INDIA COMPANY PVT LTD	8,616.23	52.01	0.01
MORGAN STANLEY TAIWAN LIMITED	4,196.67	7.46	0.00
NOMURA FINANCIAL ADVISORY + SEC INDIA	18,963.21	58.28	0.00
NOMURA FINANCIAL INVESTMENT KOREA CO LTD	1,549.81	9.14	0.01
NUMIS SECURITIES LIMITED	86.41	0.26	0.00
OPTIVER VOF	7,334.30	20.23	0.00
PAREL	644.85	3.19	0.00
PERSHING LLC	317,050.00	2,536.98	0.01
PERSHING SECURITIES LIMITED	2,662.25	6.01	0.00
PIPER JAFFRAY & CO.	7.98	0.02	0.00
RBC CAPITAL MARKETS, LLC	12,250.18	97.75	0.01
RBC DOMINION SECURITIES INC.	28,659.07	147.46	0.01
ROYAL BANK OF CANADA EUROPE LTD	8,039.37	6.21	0.00
SANTANDERINVESTMENT SECURITIES INC	34,425.68	6.17	0.00
SANTANDERSECURITIES SERVICES, S.A	2,073.92	10.86	0.01
SCOTIA CAPITAL INC	25,138.35	129.36	0.01
SCOTIAMCLEOD (U.S.A.) INC.	58.53	0.15	0.00
SG ASIA SECURITIES (INOIA) PVT LTD	418.13	0.51	0.00
SG SECURITIES (HK) LIMITED	49,988.57	38.25	0.00
SOCIETE GENERALE	29,728.73	30.23	0.00
TORONTO DOMINION SECURITIES INC	28,997.21	154.70	0.01
UBS AG	57,681.60	77.20	0.00
UBS AG LONDON BRANCH	895.40	5.37	0.01
UBS SECURITIES ASIA LTD	250,833.82	174.90	0.00
UBS SECURITIES CANADA INC	599.98	3.16	0.01
UBS SECURITIES INDIA PRIVATE LTD	2,492.42	10.99	0.00
UBS SECURITIES LLC	176,487.89	217.17	0.00
UBS SWITZERLAND AG	1,839.27	8.02	0.00
UBS WARBURG AUSTRALIA EQUITIES	26,144.39	25.09	0.00
VIRTU AMERICAS LLC	152.91	0.47	0.00
VIRTU ITGEUROPE LIMITED	26,344.61	33.91	0.00
WELLS FARGO SECURITIES LLC	15,871.93	121.91	0.01
WELLS FARGO SECURITIES, LLC	10.64	0.03	0.00
WILLIAMS CAPITAL GROUP LP (THE)	107.61	0.75	0.01
<b>GRAND TOTAL</b>	<b>12,168,232.57</b>	<b>\$ 14,875.36</b>	<b>\$ 0.00</b>

**Schedule of Broker's Commission FOVSF  
For Fiscal Year Ended June 30, 2023**

Schedule 4B

<b>Broker Name</b>	<b>Number of Shares Traded</b>	<b>Commission Paid</b>	<b>Average Cost per Share</b>
ABN AMRO CLEARING BANK N.V.	18,594.07	\$ 8.82	\$ 0.00
BANCO PACTUAL S.A.	940.57	2.67	0.00
BANCO SANTANDER CENTRAL HISPANO	13,626.60	55.95	0.00
BANCO SANTANDER CHILE	78,994.08	4.65	0.00
BARCLAYS BANK PLC	24.99	0.97	0.04
BARCLAYS CAPITAL	114,743.75	148.7	0.00
BARCLAYS CAPITAL INC./LE	32,012.91	253.91	0.01
BARCLAYS CAPITAL LE	637.12	1.59	0.00
BERNSTEINAUTONOMOUS LLP	3,592.78	6.67	0.00
BMO CAPITAL MARKETS	219.50	1.53	0.01
BNP PARIBAS PRIME BROKERAGE, INC.	26,667.73	158.15	0.01
BNP PARIBAS SECURITIES (ASIA) LTD.	235,565.14	76.79	0.00
BNP PARIBAS SECURITIES INDIA PRIVATE LIM	15,824.85	17.17	0.00
BNP PARIBAS SECURITIES SERVICES	9,536.68	8.98	0.00
BOFA SECURITIES, INC	19,101.48	5.7	0.00
BOFA SECURITIES, INC.	94,774.28	758.31	0.01
BRADESCO S.A. CTVM	31,022.80	101.64	0.00
BTG PACTUAL CASA DE BOLSA	2,593.77	5.47	0.00
CABRERA CAPITAL MARKETS	1,741.71	4.36	0.00
CANTOR FITZGERALD + CO.	17,828.26	141.74	0.01
CANTOR FITZGERALD EUROPE	1,472.05	2.46	0.00
CASTLEOAK SECURITIES LP	119.02	0.3	0.00
CIBC WORLD MKTS INC	15,952.61	81.96	0.01
CITIBANK N.A.	-	0	-
CITIGROUP GLOBAL MARKETS INC	34,238.64	268.54	0.01
CITIGROUPGLBL MARKET KOERA SECS LTD	1,182.97	19	0.02
CITIGROUPGLOBAL MARKETS AUSTRALIA PTY	15,288.37	7.69	0.00
CITIGROUPGLOBAL MARKETS EUROPE AG	10,044.90	29.7	0.00
CITIGROUPGLOBAL MARKETS INC	3,444,744.70	68.25	0.00
CITIGROUPGLOBAL MARKETS INC.	7,408.66	5.69	0.00
CITIGROUPGLOBAL MARKETS INDIA	9,465.61	28.23	0.00
CITIGROUPGLOBAL MARKETS LIMITED	96,297.63	91.16	0.00
CITIGROUPGLOBAL MARKETS TAIWAN	23.67	0.12	0.01
CL SECURITIES TAIWAN COMPANY LIMITED	127,953.40	105.07	0.00
CLSA AUSTRALIA PTY LTD	22,812.67	40.57	0.00
CLSA SECURITIES KOREA LTD.	7,870.69	102.62	0.01
CLSA SINGAPORE PTE LTD.	45,346.62	116.12	0.00
COWEN AND COMPANY, LLC	1,094.99	8.13	0.01
COWEN ANDCOMPANY, LLC	6,625.56	37.92	0.01
CREDIT LYONNAIS SECURITIES INDIA	3,551.88	9.08	0.00
CREDIT LYONNAIS SECURITIES(ASIA)	451,996.61	164.75	0.00
CREDIT SUISSE	1,208.01	5.74	0.00
CREDIT SUISSE FIRST BOSTON	165.69	0.85	0.01
CREDIT SUISSE FIRST BOSTON (EUROPE)	28.33	1.68	0.06
CREDIT SUISSE INTERNATIONAL	97,055.48	126.78	0.00
CREDIT SUISSE SECS INDIA PRIVATE LTD	1,645.78	8.94	0.01
CREDIT SUISSE SECURITIES (USA) LLC	84,676.57	126.55	0.00
CS FIRST BOSTON (HONG KONG) LIMITED	93,217.25	65.02	0.00
CSFB AUSTRALIA EQUITIES LTD	65,514.06	25.45	0.00

**Schedule of Broker's Commission FOVSF  
For Fiscal Year Ended June 30, 2023**

Schedule 4B

<b>Broker Name</b>	<b>Number of Shares Traded</b>	<b>Commission Paid</b>	<b>Average Cost per Share</b>
DAIWA SECURITIES SB CAPITAL MARKETS	7,328.36	\$ 22.04	\$ 0.00
DSP MERRILL LYNCH LTD	8,422.59	70.84	0.01
EXANE S.A.	6,644.71	7.99	0.00
FIDELITY CAPITAL MARKETS	9.96	0.07	0.01
FLOW CORRETORA DE MERCADORIAS LTDA.	13,332.88	49.48	0.00
GOLDMAN SACHS (INDIA)	15,299.31	57.76	0.00
GOLDMAN SACHS + CO LLC	160,553.87	583.57	0.00
GOLDMAN SACHS AUSTRALIA PTY LTD	27,075.83	40.15	0.00
GOLDMAN SACHS INTERNATIONAL	159,057.15	236.22	0.00
GOODBODY STOCKBROKERS	10,474.86	14.11	0.00
HAITONG INTERNATIONAL SECURITIES COMPANY	483.81	2.87	0.01
HSBC BANKPLC	31,767.47	58.77	0.00
HSBC SECURITIES (USA), INC.	5.96	0.04	0.01
INSTINET AUSTRALIA CLEARING SRVC PTY LTD	7,580.99	12.38	0.00
INSTINET EUROPE LIMITED	82.85	2.28	0.03
INSTINET LLC	2,713.01	16.51	0.01
INSTINET PACIFIC LIMITED	375,150.06	97.33	0.00
INSTINET SINGAPORE SERVICES PT	1,725.54	0.13	0.00
INSTINET U.K. LTD	468,525.04	1371.99	0.00
ITG AUSTRALIA LTD.	12,981.35	25.96	0.00
ITG CANADA	1,041.91	5.48	0.01
J P MORGAN INDIA PRIVATE LTD	6,451.51	14.28	0.00
J P MORGAN SECURITIES INC	102,848.15	89.17	0.00
J.P. MORGAN SECURITIES (TAIWAN) LTD	61,207.44	35.3	0.00
J.P. MORGAN SECURITIES LIMITED	108.21	1.23	0.01
J.P. MORGAN SECURITIES LLC	57,775.67	904.95	0.02
J.P. MORGAN SECURITIES PLC	71,957.54	214.3	0.00
JARDEN SECURITIES LIMITED	8,106.28	2.63	0.00
JEFFERIESINDIA PRIVATE LIMITED	2,785.79	8.31	0.00
JEFFERIESINTERNATIONAL LTD	238,445.71	632.52	0.00
JEFFERIESLLC	42,874.80	69.27	0.00
JP MORGANSECURITIES AUSTRALIA LTD	34,529.12	41.89	0.00
JPMORGAN SECURITIES(ASIA PACIFIC)LTD	20,148.67	6.52	0.00
LARRAIN VIAL	23,906.03	7.59	0.00
LIQUIDNETEUROPE LIMITED	4,066.66	3.58	0.00
LOOP CAPITAL MARKETS	1,544.56	11.04	0.01
MACQUARIEBANK LIMITED	32,581.98	47.22	0.00
MACQUARIECAPITAL (EUROPE) LTD	2,420.20	1.53	0.00
MACQUARIECAPITAL SECURITIES S	69,378.45	43.54	0.00
MACQUARIESEC NZ LTD	7,860.19	4.75	0.00
MACQUARIESECURITIES (INDIA) PVT LTD	5,551.66	18.36	0.00
MACQUARIESECURITIES KOREA LIMITED	127.35	3.52	0.03
MACQUARIESECURITIES LIMITED	331.36	1.69	0.01
MERRILL LYNCH INTERNATIONAL	108,796.97	117.04	0.00
MERRILL LYNCH PROFESSIONAL CLEARING CORP	55.75	0.14	0.00
MIRAE ASSET SECURITIES CO., LTD.	199.10	6.4	0.03
MISCHLER FINANCIAL GROUP, INC-EQUITIES	2,183.21	5.46	0.00
MORGAN STANLEY AND CO INTERNATIONAL	1,318.17	18.28	0.01
MORGAN STANLEY AND CO. INTERNATIONAL PLC	414,818.62	488.51	0.00

**Schedule of Broker's Commission FOVSF  
For Fiscal Year Ended June 30, 2023**

Schedule 4B

<b>Broker Name</b>	<b>Number of Shares Traded</b>	<b>Commission Paid</b>	<b>Average Cost per Share</b>
MORGAN STANLEY AUSTRALIA SECURITIES LTD	43,707.76	\$ 52.73	\$ 0.00
MORGAN STANLEY CO INCORPORATED	116,745.73	594.7	0.01
MORGAN STANLEY INDIA COMPANY PVT LTD	6,220.12	37.6	0.01
MORGAN STANLEY TAIWAN LIMITED	3,029.62	5.36	0.00
NOMURA FINANCIAL ADVISORY + SEC INDIA	13,689.70	42.08	0.00
NOMURA FINANCIAL INVESTMENT KOREA CO LTD	1,118.82	6.61	0.01
NUMIS SECURITIES LIMITED	64.67	0.2	0.00
OPTIVER VOF	5,531.66	15.27	0.00
PAREL	483.00	2.41	0.00
PERSHING LLC	111,438.78	892.36	0.01
PERSHING SECURITIES LIMITED	1,992.64	4.44	0.00
PIPER JAFFRAY & CO.	5.97	0.01	0.00
RBC CAPITAL MARKETS, LLC	6,313.15	50.28	0.01
RBC DOMINION SECURITIES INC.	21,552.95	110.74	0.01
ROYAL BANK OF CANADA EUROPE LTD	5,803.70	4.48	0.00
SANTANDERINVESTMENT SECURITIES INC	24,852.21	4.45	0.00
SANTANDERSECURITIES SERVICES, S.A	1,556.99	8.13	0.01
SCOTIA CAPITAL INC	18,899.48	97.09	0.01
SCOTIAMCLEOD (U.S.A.) INC.	43.81	0.11	0.00
SG ASIA SECURITIES (INOIA) PVT LTD	301.85	0.37	0.00
SG SECURITIES (HK) LIMITED	36,493.88	28.53	0.00
SOCIETE GENERALE	21,658.05	22.42	0.00
TORONTO DOMINION SECURITIES INC	21,856.42	116.53	0.01
UBS AG	43,148.85	57.62	0.00
UBS AG LONDON BRANCH	670.71	4.08	0.01
UBS SECURITIES ASIA LTD	184,277.19	130.01	0.00
UBS SECURITIES CANADA INC	452.50	2.39	0.01
UBS SECURITIES INDIA PRIVATE LTD	1,799.30	7.92	0.00
UBS SECURITIES LLC	168,105.49	192.99	0.00
UBS SWITZERLAND AG	1,385.20	6.05	0.00
UBS WARBURG AUSTRALIA EQUITIES	19,670.58	18.95	0.00
VIRTU AMERICAS LLC	115.39	0.36	0.00
VIRTU ITGEUROPE LIMITED	19,839.53	25.56	0.00
WELLS FARGO SECURITIES LLC	115,454.41	918.41	0.01
WELLS FARGO SECURITIES, LLC	7.96	0.02	0.00
WILLIAMS CAPITAL GROUP LP (THE)	80.54	0.57	0.01
<b>GRAND TOTAL</b>	<b>9,016,050.76</b>	<b>\$ 12,248.96</b>	<b>\$ 0.00</b>

## Investment Summary

Fire Combined Funds  
Year Ended June 30, 2023  
(Dollar amount in thousands)

	<u>Fair Value</u>	<u>Percent of Total Fair Value</u>
<b>Type of Investment:</b>		
<b>Short Term Investments:</b>		
Commercial paper	\$ 21,994	0.10%
Short Term Investments	207,740	0.96%
U.S. Treasury Bills	94,482	0.44%
<b>Total Short-Term</b>	<b>324,216</b>	<b>1.50%</b>
<b>Debt securities:</b>		
U.S. Govt Securities and Agency	2,069,986	9.55%
Mortgage debt security	671,797	3.10%
Corporate and Other	1,745,068	8.05%
Treasury Inflation -protected securities	722,535	3.34%
Bank Loans	65,191	0.30%
<b>Total debt securities</b>	<b>5,274,577</b>	<b>24.35%</b>
<b>Equities Securities:</b>		
<b>International equity</b>	<b>1,996,593</b>	<b>9.22%</b>
<b>Alternative investments:</b>		
Infrastructure	372,979	1.72%
Opportunistic fixed income	682,276	3.15%
Private equity	1,744,526	8.05%
Private real estate	1,178,865	5.44%
Hedge Funds	951,281	4.39%
Fixed income investment company	55,439	0.26%
<b>Total Alternative investments</b>	<b>4,985,366</b>	<b>23.01%</b>
<b>Collective trust funds:</b>		
Bank Loans	21,975	0.10%
Corporate and other	138,105	0.64%
International equity	591,708	2.73%
Domestic equity	32,339	0.15%
Mortgage debt security	94,220	0.43%
Opportunistic Fixed income	-	0.00%
U.S. Government and agency	109,894	0.51%
<b>Total collective trust funds:</b>	<b>988,241</b>	<b>4.56%</b>
<b>Collateral from Securities Lending</b>	<b>2,137,568</b>	<b>9.87%</b>
<b>Total Market Value</b>	<b>\$ 21,665,200</b>	<b>100%</b>



**New York City Fire Pension Funds**  
**Annual Comprehensive Financial Report**  
**A Fiduciary Fund of The City of New York**



**Actuarial Section**

**Part IV**

**Fiscal Year Ended June 30, 2023**

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## OFFICE OF THE ACTUARY

255 GREENWICH STREET • 9<sup>TH</sup> FLOOR  
NEW YORK, NY 10007  
(212) 442-5775 • FAX: (212) 442-5777

MAREK TYSZKIEWICZ  
CHIEF ACTUARY

December 1, 2023

Board of Trustees  
New York City Fire Pension Fund  
1 Battery Park Plaza 9<sup>th</sup> Floor  
New York, NY 10004

Re: Actuarial Information for the Annual Comprehensive Financial Report (ACFR) for the  
Fiscal Year Ended June 30, 2023

Dear Members of the Board of Trustees:

The financial objective of the New York City Fire Pension Fund (FIRE 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, 2021 actuarial valuation is used to determine the Fiscal Year 2023 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 2023, the Actuarial Contributions to FIRE 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 22, 2023, the Office of the Actuary (OA) published the "June 30, 2023 GASB 67/68 Report for the City of New York and the New York City Retirement Systems" (the Fiscal Year 2023 GASB67/68 Report). Appendix E of the Fiscal Year 2023 GASB67/68 Report contains information developed in accordance with GASB67 for FIRE.

## **Actuarial Assumptions and Methods**

The assumptions and methods used for the June 30, 2021 valuation were presented in the memorandum titled “Proposed Changes to Actuarial Assumptions and Methods (Revised 2021 A&M)” dated July 19, 2021 and were adopted by the Board of Trustees at the July 28, 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, 2021 and June 30, 2020 actuarial valuations are based upon the census data as of those dates submitted by the Plan’s administrative staff and the employer’s payroll facilities. A summary of the census data used in the June 30, 2021 actuarial valuation is included in this ACFR. A summary of the census data used in the June 30, 2020 actuarial valuation of the Plan is available in the Fiscal Year 2022 ACFR.

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. This valuation reflects the enactment of Chapter 782 of the Laws of 2022 which extends the eligibility of Special Accidental Death Benefits to parents of certain deceased members who died in the line-of-duty. All other benefits under the Plan are unchanged from the prior valuation.

## **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 13).

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) (Tables 14a-c), as prescribed by the Government Finance Officers Association (GFOA). This Solvency Test represents an alternative approach to describing progress toward funding objectives.

## **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, 2021 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.

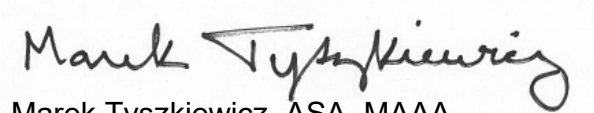
If you have any questions about the information in this Actuarial Section or the actuarial information presented elsewhere in this ACFR, please do not hesitate to contact Anderson Huynh, Edward Hue, or me.

Board of Trustees  
New York City Fire Pension Fund  
December 1, 2022  
Page 4

### **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,

A handwritten signature in black ink that reads "Marek Tyszkiewicz". The signature is written in a cursive style with a large, stylized initial "M".

Marek Tyszkiewicz, ASA, MAAA  
Chief Actuary

MT/eh

Att.

cc: Albert Connolly – New York City Fire Pension Fund  
Patrick Dunn – New York City Fire Pension Fund  
Amar Dyal – New York City Fire Pension Fund  
Edward Hue, EA – New York City Office of the Actuary  
Anderson Huynh, FSA, EA – New York City Office of the Actuary  
Winnie Lin – New York City Fire Pension Fund  
Keith Snow, Esq. – New York City Office of the Actuary  
Lei Tian – New York City Fire Pension Fund

## NEW YORK CITY FIRE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION

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 (ACCNYS), 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 19, 2021. The actuarial assumptions and methods described in that memorandum were adopted by the Board of Trustees at the July 28, 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.
3. Active service tables are used to estimate various withdrawals from active service. Probabilities are shown in Tables 1 and 2 for members withdrawing from active service for service retirement, Table 3 for members terminating from active service, and Tables 4 and 5 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.
4. The service retiree mortality, disabled retiree mortality, and beneficiary mortality base tables are projected from 2012 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 6a and 6b, respectively, and for beneficiaries in Table 6c.
5. A salary scale is used to estimate salaries at termination, retirement, or death. Percentage increases are shown in Table 7. The salary scale includes a General Wage Increase (GWI) assumption of 3.0% per annum.

## NEW YORK CITY FIRE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION (Cont'd)

6. The salary data was adjusted to reflect overtime earnings. A Baseline Overtime assumption is applied to most years and a separate overtime assumption, known as a Dual Overtime assumption, is applied to the years included in the calculation of Final Salary or Final Average Salary. Baseline Overtime and Dual Overtime percentages are shown in Table 8.
7. The economic assumptions (i.e., the assumed investment return rate, GWI rate, and Cost-of-Living Adjustments (COLA)) 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.
8. The valuation assumes a closed group of members.
9. The Actuary reset the Actuarial Value of Assets (AVA) to market value as of June 30, 2019.

Beginning with the June 30, 2020 actuarial valuation, the Actuarial Asset Valuation Method (AAVM) recognizes investment returns greater or less than expected over a period of five years. In accordance with this AAVM, the Unexpected Investment Returns are phased into the AVA over a five-year period at 20% per year.

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

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

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).



## NEW YORK CITY FIRE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION (Cont'd)

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 generally financed over fixed periods.

Under EAN, the Normal Cost as a percentage of pay remains constant by individual and changes gradually over time for the entire plan as the characteristics of the group changes (e.g., more Tier 3 Enhanced active members decrease the average Normal Cost as a percentage of pay).

11. The Employer Contribution for a fiscal year is increased by the interest-adjusted amount of administrative expenses paid from FIRE during the second prior fiscal year.
12. Obligations attributable to the World Trade Center (WTC) Disability Benefits Law and to the WTC Death Benefits Law are determined through estimation techniques for post-retirement reclassifications.
13. One-Year Lag Methodology (OYLM) uses a June 30, XX valuation date to determine Fiscal Year XX+2 employer contributions.

This methodology requires adjustments to certain components used 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.

- 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.

## NEW YORK CITY FIRE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION (Cont'd)

#### c. UAL Payments

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.

14. The obligations of FIRE to the FFVSF and the FOVSF are recognized through a methodology where the PV of future VSF transfers from FIRE to the FFVSF and FOVSF is included directly as an actuarial liability of FIRE. This amount is computed as the excess, if any, of the PV of benefits of the FFVSF and FOVSF over the AVA of the FFVSF and FOVSF, respectively. Under EAN, a portion of the PV of future VSF transfers is reflected in the PV of future normal costs and a portion is reflected in the UAL.

# NEW YORK CITY FIRE PENSION FUND

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION (Cont'd)

<b>Table 1</b>		
PROBABILITIES OF SERVICE RETIREMENT WITH FULL COLA/ESCALATION FOR THOSE ELIGIBLE FOR UNREDUCED		
Age	Years of Service Since First Eligible	
	Year 1	Ultimate
19	0.00%	0.00%
20	0.00%	0.00%
21	0.00%	0.00%
22	0.00%	0.00%
23	0.00%	0.00%
24	0.00%	0.00%
25	0.00%	0.00%
26	0.00%	0.00%
27	0.00%	0.00%
28	0.00%	0.00%
29	0.00%	0.00%
30	0.00%	0.00%
31	0.00%	0.00%
32	0.00%	0.00%
33	0.00%	0.00%
34	0.00%	0.00%
35	0.00%	0.00%
36	5.00%	0.00%
37	5.00%	0.00%
38	5.00%	1.50%
39	5.00%	1.50%
40	5.00%	1.50%
41	5.00%	1.50%
42	5.00%	1.50%
43	5.00%	1.50%
44	5.00%	1.50%
45	5.00%	1.50%
46	5.50%	1.50%
47	6.00%	1.50%
48	6.50%	1.50%
49	7.00%	1.50%
50	7.50%	1.50%
51	8.00%	1.50%
52	8.50%	2.25%
53	9.00%	3.00%
54	9.50%	3.75%
55	10.00%	4.50%
56	10.00%	5.25%
57	10.00%	6.00%
58	10.00%	6.75%
59	10.00%	7.50%
60	10.00%	9.00%
61	15.00%	11.25%
62	20.00% <sup>1</sup>	15.00% <sup>1</sup>
63	25.00% <sup>1</sup>	25.00% <sup>1</sup>
64	25.00% <sup>1</sup>	25.00% <sup>1</sup>
65	100.00%	100.00%

<sup>1</sup>100% for Tier 3, Tier 3 Modified, and Tier 3 Enhanced members.

## NEW YORK CITY FIRE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION (Cont'd)

<b>Table 2</b> PROBABILITIES OF EARLY SERVICE RETIREMENT FOR TIER 3, TIER 3 MODIFIED, AND TIER 3 ENHANCED MEMBERS		
<b>Years of Service</b>	<b>Reduced Service Retirement</b>	<b>Unreduced Before Full Escalation</b>
20	5.00%	N/A
21	2.00%	N/A
22	N/A	5.00%
23	N/A	2.00%
24	N/A	2.00%

# NEW YORK CITY FIRE PENSION FUND

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION (Cont'd)

<b>Table 3</b>	
<b>PROBABILITIES OF TERMINATION</b>	
<b>Years Of Service</b>	<b>Probability of Termination</b>
0	2.00%
1	0.80%
2	0.40%
3	0.40%
4	0.40%
5	0.40%
6	0.36%
7	0.32%
8	0.28%
9	0.24%
10	0.20%
11	0.18%
12	0.16%
13	0.14%
14	0.12%
15	0.10%
16	0.10%
17	0.10%
18	0.10%
19	0.10%
20	N/A

# NEW YORK CITY FIRE PENSION FUND

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION (Cont'd)

<b>Table 4</b>				
PROBABILITIES OF DISABILITY RETIREMENT				
		Accidental Disability		
Age	Ordinary Disability	Tier 1 & Tier 2 Eligible for WTC Benefits	Tier 1 & Tier 2 Not Eligible for WTC AND Tier 3 Enhanced Plan	Tier 3 & Tier 3 Modified Non- Enhanced Plan
15	0.0025%	0.050%	0.035%	0.030%
16	0.0025%	0.050%	0.035%	0.030%
17	0.0025%	0.050%	0.035%	0.030%
18	0.0025%	0.050%	0.035%	0.030%
19	0.0025%	0.050%	0.035%	0.030%
20	0.0025%	0.050%	0.035%	0.030%
21	0.0025%	0.050%	0.035%	0.030%
22	0.0025%	0.050%	0.035%	0.030%
23	0.0025%	0.050%	0.035%	0.030%
24	0.0025%	0.050%	0.035%	0.030%
25	0.0025%	0.050%	0.035%	0.030%
26	0.0025%	0.090%	0.045%	0.040%
27	0.0050%	0.130%	0.055%	0.050%
28	0.0075%	0.170%	0.075%	0.070%
29	0.0100%	0.210%	0.115%	0.100%
30	0.0125%	0.250%	0.175%	0.150%
31	0.0150%	0.400%	0.275%	0.240%
32	0.0175%	0.550%	0.375%	0.330%
33	0.0200%	0.700%	0.475%	0.420%
34	0.0225%	0.850%	0.575%	0.510%
35	0.0250%	1.000%	0.700%	0.600%
36	0.0275%	1.200%	0.850%	0.720%
37	0.0300%	1.400%	1.000%	0.840%
38	0.0325%	1.600%	1.150%	0.960%
39	0.0350%	1.800%	1.300%	1.080%
40	0.0375%	2.000%	1.500%	1.200%
41	0.0400%	2.200%	1.650%	1.320%
42	0.0425%	2.400%	1.800%	1.440%
43	0.0450%	2.600%	1.950%	1.560%
44	0.0475%	2.800%	2.100%	1.680%
45	0.0500%	3.000%	2.300%	1.800%
46	0.0550%	3.400%	2.650%	1.920%
47	0.0600%	3.800%	3.000%	2.040%
48	0.0650%	4.200%	3.350%	2.160%
49	0.0700%	4.600%	3.700%	2.280%
50	0.0750%	5.000%	4.050%	2.400%
51	0.1100%	5.600%	4.400%	2.520%
52	0.1450%	6.200%	4.750%	2.640%
53	0.1800%	6.800%	5.100%	2.760%
54	0.2150%	7.400%	5.450%	2.880%
55	0.2500%	8.000%	5.800%	3.000%
56	0.5000%	10.000%	8.000%	4.000%
57	0.7500%	12.000%	10.000%	5.000%
58	1.0000%	15.000%	12.500%	6.000%
59	1.2500%	18.000%	15.000%	7.000%
60	1.5000%	21.000%	17.500%	8.000%
61	2.0000%	25.000%	20.000%	9.000%
62	2.5000% <sup>1</sup>	30.000%	22.000% <sup>1</sup>	N/A
63	2.5000% <sup>1</sup>	30.000%	22.000% <sup>1</sup>	N/A
64	2.5000% <sup>1</sup>	30.000%	22.000% <sup>1</sup>	N/A
65	N/A	N/A	N/A	N/A

<sup>1</sup>N/A for Tier 3, Tier 3 Modified, and Tier 3 Enhanced members.

## NEW YORK CITY FIRE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION (Cont'd)

<b>Table 5</b>			
PROBABILITIES OF ACTIVE MEMBER MORTALITY BASE RATES			
Age	Ordinary Death		Accidental Death
	Males	Females	All
15	0.020%	0.015%	0.010%
16	0.020%	0.015%	0.010%
17	0.020%	0.015%	0.010%
18	0.020%	0.015%	0.010%
19	0.020%	0.015%	0.010%
20	0.020%	0.015%	0.010%
21	0.020%	0.015%	0.010%
22	0.020%	0.015%	0.010%
23	0.020%	0.015%	0.010%
24	0.020%	0.015%	0.010%
25	0.020%	0.015%	0.010%
26	0.020%	0.015%	0.010%
27	0.020%	0.015%	0.010%
28	0.020%	0.015%	0.010%
29	0.020%	0.015%	0.010%
30	0.020%	0.015%	0.010%
31	0.020%	0.015%	0.010%
32	0.020%	0.015%	0.010%
33	0.020%	0.015%	0.010%
34	0.020%	0.015%	0.010%
35	0.020%	0.015%	0.010%
36	0.021%	0.016%	0.010%
37	0.022%	0.017%	0.010%
38	0.023%	0.018%	0.010%
39	0.024%	0.019%	0.010%
40	0.025%	0.020%	0.010%
41	0.030%	0.023%	0.013%
42	0.035%	0.026%	0.016%
43	0.040%	0.029%	0.019%
44	0.045%	0.032%	0.022%
45	0.050%	0.035%	0.025%
46	0.055%	0.038%	0.030%
47	0.060%	0.041%	0.035%
48	0.065%	0.044%	0.040%
49	0.070%	0.047%	0.045%
50	0.075%	0.050%	0.050%
51	0.080%	0.055%	0.060%
52	0.085%	0.060%	0.070%
53	0.090%	0.065%	0.080%
54	0.095%	0.070%	0.090%
55	0.100%	0.075%	0.100%
56	0.110%	0.080%	0.110%
57	0.120%	0.085%	0.120%
58	0.130%	0.090%	0.130%
59	0.140%	0.095%	0.140%
60	0.150%	0.100%	0.150%
61	0.160%	0.110%	0.200%
62	0.170% <sup>1</sup>	0.120% <sup>1</sup>	0.250% <sup>1</sup>
63	0.180% <sup>1</sup>	0.130% <sup>1</sup>	0.300% <sup>1</sup>
64	0.190% <sup>1</sup>	0.140% <sup>1</sup>	0.350% <sup>1</sup>
65	N/A	N/A	N/A

<sup>1</sup>Probabilities are N/A for Tier 3, Tier 3 Modified, and Tier 3 Enhanced members.

# NEW YORK CITY FIRE PENSION FUND

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION (Cont'd)

Table 6a					
PROBABILITIES OF MORTALITY FOR SERVICE RETIREES					
BASE RATES					
Age	Males	Females	Age	Males	Females
15	0.0100%	0.0084%	68	1.2063%	0.7604%
16	0.0135%	0.0103%	69	1.2653%	0.8243%
17	0.0181%	0.0112%	70	1.4084%	0.9061%
18	0.0217%	0.0131%	71	1.5806%	0.9954%
19	0.0240%	0.0140%	72	1.7538%	1.0940%
20	0.0251%	0.0142%	73	1.9842%	1.2060%
21	0.0268%	0.0150%	74	2.2163%	1.3283%
22	0.0284%	0.0158%	75	2.4510%	1.4362%
23	0.0301%	0.0168%	76	2.6879%	1.6455%
24	0.0315%	0.0179%	77	2.9280%	1.8563%
25	0.0327%	0.0191%	78	3.3690%	2.0670%
26	0.0342%	0.0204%	79	3.8155%	2.3446%
27	0.0354%	0.0217%	80	4.2660%	2.6218%
28	0.0371%	0.0231%	81	4.7728%	2.8997%
29	0.0394%	0.0247%	82	5.2958%	3.1772%
30	0.0427%	0.0265%	83	6.2483%	3.4554%
31	0.0503%	0.0323%	84	7.2266%	3.9664%
32	0.0581%	0.0372%	85	8.2335%	4.4805%
33	0.0655%	0.0415%	86	9.2715%	4.9967%
34	0.0725%	0.0448%	87	10.3365%	5.5147%
35	0.0799%	0.0478%	88	11.2397%	6.0388%
36	0.0851%	0.0505%	89	12.1663%	7.0317%
37	0.0901%	0.0532%	90	13.1242%	8.0312%
38	0.0961%	0.0561%	91	14.6163%	9.4265%
39	0.1037%	0.0595%	92	16.2757%	10.8698%
40	0.1138%	0.0634%	93	18.9667%	12.3822%
41	0.1230%	0.0688%	94	21.5036%	13.7895%
42	0.1327%	0.0725%	95	23.9289%	15.2575%
43	0.1430%	0.0775%	96	25.8261%	16.7330%
44	0.1542%	0.0843%	97	27.5777%	18.2626%
45	0.1666%	0.0931%	98	29.2887%	19.6947%
46	0.1798%	0.1041%	99	30.8020%	21.1460%
47	0.1941%	0.1166%	100	32.1584%	22.1859%
48	0.2093%	0.1295%	101	33.7521%	23.0680%
49	0.2250%	0.1425%	102	35.1259%	24.0803%
50	0.2412%	0.1555%	103	36.3671%	25.2770%
51	0.2975%	0.1681%	104	37.3834%	26.6309%
52	0.3514%	0.1797%	105	38.1051%	28.0912%
53	0.4018%	0.1902%	106	38.4698%	29.6244%
54	0.4483%	0.1996%	107	38.6325%	31.1943%
55	0.4895%	0.2075%	108	38.8076%	32.7579%
56	0.5352%	0.2144%	109	38.9794%	34.2712%
57	0.5757%	0.2629%	110	50.0000%	50.0000%
58	0.6104%	0.3090%	111	50.0000%	50.0000%
59	0.6391%	0.3530%	112	50.0000%	50.0000%
60	0.6625%	0.3957%	113	50.0000%	50.0000%
61	0.7126%	0.4377%	114	50.0000%	50.0000%
62	0.7621%	0.4800%	115	50.0000%	50.0000%
63	0.8255%	0.5231%	116	50.0000%	50.0000%
64	0.9079%	0.5675%	117	50.0000%	50.0000%
65	0.9997%	0.6138%	118	50.0000%	50.0000%
66	1.0607%	0.6613%	119	50.0000%	50.0000%
67	1.1308%	0.7103%	120	100.0000%	100.0000%



# NEW YORK CITY FIRE PENSION FUND

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION (Cont'd)

Table 6b					
PROBABILITIES OF MORTALITY FOR DISABLED RETIREES					
BASE RATES					
Age	Males	Females	Age	Males	Females
15	0.0238%	0.0098%	68	1.5909%	1.2517%
16	0.0321%	0.0120%	69	1.7622%	1.4342%
17	0.0433%	0.0131%	70	1.9120%	1.6327%
18	0.0517%	0.0153%	71	2.1153%	1.8400%
19	0.0573%	0.0164%	72	2.3101%	2.0561%
20	0.0608%	0.0173%	73	2.4968%	2.2946%
21	0.0660%	0.0191%	74	2.6752%	2.5649%
22	0.0716%	0.0211%	75	2.8786%	2.8625%
23	0.0772%	0.0234%	76	3.2717%	3.1737%
24	0.0831%	0.0259%	77	3.6597%	3.4562%
25	0.0886%	0.0282%	78	4.0420%	3.7889%
26	0.0936%	0.0307%	79	4.4200%	4.3087%
27	0.1008%	0.0332%	80	4.8490%	4.8485%
28	0.1089%	0.0359%	81	5.6563%	5.4107%
29	0.1170%	0.0386%	82	6.4729%	5.8954%
30	0.1254%	0.0412%	83	7.2988%	6.3864%
31	0.1342%	0.0438%	84	8.1300%	7.2278%
32	0.1426%	0.0464%	85	8.9696%	8.0743%
33	0.1544%	0.0491%	86	9.7646%	8.8707%
34	0.1602%	0.0506%	87	10.5803%	9.6600%
35	0.1670%	0.0528%	88	11.4245%	10.5768%
36	0.1696%	0.0551%	89	12.3269%	11.9527%
37	0.1721%	0.0580%	90	13.2834%	13.2782%
38	0.1754%	0.0608%	91	15.7515%	14.7506%
39	0.1792%	0.0648%	92	18.1410%	15.8458%
40	0.1836%	0.0709%	93	20.4240%	16.9974%
41	0.1891%	0.0790%	94	22.5700%	18.2075%
42	0.1957%	0.0892%	95	24.6643%	19.3408%
43	0.2038%	0.1023%	96	26.5127%	20.3502%
44	0.2134%	0.1184%	97	28.2029%	21.2709%
45	0.2247%	0.1371%	98	29.5441%	21.9254%
46	0.2374%	0.1586%	99	30.9728%	22.3227%
47	0.2518%	0.1824%	100	32.1584%	22.4341%
48	0.2672%	0.2079%	101	33.7521%	23.0680%
49	0.2837%	0.2388%	102	35.1259%	24.0803%
50	0.3022%	0.2719%	103	36.3671%	25.2770%
51	0.3597%	0.2959%	104	37.3834%	26.6309%
52	0.4188%	0.3426%	105	38.1051%	28.0912%
53	0.4788%	0.3791%	106	38.4698%	29.6244%
54	0.5392%	0.4326%	107	38.6325%	31.1943%
55	0.5986%	0.4868%	108	38.8076%	32.7579%
56	0.6556%	0.5294%	109	38.9794%	34.2712%
57	0.7090%	0.5421%	110	50.0000%	50.0000%
58	0.7577%	0.5621%	111	50.0000%	50.0000%
59	0.8017%	0.6003%	112	50.0000%	50.0000%
60	0.8498%	0.6343%	113	50.0000%	50.0000%
61	0.9095%	0.6687%	114	50.0000%	50.0000%
62	0.9862%	0.7391%	115	50.0000%	50.0000%
63	1.0698%	0.8094%	116	50.0000%	50.0000%
64	1.1631%	0.8897%	117	50.0000%	50.0000%
65	1.2477%	0.9710%	118	50.0000%	50.0000%
66	1.3403%	1.0569%	119	50.0000%	50.0000%
67	1.4168%	1.1551%	120	100.0000%	100.0000%

# NEW YORK CITY FIRE PENSION FUND

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION (Cont'd)

Table 6c					
PROBABILITIES OF BENEFICIARY MORTALITY					
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%	71	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%	0.1287%	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	0.4150%	0.2319%	102	35.1259%	24.5619%
50	0.4431%	0.2633%	103	36.3671%	25.7825%
51	0.5156%	0.2999%	104	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	0.8440%	0.4540%	108	38.8076%	33.4131%
56	0.9048%	0.5132%	109	38.9794%	34.9566%
57	0.9604%	0.5735%	110	50.0000%	50.0000%
58	1.0101%	0.6353%	111	50.0000%	50.0000%
59	1.0536%	0.6981%	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	1.2676%	0.8908%	115	50.0000%	50.0000%
63	1.3473%	0.9493%	116	50.0000%	50.0000%
64	1.4238%	1.0146%	117	50.0000%	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%

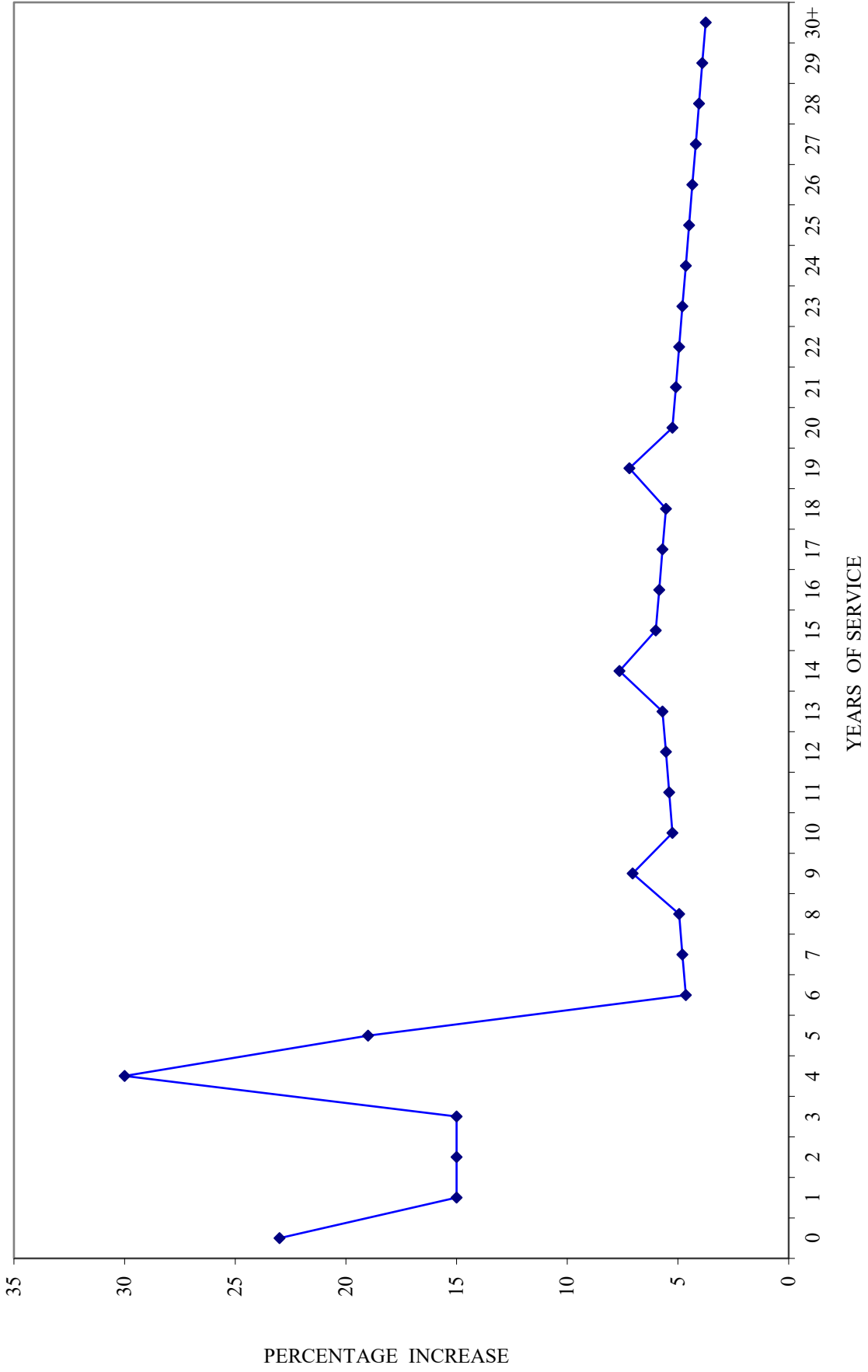
## NEW YORK CITY FIRE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION (Cont'd)

<b>Table 7</b>		
ANNUAL RATES OF MERIT AND SALARY INCREASE		
Years of Service	Merit Increase	Salary Increase <sup>1</sup>
0	20.00%	23.00%
1	12.00%	15.00%
2	12.00%	15.00%
3	12.00%	15.00%
4	27.00%	30.00%
5	16.00%	19.00%
6	1.65%	4.65%
7	1.80%	4.80%
8	1.95%	4.95%
9	4.05%	7.05%
10	2.25%	5.25%
11	2.40%	5.40%
12	2.55%	5.55%
13	2.70%	5.70%
14	4.65%	7.65%
15	3.00%	6.00%
16	2.85%	5.85%
17	2.70%	5.70%
18	2.55%	5.55%
19	4.20%	7.20%
20	2.25%	5.25%
21	2.10%	5.10%
22	1.95%	4.95%
23	1.80%	4.80%
24	1.65%	4.65%
25	1.50%	4.50%
26	1.35%	4.35%
27	1.20%	4.20%
28	1.05%	4.05%
29	0.90%	3.90%
30+	0.75%	3.75%

<sup>1</sup>Salary Increase is the General Wage Increase of 3.00% plus the Merit Increase.

### SALARY SCALE (From Table 7 Data)



## NEW YORK CITY FIRE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2021 ACTUARIAL VALUATION (Cont'd)

<b>Table 8</b>				
OVERTIME ASSUMPTION				
Years of Service	All Tiers Baseline	Tier 1 & Tier 2 Dual Service	Tier 3, Tier 3 Modified, & Enhanced Dual Service	All Tiers Dual Disability
0-13	20.00%	21.00%	21.00%	20.00%
14	20.00%	22.00%	21.00%	20.00%
15	20.00%	24.00%	21.00%	20.00%
16	20.00%	25.00%	22.00%	21.00%
17	20.00%	26.00%	24.00%	22.00%
18	21.00%	28.00%	25.00%	24.00%
19	22.00%	29.00%	26.00%	25.00%
20	24.00%	30.00%	28.00%	26.00%
21	22.00%	29.00%	26.00%	25.00%
22	21.00%	28.00%	25.00%	24.00%
23	20.00%	26.00%	24.00%	22.00%
24	19.00%	25.00%	22.00%	21.00%
25	17.00%	24.00%	21.00%	20.00%
26	16.00%	21.00%	19.00%	17.00%
27	15.00%	19.00%	18.00%	15.00%
28	13.00%	16.00%	15.00%	13.00%
29	12.00%	15.00%	13.00%	12.00%
30	11.00%	13.00%	12.00%	11.00%
31	9.00%	12.00%	11.00%	10.00%
32	8.00%	11.00%	9.00%	8.00%
33	7.00%	9.00%	8.00%	7.00%
34+	7.00%	8.00%	8.00%	7.00%

## NEW YORK CITY FIRE PENSION FUND

### SUMMARY OF ACTIVE MEMBER VALUATION DATA

<b>Table 9a</b>				
NEW YORK CITY FIRE PENSION FUND ACTIVE MEMBER VALUATION DATA				
<b>June 30 Actuarial Valuation</b>	<b>Number</b>	<b>Annual Salary</b>	<b>Average Annual Salary</b>	<b>Percentage Increase/ (Decrease) In Avg. Salary</b>
2012	10,267	\$1,106,113,386	\$107,735	1.9%
2013	10,182	1,129,706,314	110,951	3.0%
2014	10,319	1,150,389,645	111,483	0.5%
2015	10,780	1,164,994,036	108,070	(3.1%)
2016	10,951	1,180,226,281	107,773	(0.3%)
2017	11,091	1,256,001,332	113,245	5.1%
2018	11,237	1,305,960,137	116,220	2.6%
2019	11,244	1,336,843,002	118,894	2.3%
2020	11,079	1,348,006,398	121,672	2.3%
2021	10,793	1,401,377,517	129,841	6.7%

Salaries shown are base salaries plus assumed overtime paid and reflect the impact of recent labor contract settlements and certain non-union salary increases with retroactive effective dates, if any.

## NEW YORK CITY FIRE PENSION FUND

### SUMMARY OF ACTIVE MEMBER VALUATION DATA (Cont'd)

<b>Table 9b</b>				
FIREFIGHTERS' VARIABLE SUPPLEMENTS FUND				
ACTIVE MEMBER VALUATION DATA				
<b>June 30 Actuarial Valuation</b>	<b>Number</b>	<b>Annual Salary</b>	<b>Average Annual Salary</b>	<b>Percentage Increase/ (Decrease) In Avg. Salary</b>
2012	7,804	\$767,503,130	\$98,347	2.4%
2013	7,697	783,719,745	101,821	3.5%
2014	7,623	775,520,208	101,734	(0.1%)
2015	8,081	787,367,072	97,434	(4.2%)
2016	8,399	815,686,337	97,117	(0.3%)
2017	8,431	855,953,320	101,525	4.5%
2018	8,627	888,865,294	103,033	1.5%
2019	8,621	909,892,001	105,544	2.4%
2020	8,389	933,578,212	111,286	5.4%
2021	8,203	967,304,155	117,921	6.0%

Salaries shown are base salaries plus assumed overtime paid and reflect the impact of recent labor contract settlements and certain non-union salary increases with retroactive effective dates, if any.

## NEW YORK CITY FIRE PENSION FUND

### SUMMARY OF ACTIVE MEMBER VALUATION DATA (Cont'd)

<b>Table 9c</b>				
FIRE OFFICERS' VARIABLE SUPPLEMENTS FUND ACTIVE MEMBER VALUATION DATA				
<b>June 30 Actuarial Valuation</b>	<b>Number</b>	<b>Annual Salary</b>	<b>Average Annual Salary</b>	<b>Percentage Increase/ (Decrease) In Avg. Salary</b>
2012	2,463	\$338,610,256	\$137,479	0.6%
2013	2,485	345,986,569	139,230	1.3%
2014	2,696	374,869,437	139,047	(0.1%)
2015	2,699	377,626,964	139,914	0.6%
2016	2,552	364,539,944	142,845	2.1%
2017	2,660	400,048,012	150,394	5.3%
2018	2,610	417,094,843	159,806	6.3%
2019	2,623	426,951,001	162,772	1.9%
2020	2,690	414,428,186	154,063	(5.4%)
2021	2,590	434,073,362	167,596	8.8%

Salaries shown are base salaries plus assumed overtime paid and reflect the impact of recent labor contract settlements and certain non-union salary increases with retroactive effective dates, if any.



# NEW YORK CITY FIRE PENSION FUND

## SUMMARY OF PLAN MEMBERSHIP DATA

As of the June 30, 2021 and June 30, 2020 actuarial valuations, the Plan's Membership consisted of:

<b>Table 10</b>		
<b>SUMMARY OF PLAN MEMBERSHIP</b>		
<b>Group</b>	<b>June 30, 2021</b>	<b>June 30, 2020</b>
Active members	10,793	11,079
Terminated nonvested	2	0
Deferred vested members not yet receiving benefits	62	64
Retirees and beneficiaries currently receiving benefits	<u>16,578</u>	<u>16,624</u>
Total	27,435	27,767

**NEW YORK CITY FIRE PENSION FUND**

**SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM THE ROLLS**

**Table 11a**

**NEW YORK CITY FIRE PENSION FUND**

**SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM THE ROLLS**

June 30 Actuarial Valuation	Added to Rolls		Removed from Rolls		End of Year Rolls		% Increase In Annual Allowances	Average Annual Allowances
	Number	Annual Allowances <sup>1</sup>	Number	Annual Allowances	Number	Annual Allowances <sup>1</sup>		
2012	538	\$58,288,645	638	\$26,379,782	16,917	\$953,119,245	3.5%	\$56,341
2013	453	54,522,199	563	23,448,369	16,807	984,193,075	3.3%	58,559
2014	490	54,256,974	534	23,299,539	16,763	1,015,150,510	3.1%	60,559
2015	500	59,578,951	553	22,526,507	16,710	1,052,202,954	3.6%	62,968
2016	498	110,481,515	561	22,667,718	16,647	1,140,016,751	8.3%	68,482
2017	497	77,245,492	508	21,127,518	16,636	1,196,134,725	4.9%	71,900
2018	456	65,902,484	499	21,226,999	16,593	1,240,810,210	3.7%	74,779
2019	559	78,160,361	524	24,799,933	16,628	1,294,170,638	4.3%	77,831
2020 <sup>2</sup>	560	75,661,961	564	28,481,496	16,624	1,341,351,103	3.6%	80,688
2021	482	69,949,959	528	27,631,628	16,578	1,383,669,434	3.2%	83,464

<sup>1</sup> Allowances shown are those presented in the census data. Beginning 2016, SADB payments to beneficiaries are included.

<sup>2</sup> Disclosed 2020 allowances updated to reflect only allowances presented in census data.

**NEW YORK CITY FIRE PENSION FUND**

**SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM THE ROLLS (Cont'd)**

**Table 11b**

**FIREFIGHTERS' VARIABLE SUPPLEMENTS FUND**

**SCHEDULE OF RETIREES ADDED TO AND REMOVED FROM THE ROLLS**

June 30 Actuarial Valuation	Added to Rolls		Removed from Rolls		End of Year Rolls		% Increase In Annual Allowances	Average Annual Allowances
	Number	Annual Allowances <sup>1</sup>	Number	Annual Allowances <sup>1</sup>	Number	Annual Allowances <sup>1</sup>		
2012	34	\$408,000	156	\$1,872,000	3,816	\$45,792,000	(3.1%)	\$12,000
2013	61	732,000	157	1,884,000	3,720	44,640,000	(2.5%)	12,000
2014	94	1,128,000	123	1,476,000	3,691	44,292,000	(0.8%)	12,000
2015	67	804,000	137	1,644,000	3,621	43,452,000	(1.9%)	12,000
2016	55	660,000	141	1,692,000	3,535	42,420,000	(2.4%)	12,000
2017	77	924,000	138	1,656,000	3,474	41,688,000	(1.7%)	12,000
2018	50	600,000	138	1,656,000	3,386	40,632,000	(2.5%)	12,000
2019	71	852,000	152	1,824,000	3,305	39,660,000	(2.4%)	12,000
2020	68	816,000	158	1,896,000	3,215	38,580,000	(2.7%)	12,000
2021	76	912,000	161	1,932,000	3,130	37,560,000	(2.6%)	12,000

<sup>1</sup>Before reduction due to increases in Supplementation/COLA from FIRE. Does not include one-time VSF DROP payments.

**NEW YORK CITY FIRE PENSION FUND**

**SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM THE ROLLS (Cont'd)**

**Table 11c**

FIRE OFFICERS' VARIABLE SUPPLEMENTS FUND  
SCHEDULE OF RETIREES ADDED TO AND REMOVED FROM THE ROLLS

June 30 Actuarial Valuation	Added to Rolls		Removed from Rolls		End of Year Rolls		% Increase In Annual Allowances	Average Annual Allowances
	Number	Annual Allowances <sup>1</sup>	Number	Annual Allowances <sup>1</sup>	Number	Annual Allowances <sup>1</sup>		
2012	29	\$348,000	69	\$828,000	1,694	\$20,328,000	(2.3%)	\$12,000
2013	29	348,000	70	840,000	1,653	19,836,000	(2.4%)	12,000
2014	42	504,000	66	792,000	1,629	19,548,000	(1.5%)	12,000
2015	37	444,000	73	876,000	1,593	19,116,000	(2.2%)	12,000
2016	35	420,000	75	900,000	1,553	18,636,000	(2.5%)	12,000
2017	43	516,000	60	720,000	1,536	18,432,000	(1.1%)	12,000
2018	54	648,000	58	696,000	1,532	18,384,000	(0.3%)	12,000
2019	63	756,000	73	876,000	1,522	18,264,000	(0.7%)	12,000
2020	57	684,000	89	1,068,000	1,490	17,880,000	(2.1%)	12,000
2021	43	516,000	66	792,000	1,467	17,604,000	(1.5%)	12,000

<sup>1</sup>Before reduction due to increases in Supplementation/COLA from FIRE. Does not include one-time VSF DROP payments.

# NEW YORK CITY FIRE PENSION FUND

## ACTUARIAL AND STATUTORY CONTRIBUTION HISTORY

<b>Table 12</b>			
ACTUARIAL AND STATUTORY CONTRIBUTION HISTORY			
Fiscal Year Ended June 30	Actuarial Contribution Certified	Statutory Contribution Contributed <sup>1</sup>	Employer Rate of Contribution <sup>2</sup>
2014	\$969,955,923	\$969,955,923	88.0%
2015	988,783,932	988,783,932	88.9%
2016	1,054,477,631	1,054,477,631	93.4%
2017	1,061,169,993	1,061,169,993	92.6%
2018	1,200,417,052	1,200,417,052	103.1%
2019	1,398,565,399	1,398,565,399	109.9%
2020	1,419,269,763	1,419,269,763	107.0%
2021	1,436,977,136	1,436,977,136	105.5%
2022	1,446,991,622	1,446,991,622	105.5%
2023	1,423,600,676	1,423,600,676	100.3%

<sup>1</sup> Represents total employer contributions accrued for fiscal year.

<sup>2</sup> 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 increased to reflect overtime earnings and adjusted, where applicable, to be consistent with collective bargaining agreements estimated to be achieved.

# NEW YORK CITY FIRE PENSION FUND

## FUNDED STATUS BASED ON ENTRY AGE NORMAL COST METHOD

<b>Table 13a</b>						
FUNDED STATUS BASED ON ENTRY AGE NORMAL COST METHOD						
(\$ Thousands)						
June 30 Valuation Date	(1) Actuarial Value of Assets (AVA)	(2) Accrued Liability (AL) <sup>1</sup>	(3) Unfunded AL (UAL) (2) - (1)	(4) Funded Ratio (1) / (2)	(5) Covered Payroll <sup>2</sup>	(6) UAL as a % of Covered Payroll (3) / (5)
2012	\$8,520,769	\$16,358,108	\$7,837,339	52.1%	\$1,106,113	708.5%
2013	9,144,587	17,003,722	7,859,135	53.8%	1,129,706	695.7%
2014	9,808,854	18,028,695	8,219,841	54.4%	1,150,390	714.5%
2015	10,504,728	18,688,642	8,183,914	56.2%	1,164,994	702.5%
2016	11,082,451	20,125,429	9,042,978	55.1%	1,180,226	766.2%
2017	11,814,576	20,942,655	9,128,079	56.4%	1,256,001	726.8%
2018	12,876,671	21,787,888	8,911,217	59.1%	1,305,960	682.3%
2019	14,337,618	22,824,419	8,486,801	62.8%	1,336,843	634.8%
2020	15,346,377	23,491,617	8,145,240	65.3%	1,348,006	604.2%
2021	16,943,734	24,394,755	7,451,021	69.5%	1,401,378	531.7%

<sup>1</sup> AL includes the accrued liabilities attributable to the Variable Supplements Funds, net of their Actuarial Value of Assets but not less than zero, if any.

<sup>2</sup> Salaries shown are base salaries plus assumed overtime paid and reflect the impact of recent labor contract settlements and certain non-union salary increases with retroactive effective dates, if any.

# NEW YORK CITY FIRE PENSION FUND

## FUNDED STATUS BASED ON ENTRY AGE NORMAL COST METHOD (Cont'd)

Table 13b						
FIREFIGHTERS' VARIABLE SUPPLEMENTS FUND						
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 <sup>1</sup>	(6) UAL as a % of Covered Payroll (3) / (5)
2012	\$439,120	\$552,178	\$113,058	79.5%	\$767,503	14.7%
2013	419,243	549,159	129,916	76.3%	783,720	16.6%
2014	511,336	562,253	50,917	90.9%	775,520	6.6%
2015	530,699	564,447	33,748	94.0%	787,367	4.3%
2016	535,824	556,201	20,377	96.3%	815,686	2.5%
2017	547,690	500,484	(47,206)	109.4%	855,953	(5.5%)
2018	558,731	496,763	(61,968)	112.5%	888,865	(7.0%)
2019	519,268	484,742	(34,526)	107.1%	909,892	(3.8%)
2020	504,358	474,110	(30,248)	106.4%	933,578	(3.2%)
2021	507,821	469,358	(38,463)	108.2%	967,304	(4.0%)

<sup>1</sup> Salaries shown are base salaries plus assumed overtime paid and reflect the impact of recent labor contract settlements and certain non-union salary increases with retroactive effective dates, if any.

# NEW YORK CITY FIRE PENSION FUND

## FUNDED STATUS BASED ON ENTRY AGE NORMAL COST METHOD (Cont'd)

<b>Table 13c</b> FIRE OFFICERS' VARIABLE SUPPLEMENTS FUND 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 <sup>1</sup>	(6) UAL as a % of Covered Payroll (3) / (5)
2012	\$277,442	\$341,607	\$64,165	81.2%	\$338,610	18.9%
2013	273,584	342,103	68,519	80.0%	345,987	19.8%
2014	285,203	349,589	64,386	81.6%	374,869	17.2%
2015	296,488	343,397	46,909	86.3%	377,627	12.4%
2016	313,451	344,236	30,785	91.1%	364,540	8.4%
2017	338,903	296,746	(42,157)	114.2%	400,048	(10.5%)
2018	346,860	295,492	(51,368)	117.4%	417,095	(12.3%)
2019	351,386	294,124	(57,262)	119.5%	426,951	(13.4%)
2020	355,084	292,280	(62,804)	121.5%	414,428	(15.2%)
2021	368,993	293,039	(75,954)	125.9%	434,073	(17.5%)

<sup>1</sup> Salaries shown are base salaries plus assumed overtime paid and reflect the impact of recent labor contract settlements and certain non-union salary increases with retroactive effective dates, if any.



**NEW YORK CITY FIRE PENSION FUND**

**COMPARATIVE SUMMARY OF ACCRUED LIABILITIES FUNDED BY ACTUARIAL VALUE OF ASSETS**

**Table 14a**

NEW YORK CITY FIRE PENSION FUND  
COMPARATIVE SUMMARY OF ACCRUED LIABILITIES FUNDED BY ACTUARIAL VALUE OF ASSETS  
SOLVENCY TEST  
(\$ Thousands)

June 30 Valuation Date	Accrued Liabilities for			(D) Actuarial Value of Assets	Percentage of Accrued Liabilities Funded by Actuarial Value of Assets		
	(A)	(B)	(C)		(A)	(B)	(C)
	Accumulated Member Contribution	Current Retirees and Beneficiaries	Active Members' Employer-Financed Portion				
2012	\$1,106,357	\$10,270,585	\$4,972,364	\$8,520,769	100%	72%	0%
2013	1,182,541	10,535,634	5,180,594	9,144,587	100	76	0
2014	1,281,357	11,147,573	5,486,998	9,808,854	100	76	0
2015	1,555,635	11,602,492	5,385,217	10,504,728	100	77	0
2016	1,609,720	12,822,895	5,560,855	11,082,451	100	74	0
2017	1,732,512	13,442,139	8,324,377	11,814,576	100	75	0
2018	1,850,370	13,951,781	8,612,880	12,876,671	100	79	0
2019	1,945,326	14,518,298	6,360,795	14,337,618	100	85	0
2020	2,031,800	15,124,851	6,334,966	15,346,377	100	88	0
2021	2,151,999	15,634,181	6,608,575	16,943,734	100	95	0

See following "SOLVENCY TEST - NOTES."

**NEW YORK CITY FIRE PENSION FUND**

**COMPARATIVE SUMMARY OF ACCRUED LIABILITIES FUNDED BY ACTUARIAL VALUE OF ASSETS (Cont'd)**

<p align="center"><b>Table 14b</b>                      FIREFIGHTERS' VARIABLE SUPPLEMENTS FUND                      COMPARATIVE SUMMARY OF ACCRUED LIABILITIES FUNDED BY ACTUARIAL VALUE OF ASSETS                      SOLVENCY TEST                      (\$ Thousands)</p>							
June 30 Valuation Date	Accrued Liabilities for			(D) Actuarial Value of Assets	Percentage of Accrued Liabilities Funded by Actuarial Value of Assets		
	(A) Accumulated Member Contribution	(B) Current Retirees	(C) Active Members' Employer-Financed Portion		(A)	(B)	(C)
2012	\$0	\$405,847	\$146,331	\$439,120	100%	100%	23%
2013	0	392,654	156,505	419,243	100	100	17
2014	0	394,522	167,731	511,336	100	100	70
2015	0	383,104	181,343	530,699	100	100	81
2016	0	370,075	186,126	535,824	100	100	89
2017	0	366,673	133,811	547,690	100	100	100
2018	0	354,715	142,048	558,731	100	100	100
2019	0	341,499	143,243	519,268	100	100	100
2020	0	330,941	143,169	504,358	100	100	100
2021	0	321,403	147,955	507,821	100	100	100

**NEW YORK CITY FIRE PENSION FUND**

**COMPARATIVE SUMMARY OF ACCRUED LIABILITIES FUNDED BY ACTUARIAL VALUE OF ASSETS (Cont'd)**

<b>Table 14c</b> FIRE OFFICERS' VARIABLE SUPPLEMENTS FUND COMPARATIVE SUMMARY OF ACCRUED LIABILITIES FUNDED BY ACTUARIAL VALUE OF ASSETS SOLVENCY TEST (\$ Thousands)							
June 30 Valuation Date	Accrued Liabilities for			(D) Actuarial Value of Assets	Percentage of Accrued Liabilities Funded by Actuarial Value of Assets		
	(A) Accumulated Member Contribution	(B) Current Retirees	(C) Active Members' Employer-Financed Portion		(A)	(B)	(C)
2012	\$0	\$173,590	\$168,017	\$277,442	100%	100%	62%
2013	0	167,784	174,319	273,584	100	100	61
2014	0	167,931	181,658	285,203	100	100	65
2015	0	163,169	180,228	296,488	100	100	74
2016	0	158,211	186,025	313,451	100	100	83
2017	0	158,302	138,444	338,903	100	100	100
2018	0	157,411	138,081	346,860	100	100	100
2019	0	155,617	138,507	351,386	100	100	100
2020	0	152,948	139,332	355,084	100	100	100
2021	0	150,048	142,991	368,993	100	100	100

See following "SOLVENCY TEST - NOTES."

## NEW YORK CITY FIRE PENSION FUND

### COMPARATIVE SUMMARY OF ACCRUED LIABILITIES FUNDED BY ACTUARIAL VALUE OF ASSETS (Cont'd)

#### SOLVENCY TEST - NOTES

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

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

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 actuarial assumptions and methods occurred in the June 30, 2019 valuation used to compute the Employer Contribution for Fiscal Year 2021 and in the June 30, 2017 valuation used to compute the Employer Contribution for Fiscal Year 2019.

# NEW YORK CITY FIRE PENSION FUND

## CONTRIBUTIONS

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

### A. MEMBER CONTRIBUTIONS

**Tier 1 and Tier 2:** Required Member Contributions - Based upon age at entry and elected retirement age, credited with regular and special interest. Contributions are required for the first 20 years.

Voluntary Member Contributions - Additional contributions to the Annuity Savings Fund credited with regular and special interest.

Contributions from members are recorded when the employer makes payroll deductions from Plan members. Tier 1 and Tier 2 members are permitted to borrow up to 90% of their own contributions including accumulated interest. These loans are accounted for as reductions in such member's contribution accounts.

**Tier 3, Tier 3 Modified, and Tier 3 Enhanced:** Basic Member Contributions - Members contribute 3.0% of salary for a maximum of 25 years.

Additional Member Contributions (AMC) – Effective September 8, 2022, Tier 3 Enhanced Plan members are required to contribute an additional 2.0% (previously 2.1% from September 8, 2019 to September 7, 2022) of salary for a maximum of 25 years. Chapter 298/16 states that the AMC rate for Tier 3 Enhanced Plan members is required to be reviewed by the Actuary every three years. The June 30, 2021 actuarial valuation reflects the previous AMC rate of 2.1% of salary.

Loans are not permitted for Tier 3, Tier 3 Modified, and Tier 3 Enhanced Plan members.

### B. EMPLOYER CONTRIBUTIONS

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

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

Table 15

**AVERAGE ANNUAL BENEFIT PAYMENT AMOUNTS**

June 30 Valuation Date	Service Retirement Benefits		Accidental (Line-of-Duty) Disability Benefits		Ordinary (Non-Line-of-Duty) Disability Benefits		Survivor Benefits	
	Number	Average Annual Allowance	Number	Average Annual Allowance	Number	Average Annual Allowance	Number	Average Annual Allowance
	2012	5,646	\$42,116	8,943	\$70,653	1,057	\$49,511	1,271
2013	5,487	43,289	9,094	73,041	1,012	49,840	1,214	26,354
2014	5,427	44,659	9,223	75,043	959	50,722	1,154	27,752
2015	5,305	45,932	9,390	77,701	904	51,059	1,111	29,485
2016	5,174	47,341	9,560	81,136	853	52,007	1,060	70,802
2017	5,086	49,543	9,738	84,713	787	52,899	1,025	75,701
2018	4,993	51,564	9,870	87,380	731	54,139	999	81,421
2019	4,903	53,758	10,056	90,365	686	54,622	983	85,872
2020	4,779	68,515	10,218	94,910	638	55,384	989	92,105
2021	4,667	57,543	10,335	95,547	590	55,351	986	96,331

**New York City Fire Pension Funds**  
**Annual Comprehensive Financial Report**  
**A Fiduciary Fund of The City of New York**



**Statistical Section**

**Part V**

**Fiscal Year Ended June 30, 2023**

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**The Statistical Section Narrative**

The Statistical section of the New York City Fire Pension Fund's Comprehensive Annual Financial Report presents detailed information related to the financial statements, as well as highlights of the actuarial valuations. The data provided is a useful source in determining the fund's economic condition. The schedules are organized into four categories: Operating information, Demographic and Economic information, Financial trends and Revenue capacity.

**Operating information**

The operating information gives users an indication of how the information in the financial statements relate to the activities of the fund. The schedules show data on benefit ranges, years of credited service, types of retirement and options selected and the amount of monthly, annual or average benefit paid to each group of retirees and beneficiaries. The data is presented for the fiscal period or over a ten-year period.

**Demographic and economic information**

The demographic and economic categories present data to give users an understanding of the environment in which the pension plan operates. This is done mainly through the breakdown of the population groups in the plan membership. The schedules present the number of members and beneficiaries grouped according to several indicators including average monthly or annual salaries or age participating in the pension the plan, for the fiscal period or over a ten-year period.

**Financial Trends**

The schedules of trend data provide financial and actuarial data for the most current ten-year period. This data shows the changes in benefit types and changes in the plan's performance over time, as relates to revenues received benefits and expenses paid and net assets.

**Revenue Capacity**

Revenue capacity information helps users evaluate the different sources of revenues for the plan. The schedules show the sources and the changes in the level of revenues over time. The main sources of revenues for the plan are investment income and employer contributions.

**TABLE OF BENEFIT EXPENSES BY TYPE**

(in thousands)

Fiscal Year	Service Retirement Payments	QPP							FFVSF Payments	FOVSF Payments	Total
		Ordinary Disability Payments	Accidental Disability Payments	Payments for Death in Duty	Payments of Deceased Service	Death Benefits		Other Benefits*			
						Payments	Lump Sum Payments				
2014	\$ 239,234	\$ 49,456	\$ 681,196	\$ 61,951	\$ 5,592	\$ 11,354	\$ 50,379	\$ 50,425	\$ 21,742	\$ 1,171,329	
2015	\$ 241,393	\$ 47,378	\$ 709,488	\$ 63,918	\$ 5,652	\$ 12,038	\$ 70,638	\$ 47,415	\$ 21,970	\$ 1,219,890	
2016	\$ 244,561	\$ 44,938	\$ 764,129	\$ 66,417	\$ 5,384	\$ 14,301	\$ 151,132	\$ 46,002	\$ 21,567	\$ 1,358,431	
2017	\$ 251,909	\$ 43,145	\$ 825,388	\$ 68,766	\$ 5,812	\$ 12,550	\$ 58,247	\$ 47,273	\$ 21,717	\$ 1,334,807	
2018	\$ 254,855	\$ 40,537	\$ 848,665	\$ 72,357	\$ 5,831	\$ 13,267	\$ 72,955	\$ 46,572	\$ 24,048	\$ 1,379,087	
2019	\$ 260,359	\$ 38,378	\$ 880,075	\$ 75,533	\$ 6,142	\$ 14,415	\$ 101,188	\$ 44,744	\$ 24,735	\$ 1,445,569	
2020	\$ 263,018	\$ 36,059	\$ 923,597	\$ 79,908	\$ 6,129	\$ 15,361	\$ 122,999	\$ 44,348	\$ 25,726	\$ 1,517,145	
2021	\$ 263,520	\$ 33,621	\$ 962,639	\$ 83,379	\$ 6,384	\$ 16,296	\$ 109,996	\$ 43,617	\$ 20,459	\$ 1,539,911	
2022	\$ 273,568	\$ 31,503	\$ 996,701	\$ 86,088	\$ 6,919	\$ 17,490	\$ 138,913	\$ 43,559	\$ 25,664	\$ 1,620,405	
2023	\$ 299,184	\$ 30,292	\$ 1,066,731	\$ 92,885	\$ 7,386	\$ 19,150	\$ 184,284	\$ 48,558	\$ 28,302	\$ 1,776,772	

\* This represents voucher payments and other payments.

Statistical Section

New York City Fire Pension Funds

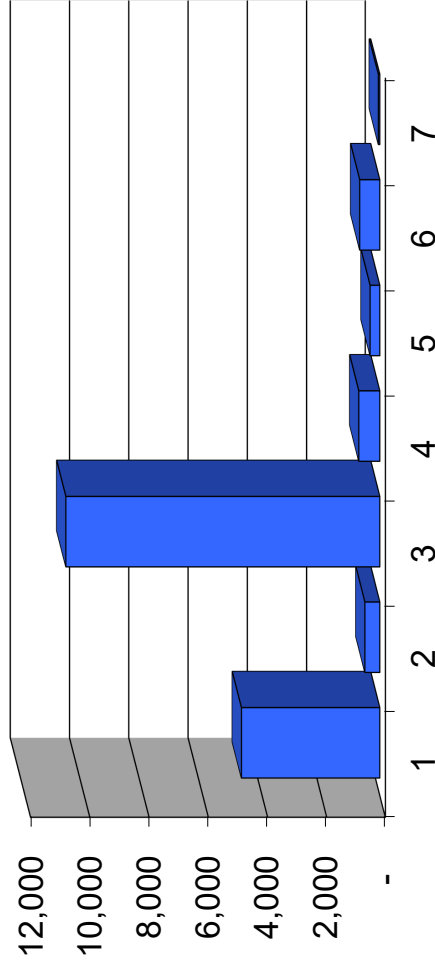
**TABLE OF RETIRED MEMEBERS AND BENEFICIARIES BY TYPE OF BENEFIT**

FISCAL YEAR 2023

	ORDINARY SERVICE RETIRES (1)	ACCIDENTAL DISABILITY RETIRES (1)	LINE OF DUTY BENEFITS	SERVICE BENEFICIARIES	ACCIDENTAL BENEFICIARIES	ORDINARY BENEFICIARIES	OTHER BENEFITS (2)	TOTAL NUMBERS RETIRES AND BENEFICIARIES					
	4,696	510	10,620	717	332	686	50	17,611					
\$	299,184	\$	1,066,731	\$	92,885	\$	7,386	\$	18,034	\$	261,144	\$	1,776,772

**ANNUAL PAYROLL AMOUNT**

**RETIRED MEMBERS BY TYPE OF BENEFIT**



SEE TYPE OF RETIREMENT BENEFIT BELOW

- 1 - Service Retirement (20 yrs or over)
- 2 - Ordinary Disability ( Non - Line of Duty)
- 3 - Accidental Disability (Line of Duty)
- 4 - Line of Duty benefits for surviving spouse
- 5 - Survivors of Service Retirees
- 6 - Survivors of Accidental Disability Retirees
- 7 - Survivors of Ordinary Disability Retirees

(1) Includes Maximum Allowance and Options.  
 (2) Includes City Supplements, Return of Contributions Vouchers and payments to FF, FO Variable Supplements Funds.

**TABLE OF RETIRED MEMBERS AND BENEFICIARIES BY TYPE OF OPTION SELECTED \***  
**FISCAL YEAR 2023**

	MAXIMUM ALLOWANCE (1)	OPTION ONE	OPTION TWO	OPTION THREE	OPTION FOUR	POP - UP OPTION	LINE OF DUTY BENEFICIARIES (1)	OTHER BENEFITS (2)	TOTAL NUMBER OF RETIREES AND BENEFICIARIES	
	14,447	8	325	335	992	13	717	774	-	17,611
	\$ 1,272,973	\$ 389	\$ 19,349	\$ 24,502	\$ 87,839	\$ 1,194	\$ 92,885	\$ 16,497	\$ 261,144	\$ 1,776,772
		<b>ANNUAL PAYROLL AMOUNT</b> (in thousands)								

(1) Includes Subchapter I and II.

(2) Includes City Supplements, Return of Contributions Vouchers and payments to FF, FO Variable Supplement Funds.

\*Note: Option figures include Retirees and Beneficiaries.

**Statistical Section**

**New York City Fire Pension Funds**

**New York Fire Department Pension Funds  
Retired Members by Type of Benefit  
As of June 30, 2023**

Age Group	Amount of		Number of Retired Members
	Monthly Benefits	Retired Members	
Under 30	\$ 72,861	16	
30 To 34	\$ 23,298	7	
35 To 39	\$ 508,244	50	
40 To 44	\$ 2,936,287	397	
45 To 49	\$ 6,123,640	850	
50 To 54	\$ 11,316,431	1,476	
55 To 59	\$ 18,663,384	2,234	
60 To 64	\$ 23,343,886	2,773	
65 To 69	\$ 19,853,404	3,120	
70 To 74	\$ 9,696,482	1,731	
75 To 79	\$ 8,530,769	1,538	
80 To 84	\$ 7,758,558	1,658	
85 To 89	\$ 4,536,757	1,226	
90 & Up	\$ 1,941,786	535	
<b>Total</b>		<b>17,611</b>	

	Type of Retirement <sup>a</sup>					POP - UPS
	1	2	3	4	5	
Unmodified	16	-	-	10	6	-
	4	-	3	-	4	-
	45	2	37	3	8	1
	374	9	330	4	16	-
	786	13	667	21	27	1
	1,371	4	1,098	67	75	-
	2,062	14	1,586	93	156	2
	2,519	14	1,866	148	224	4
	2,744	43	2,045	112	162	3
	1,479	32	961	74	106	1
	1,370	50	718	69	88	1
	1,541	124	668	65	79	-
	1,152	135	501	35	58	-
	475	250	70	140	16	-
<b>Total</b>	<b>15,938</b>	<b>510</b>	<b>10,620</b>	<b>717</b>	<b>1,068</b>	<b>13</b>

Exhibit 4

Option Selected <sup>b</sup>

	1	2	3	4	POP - UPS
	-	-	-	-	-
	-	3	-	-	-
	-	1	1	2	1
	-	4	3	16	-
	-	14	5	44	1
	-	16	16	73	-
	-	28	26	116	2
	-	38	42	170	4
	-	76	57	240	3
	1	52	44	154	1
	4	24	47	92	1
	2	20	43	52	-
	1	18	28	27	-
	-	31	23	6	-
<b>Total</b>	<b>8</b>	<b>325</b>	<b>335</b>	<b>992</b>	<b>13</b>

**<sup>a</sup> Type of retirement:**

- 1 - Service retirement
- 2 - Ordinary Disability
- 3 - Accidental Disability
- 4 - Line of Duty (Accidental Death)
- 5 - Beneficiaries (All)

**<sup>b</sup> Option selected:**

**The following options reduce the retired member's monthly benefits**

- Option 1** - Provides a member with a retirement allowance payable for life which is less than the Maximum Allowance.
- Option 2** - Provides a member with a reduced retirement allowance with the provision that upon his or her death the same allowance will continue to be paid to his or her beneficiary for life.
- Option 3** - Provides a member with a retirement allowance reduce from the Maximum Allowance, with the provision that one half of the allowance will continue to be paid to the member's beneficiary for life.
- Option 4** - This option provides, upon the member's death, payment of a specified benefit or benefits actuarially sound and approved by the Actuary and the Board of Trustees.
- POP - UP** - (refer to Option 4-2 and Option 4-3) These are called the "POP - UPS" because they are variations of Option 2 and 3 and provide that if the beneficiary predeceases the retiree, then the retirement allowance will "Pop - Up" to the level of the Maximum Retirement Allowance.

Statistical Section

New York City Fire Pension Funds

New York Fire Department Pension Fund - QPP  
Average Benefit Payments  
Last Ten Years  
(in thousands)

Exhibit 5a

Retirement Effective Dates	Age Credited Service										90 & Up			
	Under 30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74		75-79	80-84	85-89
<b>Period 7/1/13 to 6/30/14</b>														
Average monthly benefit	\$ 4,339	\$ 5,345	\$ 5,390	\$ 5,891	\$ 6,164	\$ 6,247	\$ 5,985	\$ 6,247	\$ 4,707	\$ 4,047	\$ 3,477	\$ 2,504	\$ 2,848	\$ 1,665
Average final salary	\$ 52,071	\$ 64,141	\$ 64,676	\$ 70,690	\$ 73,963	\$ 74,966	\$ 71,820	\$ 64,663	\$ 56,485	\$ 48,563	\$ 41,721	\$ 30,051	\$ 34,179	\$ 19,983
Number of retired members	10	28	153	506	1,092	1,955	2,366	1,633	1,861	2,361	2,161	1,302	828	661
<b>Period 7/1/14 to 6/30/15</b>														
Average monthly benefit	\$ 3,784	\$ 6,265	\$ 5,642	\$ 6,154	\$ 6,412	\$ 6,483	\$ 6,250	\$ 5,630	\$ 4,934	\$ 4,160	\$ 3,647	\$ 3,319	\$ 2,909	\$ 1,796
Average final salary	\$ 45,403	\$ 75,176	\$ 67,703	\$ 73,851	\$ 76,940	\$ 77,791	\$ 75,001	\$ 67,562	\$ 59,212	\$ 49,922	\$ 43,759	\$ 39,829	\$ 34,909	\$ 21,546
Number of retired members	11	31	130	486	1,021	1,792	2,575	1,722	1,726	2,210	2,269	1,391	818	625
<b>Period 7/1/15 to 6/30/16</b>														
Average monthly benefit	\$ 3,697	\$ 6,148	\$ 6,172	\$ 6,280	\$ 6,525	\$ 6,707	\$ 6,446	\$ 5,919	\$ 5,120	\$ 4,306	\$ 3,764	\$ 3,386	\$ 3,022	\$ 1,958
Average final salary	\$ 44,368	\$ 73,776	\$ 74,066	\$ 75,361	\$ 78,296	\$ 80,481	\$ 77,355	\$ 71,026	\$ 61,435	\$ 51,672	\$ 45,170	\$ 40,633	\$ 36,269	\$ 23,493
Number of retired members	10	21	136	448	943	1,689	2,733	1,816	1,705	2,069	2,288	1,483	821	601
<b>Period 7/1/16 to 6/30/17</b>														
Average monthly benefit	\$ 3,426	\$ 6,515	\$ 6,518	\$ 6,366	\$ 6,716	\$ 6,959	\$ 6,677	\$ 6,295	\$ 5,302	\$ 4,491	\$ 3,873	\$ 3,440	\$ 3,099	\$ 2,206
Average final salary	\$ 41,117	\$ 78,179	\$ 78,217	\$ 76,386	\$ 80,588	\$ 83,508	\$ 80,121	\$ 75,542	\$ 63,626	\$ 53,892	\$ 46,477	\$ 41,275	\$ 37,193	\$ 26,466
Number of retired members	9	23	144	429	890	1,634	2,723	2,069	1,644	1,890	2,283	1,595	794	583
<b>Period 7/1/17 to 6/30/18</b>														
Average monthly benefit	\$ 5,538	\$ 6,546	\$ 7,086	\$ 7,219	\$ 7,396	\$ 7,724	\$ 7,319	\$ 6,782	\$ 5,745	\$ 4,849	\$ 4,101	\$ 3,613	\$ 3,323	\$ 2,407
Average final salary	\$ 66,458	\$ 78,548	\$ 85,031	\$ 86,630	\$ 88,757	\$ 92,688	\$ 87,832	\$ 81,378	\$ 68,943	\$ 58,190	\$ 49,206	\$ 43,355	\$ 39,876	\$ 28,879
Number of retired members	7	21	142	392	865	1,632	2,624	2,304	1,649	1,782	2,154	1,704	820	551
<b>Period 7/1/18 to 6/30/19</b>														
Average monthly benefit	\$ 5,487	\$ 7,444	\$ 7,787	\$ 7,680	\$ 7,877	\$ 8,054	\$ 7,785	\$ 7,073	\$ 6,176	\$ 5,021	\$ 4,305	\$ 3,713	\$ 3,443	\$ 2,655
Average final salary	\$ 65,844	\$ 89,327	\$ 93,445	\$ 92,165	\$ 94,520	\$ 96,645	\$ 93,420	\$ 84,877	\$ 74,114	\$ 60,254	\$ 51,658	\$ 44,551	\$ 41,319	\$ 31,864
Number of retired members	7	16	143	376	868	1,602	2,397	2,584	1,648	1,757	2,081	1,729	854	574
<b>Period 7/1/19 to 6/30/20</b>														
Average monthly benefit	\$ 7,620	\$ 7,053	\$ 7,923	\$ 8,035	\$ 8,165	\$ 8,303	\$ 8,233	\$ 7,419	\$ 6,626	\$ 5,415	\$ 4,535	\$ 3,928	\$ 3,579	\$ 2,868
Average final salary	\$ 91,440	\$ 84,639	\$ 95,079	\$ 96,416	\$ 97,974	\$ 99,631	\$ 98,794	\$ 89,024	\$ 79,513	\$ 64,979	\$ 54,424	\$ 47,139	\$ 42,952	\$ 34,411
Number of retired members	9	7	107	345	764	1,402	2,161	2,910	1,794	1,639	1,976	1,885	992	602
<b>Period 7/1/20 to 6/30/21</b>														
Average monthly benefit	\$ 6,369	\$ 5,974	\$ 7,903	\$ 8,127	\$ 8,337	\$ 8,611	\$ 8,583	\$ 7,711	\$ 7,105	\$ 5,591	\$ 4,707	\$ 4,053	\$ 3,629	\$ 3,107
Average final salary	\$ 76,427	\$ 71,684	\$ 94,834	\$ 97,529	\$ 100,038	\$ 103,329	\$ 102,994	\$ 92,537	\$ 85,263	\$ 67,095	\$ 56,480	\$ 48,641	\$ 43,549	\$ 37,288
Number of retired members	11	5	90	363	768	1,310	2,077	3,038	2,010	1,614	1,817	1,890	1,060	575
<b>Period 7/1/21 to 6/30/22</b>														
Average monthly benefit	\$ 7,316	\$ 6,452	\$ 8,372	\$ 8,772	\$ 9,015	\$ 9,164	\$ 9,198	\$ 8,428	\$ 7,769	\$ 6,254	\$ 5,356	\$ 4,646	\$ 4,159	\$ 3,686
Average final salary	\$ 87,791	\$ 77,420	\$ 100,468	\$ 105,261	\$ 108,174	\$ 109,970	\$ 110,372	\$ 101,141	\$ 93,223	\$ 75,054	\$ 64,271	\$ 55,747	\$ 49,912	\$ 44,233
Number of retired members	10	3	87	364	749	1,264	2,108	2,955	2,287	1,581	1,677	1,857	1,120	562
<b>Period 7/1/22 to 6/30/23</b>														
Average monthly benefit	\$ 8,096	\$ 5,824	\$ 7,701	\$ 8,248	\$ 8,553	\$ 8,827	\$ 9,034	\$ 8,449	\$ 7,651	\$ 6,240	\$ 5,170	\$ 4,398	\$ 3,848	\$ 3,383
Average final salary	\$ 97,148	\$ 69,894	\$ 92,408	\$ 98,976	\$ 102,631	\$ 105,926	\$ 108,403	\$ 101,385	\$ 91,808	\$ 74,876	\$ 62,042	\$ 52,779	\$ 46,176	\$ 40,595
Number of retired members	9	4	66	356	716	1,282	2,066	2,763	2,595	1,554	1,650	1,764	1,179	574

Source: Office of the Actuary City of New York  
Lag 2021 for determining Final Fiscal Year 2023 Employer Contributions

Statistical Section

New York City Fire Pension Funds

New York City Fire Fighters' Variable Supplements Fund  
Average Benefit Payments  
Last Ten Years  
(in thousands)

Exhibit 5b

Retirement Effective Dates	Age Credited Service										90 & Up			
	Under 30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74		75-79	80-84	85-89
Period 7/1/13 to 6/30/14														
Average final salary	\$ -	\$ -	\$ -	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000
Number of retired members	-	-	-	4	36	160	456	388	416	569	666	430	246	71
Period 7/1/14 to 6/30/15														
Average final salary	\$ -	\$ -	\$ -	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000
Number of retired members	-	-	-	4	33	138	432	402	395	504	657	482	256	101
Period 7/1/15 to 6/30/16														
Average final salary	\$ -	\$ -	\$ -	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000
Number of retired members	-	-	-	2	36	128	371	426	393	467	610	545	261	112
Period 7/1/16 to 6/30/17														
Average final salary	\$ -	\$ -	\$ -	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000
Number of retired members	-	-	-	1	38	126	311	444	365	465	590	541	286	128
Period 7/1/17 to 6/30/18														
Average final salary	\$ -	\$ -	\$ -	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000
Number of retired members	-	-	-	3	36	118	286	444	388	412	558	552	323	157
Period 7/1/18 to 6/30/19														
Average final salary	\$ -	\$ -	\$ -	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000
Number of retired members	-	-	-	6	35	98	245	467	380	403	520	551	326	169
Period 7/1/19 to 6/30/20														
Average final salary	\$ -	\$ -	\$ -	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000
Number of retired members	-	-	-	4	35	111	269	505	402	434	592	590	310	134
Period 7/1/20 to 6/30/21														
Average final salary	\$ -	\$ -	\$ -	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000
Number of retired members	-	-	-	9	36	91	229	527	397	417	539	583	336	141
Period 7/1/21 to 6/30/22														
Average final salary	\$ -	\$ -	\$ -	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000
Number of retired members	-	-	-	11	30	85	233	459	460	394	469	568	369	137
Period 7/1/22 to 6/30/23														
Average final salary	\$ -	\$ -	\$ -	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000
Number of retired members	-	-	-	13	40	95	210	402	477	365	455	519	403	144

Source: Office of the Actuary City of New York  
Lag 2021 for determining Final Fiscal Year 2023 Employer Contributions

Statistical Section

New York City Fire Pension Funds

New York City Fire Officers' Variable Supplements Fund  
Average Benefit Payments  
Last Ten Years  
(in thousands)

Exhibit 5c

Retirement Effective Dates	Age Credited Service										90 & Up			
	Under 30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74		75-79	80-84	85-89
Period 7/1/13 to 6/30/14														
Average final salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Number of retired members	-	-	-	-	12	46	194	161	243	283	269	215	144	95
Period 7/1/14 to 6/30/15														
Average final salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Number of retired members	-	-	-	2	19	44	179	180	217	256	303	190	151	110
Period 7/1/15 to 6/30/16														
Average final salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Number of retired members	-	-	-	4	15	42	217	312	194	249	287	211	146	114
Period 7/1/16 to 6/30/17														
Average final salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Number of retired members	-	-	-	1	8	41	118	205	182	251	286	201	153	112
Period 7/1/17 to 6/30/18														
Average final salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Number of retired members	-	-	-	-	5	43	106	203	195	234	282	221	157	111
Period 7/1/18 to 6/30/19														
Average final salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Number of retired members	-	-	-	1	10	34	98	223	193	222	261	227	164	122
Period 7/1/19 to 6/30/20														
Average final salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Number of retired members	-	-	-	2	7	40	105	219	191	231	269	218	149	101
Period 7/1/20 to 6/30/21														
Average final salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Number of retired members	-	-	-	-	11	36	90	232	213	214	249	237	140	100
Period 7/1/21 to 6/30/22														
Average final salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Number of retired members	-	-	-	-	13	41	89	221	227	200	230	246	127	96
Period 7/1/22 to 6/30/23														
Average final salary	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Number of retired members	-	-	-	1	9	41	95	188	240	175	240	236	133	106

Source: Office of the Actuary City of New York  
Lag 2021 for determining Final Fiscal Year 2023 Employer Contributions



Statistical Section

New York City Fire Pension Funds

New York Fire Department Pension Funds  
Benefit and Refund Deductions from Net Position by Type  
Last Ten Fiscal Years  
(In thousands)

Exhibit 6

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>QPP Benefit &amp; Refund by Type</b>										
Age and service benefits:										
Retirees	239,234	241,393	244,561	251,909	254,855	260,359	263,018	263,520	273,568	299,184
Beneficiaries	5,592	5,652	5,384	5,812	5,831	6,142	6,129	6,384	6,919	7,386
Death in service benefits	61,951	63,918	66,417	68,766	72,357	75,533	79,908	83,379	86,088	92,885
Disability benefits:										
Retirees - accidental (duty)	681,196	709,488	764,129	825,388	848,665	880,075	923,597	962,639	996,701	1,066,731
Retirees - ordinary (nonduty)	49,456	47,378	44,938	43,145	40,537	38,378	36,059	33,621	31,503	30,292
Beneficiaries - accidental	9,638	10,245	12,507	11,130	11,936	13,080	14,123	15,131	16,371	18,034
Beneficiaries - ordinary	1,716	1,793	1,794	1,420	1,331	1,335	1,238	1,165	1,119	1,116
Refunds	926	1,144	940	1,190	1,850	1,570	2,928	919	570	2,895
Other benefits	49,453	69,494	13,361	57,057	71,105	99,618	120,071	109,077	138,343	181,389
<b>Total QPP Benefits &amp; Refunds</b>	<b>\$ 1,099,162</b>	<b>\$ 1,150,505</b>	<b>\$ 1,154,031</b>	<b>\$ 1,265,817</b>	<b>\$ 1,308,467</b>	<b>\$ 1,376,090</b>	<b>\$ 1,447,071</b>	<b>\$ 1,475,835</b>	<b>\$ 1,551,182</b>	<b>\$ 1,699,912</b>
<b>FFVSF Benefits</b>	<b>50,425</b>	<b>47,415</b>	<b>46,002</b>	<b>47,273</b>	<b>46,572</b>	<b>44,744</b>	<b>44,348</b>	<b>43,617</b>	<b>43,559</b>	<b>48,558</b>
<b>FOVSF Benefits</b>	<b>21,742</b>	<b>21,970</b>	<b>21,567</b>	<b>21,717</b>	<b>24,048</b>	<b>24,735</b>	<b>25,726</b>	<b>20,459</b>	<b>25,664</b>	<b>28,302</b>
<b>Total Benefits and Refunds</b>	<b>\$ 1,171,329</b>	<b>\$ 1,219,890</b>	<b>\$ 1,221,600</b>	<b>\$ 1,334,807</b>	<b>\$ 1,379,087</b>	<b>\$ 1,445,569</b>	<b>\$ 1,517,145</b>	<b>\$ 1,539,911</b>	<b>\$ 1,620,405</b>	<b>\$ 1,776,772</b>

Source: NYC Fire Pension Fund

Statistical Section

New York City Fire Pension Funds

**SCHEDULE OF AVERAGE ANNUAL BENEFIT PAYMENT AMOUNTS**

Fiscal Year	Service Retirement Benefits		Accidental ( Duty)		Ordinary (Non Duty)		Survivor's Benefits *	
	Numbers	Average Annual Allowance	Disability Benefits	Average Annual Allowance	Disability Benefits	Average Annual Allowance	Number	Average Annual Allowance
2014	5,433	\$ 44,033	9,194	\$ 63,215	958	\$ 51,624	1,695	\$ 46,370
2015	5,312	\$ 45,443	9,366	\$ 75,751	905	\$ 52,351	1,678	\$ 48,632
2016	5,188	\$ 44,659	9,548	\$ 75,043	853	\$ 50,722	1,641	\$ 53,748
2017	5,089	\$ 45,932	9,723	\$ 77,701	792	\$ 51,059	1,623	\$ 56,153
2018	5,001	\$ 47,341	9,860	\$ 81,136	735	\$ 52,007	1,630	\$ 125,148
2019	4,924	\$ 49,543	10,037	\$ 84,713	691	\$ 52,899	1,644	\$ 129,344
2020	4,793	\$ 51,564	10,217	\$ 87,380	639	\$ 54,139	1,668	\$ 137,687
2021	4,673	\$ 53,758	10,340	\$ 90,365	593	\$ 54,622	1,682	\$ 142,445
2022	4,696	\$ 68,515	10,436	\$ 94,910	546	\$ 55,384	1,719	\$ 151,249
2023	4,696	\$ 57,543	10,620	\$ 95,547	510	\$ 55,351	1,785	\$ 157,920

\* Includes World Trade Center Benefits

Statistical Section

New York City Fire Pension Funds

New York City Fire Pension Fund - QPP

Schedule of Changes in Net Positions

(In thousands)

Year Ended	Additions to Funds Net Position					Deductions from Funds Net Position					Change in Net Position
	Member Contributions	Employer Contributions	Net Investment Income/(Loss)	Other Income	Total Additions	Benefit Payments	Refunds	Administrative Expenses	City Supplement Parity	Total Deductions	
2014	\$ 108,859	\$ 969,956	\$ 1,569,013	\$ 39,980	\$ 2,687,808	\$ (1,218,415)	\$ (184)	\$ (477)	\$ (86)	\$ (1,219,162)	\$ 1,468,646
2015	\$ 108,582	\$ 988,784	\$ 271,430	\$ 41,201	\$ 1,409,997	\$ (1,189,926)	\$ (186)	\$ (313)	\$ (80)	\$ (1,190,505)	\$ 219,492
2016	\$ 116,619	\$ 1,054,478	\$ 197,398	\$ 43,673	\$ 1,412,168	\$ (1,325,938)	\$ (939)	\$ (786)	\$ (72)	\$ (1,327,735)	\$ 84,433
2017	\$ 108,368	\$ 1,061,170	\$ 1,284,871	\$ 47,284	\$ 2,501,693	\$ (1,309,624)	\$ (1,190)	\$ (685)	\$ (61)	\$ (1,311,560)	\$ 1,190,133
2018	\$ 108,338	\$ 1,200,417	\$ 1,188,860	\$ 9,411	\$ 2,507,026	\$ (1,321,565)	\$ (1,850)	\$ (6,412)	\$ (52)	\$ (1,329,879)	\$ 1,177,147
2019	\$ 108,015	\$ 1,398,565	\$ 933,889	\$ 16,057	\$ 2,456,526	\$ (1,374,365)	\$ (1,680)	\$ (9,861)	\$ (45)	\$ (1,385,951)	\$ 1,070,575
2020	\$ 106,821	\$ 1,419,270	\$ 681,383	\$ 17,842	\$ 2,225,316	\$ (1,464,264)	\$ (2,928)	\$ (9,131)	\$ (36)	\$ (1,476,359)	\$ 748,957
2021	\$ 112,566	\$ 1,436,977	\$ 3,757,865	\$ 758	\$ 5,308,166	\$ (1,474,885)	\$ (919)	\$ (10,345)	\$ (31)	\$ (1,486,180)	\$ 3,821,986
2022	\$ 134,469	\$ 1,446,992	\$ (1,454,918)	\$ 953	\$ 127,496	\$ (1,550,587)	\$ (570)	\$ (12,711)	\$ (25)	\$ (1,563,893)	\$ (1,436,397)
2023	\$ 118,264	\$ 1,423,679	\$ 1,353,127	\$ 811	\$ 2,895,881	\$ (1,696,996)	\$ (2,895)	\$ (13,020)	\$ (21)	\$ (1,712,932)	\$ 1,182,949

Statistical Section

New York City Fire Pension Funds

New York City Fire Fighters' Variable Supplements Fund

Schedule of Changes in Net Positions

(In thousands)

Year Ended	Additions to Funds Net Position						Deductions from Funds Net Position			Change in Net Position
	Net Investment Income/(Loss)	Other Income	Transfer Skim Earning	Payment from QPP-Int. on skim	Total Additions	Total Deductions	Benefit Payments	Total Deductions		
2014	\$ 68,971	\$ 56	\$ 110,000	\$ -	\$ 179,027	\$ (50,425)	\$ (50,425)	\$ (50,425)	\$ 128,602	
2015	\$ 18,661	\$ 227	\$ 30,000	\$ -	\$ 48,888	\$ (47,415)	\$ (47,415)	\$ (47,415)	\$ 1,473	
2016	\$ 4,325	\$ 344	\$ 18,739	\$ -	\$ 23,408	\$ (46,002)	\$ (46,002)	\$ (46,002)	\$ (22,594)	
2017	\$ 46,467	\$ 288	\$ 23,914	\$ -	\$ 70,669	\$ (47,273)	\$ (47,273)	\$ (47,273)	\$ 23,396	
2018	\$ 35,168	\$ 238	\$ 15,000	\$ -	\$ 50,406	\$ (46,572)	\$ (46,572)	\$ (46,572)	\$ 3,834	
2019	\$ 27,838	\$ 141	\$ (14,000)	\$ -	\$ 13,979	\$ (44,744)	\$ (44,744)	\$ (44,744)	\$ (30,765)	
2020	\$ 21,387	\$ 130	\$ (15,000)	\$ 12,792	\$ 19,309	\$ (44,348)	\$ (44,348)	\$ (44,348)	\$ (25,039)	
2021	\$ 119,044	\$ 113	\$ -	\$ -	\$ 119,157	\$ (43,617)	\$ (43,617)	\$ (43,617)	\$ 75,540	
2022	\$ (72,666)	\$ 141	\$ -	\$ -	\$ (72,525)	\$ (43,559)	\$ (43,559)	\$ (43,559)	\$ (116,084)	
2023	\$ 41,566	\$ 11	\$ -	\$ -	\$ 41,577	\$ (48,558)	\$ (48,558)	\$ (48,558)	\$ (6,981)	

**Statistical Section**

**New York City Fire Pension Funds**

**New York City Fire Officers' Variable Supplements Fund**

**Schedule of Changes in Net Positions**

(in thousands)

Year Ended	Additions to Funds Net Position						Deductions from Funds Net Position			Change in Net Position
	Net Investment Income/(Loss)	Other Income	Transfer Skim Earning	Payment from QPP-Int. on skim	Total Additions	Benefit Payments	Total Deductions			
2014	\$ 51,265	\$ 180	\$ 10,000	\$ -	\$ 61,445	\$ (21,742)	\$ (21,742)	\$ 39,703		
2015	\$ 12,056	\$ 193	\$ 10,000	\$ -	\$ 22,249	\$ (21,970)	\$ (21,970)	\$ 279		
2016	\$ 758	\$ 279	\$ 18,134	\$ -	\$ 19,171	\$ (21,567)	\$ (21,567)	\$ (2,396)		
2017	\$ 39,855	\$ 240	\$ 21,829	\$ -	\$ 61,924	\$ (21,717)	\$ (21,717)	\$ 40,207		
2018	\$ 25,303	\$ 162	\$ -	\$ -	\$ 25,465	\$ (24,048)	\$ (24,048)	\$ 1,417		
2019	\$ 20,381	\$ 99	\$ -	\$ -	\$ 20,480	\$ (24,735)	\$ (24,735)	\$ (4,255)		
2020	\$ 15,748	\$ 91	\$ -	\$ 7,365	\$ 23,204	\$ (25,726)	\$ (25,726)	\$ (2,522)		
2021	\$ 86,151	\$ 84	\$ -	\$ -	\$ 86,235	\$ (20,459)	\$ (20,459)	\$ 65,776		
2022	\$ (55,519)	\$ 105	\$ -	\$ -	\$ (55,414)	\$ (25,664)	\$ (25,664)	\$ (81,078)		
2023	\$ 33,257	\$ 16	\$ -	\$ -	\$ 33,273	\$ (28,302)	\$ (28,302)	\$ 4,971		

Statistical Section

New York City Fire Pension Funds

NEW YORK CITY FIRE PENSION FUNDS  
SCHEDULE OF REVENUES BY SOURCE

(in thousands)

Fiscal Year Ended June 30	Member Contributions	Employer Contributions	Other Income/(Loss)	Interest and Dividends	Appreciation (Depreciation) In fair value of investments	Total	% of Annual Covered Payroll
2014	\$ 108,859	\$ 969,956	\$ (3,557) *	\$ 277,940	\$ 1,455,082	\$ 2,808,280	N/A
2015	\$ 108,582	\$ 988,784	\$ (21,420)	\$ 361,802	\$ 3,386	\$ 1,441,134	N/A
2016	\$ 116,619	\$ 1,054,478	\$ 3,768	\$ 302,881	\$ (59,872)	\$ 1,417,874	N/A
2017	\$ 108,368	\$ 1,061,170	\$ (31,590)	\$ 314,960	\$ 1,135,635	\$ 2,588,543	N/A
2018	\$ 108,338	\$ 1,200,417	\$ (83,037)	\$ 349,627	\$ 992,552	\$ 2,567,897	N/A
2019	\$ 108,015	\$ 1,398,565	\$ (83,217)	\$ 374,555	\$ 693,067	\$ 2,490,985	N/A
2020	\$ 106,821	\$ 1,419,270	\$ (74,625)	\$ 368,525	\$ 427,681	\$ 2,247,672	N/A
2021	\$ 112,566	\$ 1,436,977	\$ (100,491)	\$ 390,911	\$ 3,673,595	\$ 5,513,558	N/A
2022	\$ 134,469	\$ 1,446,992	\$ (135,681)	\$ 488,806	\$ (1,935,029)	\$ (443)	N/A
2023	\$ 118,264	\$ 1,423,679	\$ (173,368)	\$ 480,331	\$ 1,121,825	\$ 2,970,731	N/A

\* Other Income/(loss) Included.

Source: Combined Statement of Changes in Fiduciary Net Position

NEW YORK CITY FIRE PENSION FUNDS

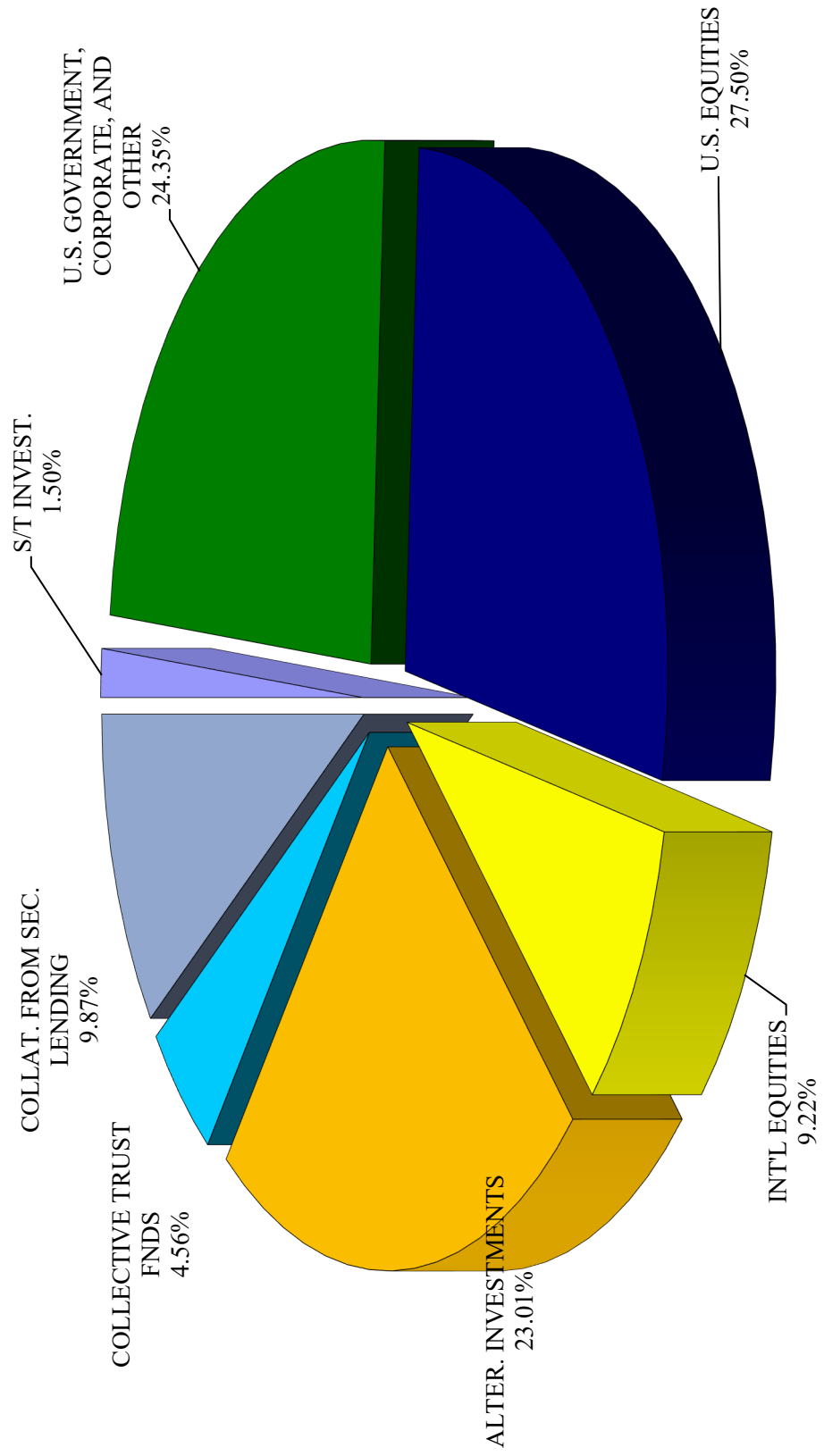
SCHEDULE OF EXPENSES BY TYPE

(in thousands)

Fiscal Year Ended June 30	Benefit Payments	Refunds	Administrative Expenses	Other Payments	Total
2014	\$ 1,170,582	\$ 184	\$ 477	\$ 86	\$ 1,171,329
2015	\$ 1,219,311	\$ 186	\$ 313	\$ 80	\$ 1,219,890
2016	\$ 1,356,634	\$ 939	\$ 786	\$ 72	\$ 1,358,431
2017	\$ 1,332,871	\$ 1,190	\$ 685	\$ 61	\$ 1,334,807
2018	\$ 1,377,185	\$ 1,850	\$ 6,412	\$ 52	\$ 1,385,499
2019	\$ 1,443,844	\$ 1,680	\$ 9,861	\$ 45	\$ 1,455,430
2020	\$ 1,514,181	\$ 2,928	\$ 9,131	\$ 36	\$ 1,526,276
2021	\$ 1,538,953	\$ 919	\$ 10,345	\$ 39	\$ 1,550,256
2022	\$ 1,619,810	\$ 570	\$ 12,711	\$ 25	\$ 1,633,116
2023	\$ 1,776,033	\$ 718	\$ 13,020	\$ 21	\$ 1,789,792

\* includes additional expenses related to Corpus funding effective September 2016

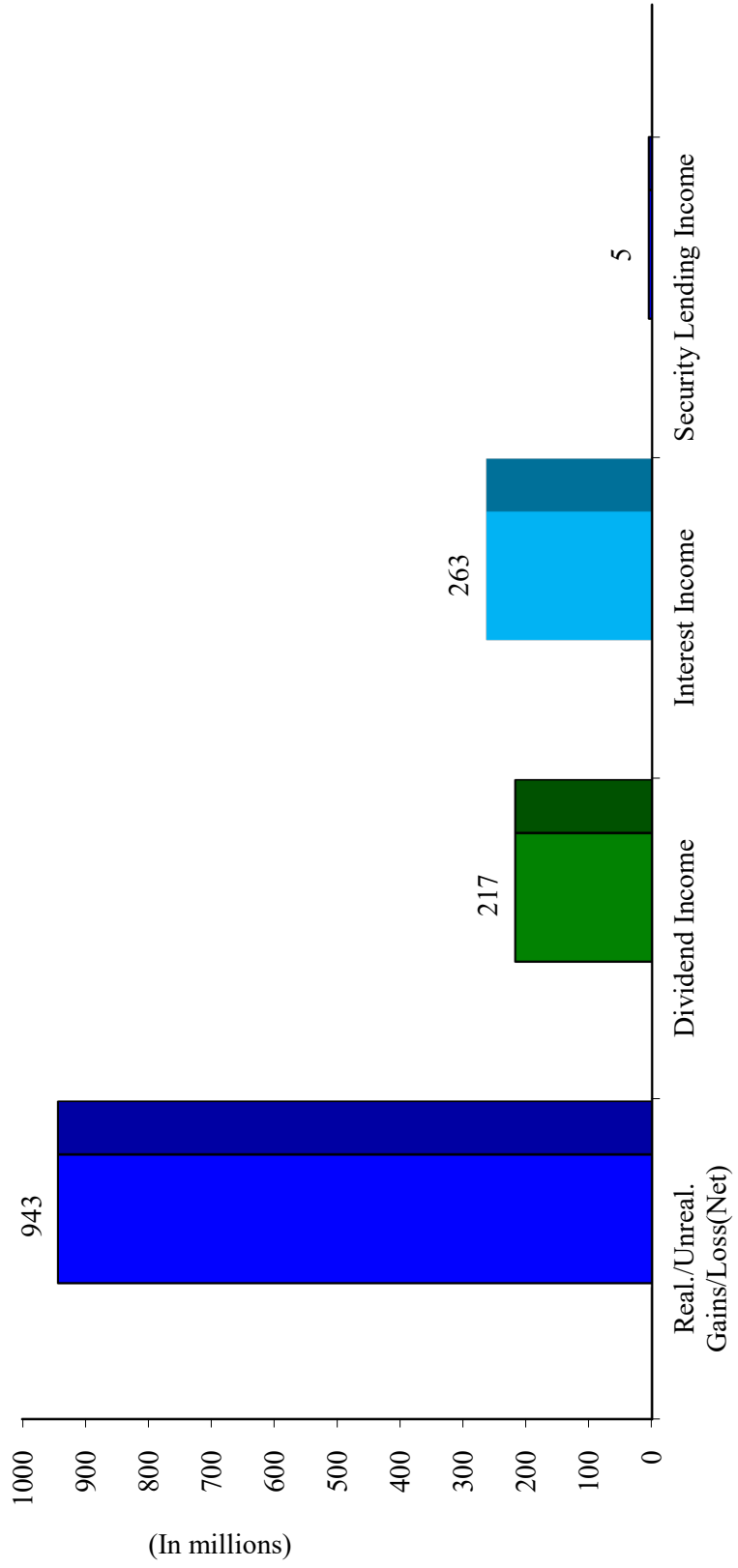
**TOTAL INVESTMENTS FISCAL YEAR 2023**  
**Fire Funds Combined**  
(At Fair Value)





### INVESTMENT INCOME Fire Funds Combined

Fiscal Year 2023



**Table of Compensation to Administrative Officials & Commissions &  
Payments to Brokers and Consultants  
Fiscal Year ended June 30, 2023**

<u>Official Plan Position</u>		<u>Salary or Allowance Paid</u>
Comptroller's Office Executive Management Costs	\$	18,114
Deputy Comptroller Asset Management (Personal Service Costs)	\$	640,616
Deputy Comptroller Asset Management (Outside Service Costs)	\$	1,054,598
First Deputy Personal Service Costs	\$	67,270
Administrative Support Cost	\$	46,792
Office of Management and Budget	\$	102,365
Legal Advisors	\$	60,977
Financial Information Service Agency (FISA)	\$	591,385
Office of Payroll Administration (OPA)	\$	62,468
Office of the Actuary	\$	1,526,812
Pension Fund Administrative Expenses	\$	13,019,932 *
Investment Advisors	\$	178,480,740 *
Securities Lending Fees	\$	473,501 *
<b>Total</b>	<b>\$</b>	<b>196,145,570</b>

\*Exempt for Administrative Expenses, Investment advisors and Securities Lending Fees. These expenses to other City Agencies on behalf of the New York City Fire Pension Funds

**New York City Fire Pension Funds**  
**Annual Comprehensive Financial Report**  
**A Fiduciary Fund of The City of New York**



**Appendix A**  
**Census Data for Active Members**  
**As of June 30, 2023**

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NEW YORK CITY FIRE PENSION FUND  
DATA USED IN THE JUNE 30, 2021 ACTUARIAL VALUATION  
FOR DETERMINING FINAL FISCAL YEAR 2023 EMPLOYER CONTRIBUTIONS

MALES

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP ALL YEARS	
<i>NUMBER:</i>										
UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	33	0	0	0	0	0	0	0	0	33
25 TO 29	679	193	0	0	0	0	0	0	0	872
30 TO 34	864	1,077	74	1	0	0	0	0	0	2,016
35 TO 39	103	786	482	573	1	0	0	0	0	1,945
40 TO 44	18	87	285	1,372	326	3	0	0	0	2,091
45 TO 49	1	2	71	908	590	109	2	0	0	1,683
50 TO 54	1	0	2	190	458	362	107	0	0	1,120
55 TO 59	1	0	1	0	143	218	196	92	0	651
60 TO 64	0	0	0	1	1	36	70	82	45	235
65 TO 69	0	0	0	0	1	0	3	5	0	9
70 & UP	0	0	0	1	0	1	0	0	0	2
<b>TOTAL</b>	<b>1,700</b>	<b>2,145</b>	<b>915</b>	<b>3,046</b>	<b>1,520</b>	<b>729</b>	<b>378</b>	<b>179</b>	<b>45</b>	<b>10,657</b>

*SALARIES (IN THOUSANDS):*

UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	1,970	0	0	0	0	0	0	0	0	1,970
25 TO 29	45,306	22,910	0	0	0	0	0	0	0	68,215
30 TO 34	61,856	129,302	9,628	147	0	0	0	0	0	200,932
35 TO 39	8,283	97,571	64,642	80,691	138	0	0	0	0	251,325
40 TO 44	1,577	10,753	38,453	195,983	49,959	406	0	0	0	297,130
45 TO 49	75	324	9,567	130,145	91,330	17,281	324	0	0	249,046
50 TO 54	151	0	306	27,251	69,267	57,914	18,118	0	0	173,006
55 TO 59	143	0	174	0	21,396	33,785	32,759	16,180	0	104,438
60 TO 64	0	0	0	175	176	5,506	11,037	13,749	7,842	38,485
65 TO 69	0	0	0	0	175	0	406	933	0	1,514
70 & UP	0	0	0	175	0	176	0	0	0	351
<b>TOTAL <sup>1</sup></b>	<b>119,360</b>	<b>260,860</b>	<b>122,769</b>	<b>434,566</b>	<b>232,441</b>	<b>115,069</b>	<b>62,644</b>	<b>30,862</b>	<b>7,842</b>	<b>1,386,412</b>

*AVERAGE SALARIES: <sup>2</sup>*

UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	59,699	0	0	0	0	0	0	0	0	59,699
25 TO 29	66,724	118,703	0	0	0	0	0	0	0	78,229
30 TO 34	71,592	120,058	130,102	146,726	0	0	0	0	0	99,669
35 TO 39	80,413	124,137	134,112	140,822	138,048	0	0	0	0	129,216
40 TO 44	87,596	123,595	134,921	142,845	153,248	135,432	0	0	0	142,100
45 TO 49	75,380	161,762	134,751	143,331	154,797	158,543	161,794	0	0	147,977
50 TO 54	150,801	0	152,811	143,425	151,239	159,984	169,326	0	0	154,470
55 TO 59	143,306	0	173,890	0	149,624	154,976	167,139	175,873	0	160,427
60 TO 64	0	0	0	174,955	175,918	152,954	157,678	167,666	174,259	163,766
65 TO 69	0	0	0	0	174,955	0	135,416	186,529	0	168,205
70 & UP	0	0	0	174,600	0	176,000	0	0	0	175,300
<b>TOTAL</b>	<b>70,212</b>	<b>121,613</b>	<b>134,174</b>	<b>142,668</b>	<b>152,922</b>	<b>157,845</b>	<b>165,726</b>	<b>172,411</b>	<b>174,259</b>	<b>130,094</b>

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

<sup>1</sup> Total may not add up due to rounding.

<sup>2</sup> Average based on unrounded salary.

NEW YORK CITY FIRE PENSION FUND  
DATA USED IN THE JUNE 30, 2021 ACTUARIAL VALUATION  
FOR DETERMINING FINAL FISCAL YEAR 2023 EMPLOYER CONTRIBUTIONS

FEMALES

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP ALL YEARS	
<i>NUMBER:</i>										
UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	0	0	0	0	0	0	0	0	0	0
25 TO 29	20	3	0	0	0	0	0	0	0	23
30 TO 34	31	11	2	0	0	0	0	0	0	44
35 TO 39	3	11	2	2	0	0	0	0	0	18
40 TO 44	1	6	3	9	4	0	0	0	0	23
45 TO 49	1	0	2	8	4	0	0	0	0	15
50 TO 54	1	1	0	2	4	0	0	0	0	8
55 TO 59	1	1	0	0	0	1	0	0	0	3
60 TO 64	0	0	1	0	0	0	0	0	0	1
65 TO 69	0	0	0	0	0	0	0	0	0	0
70 & UP	0	0	0	0	1	0	0	0	0	1
<b>TOTAL</b>	<b>58</b>	<b>33</b>	<b>10</b>	<b>21</b>	<b>13</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>136</b>

*SALARIES (IN THOUSANDS):*

UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	0	0	0	0	0	0	0	0	0	0
25 TO 29	1,327	302	0	0	0	0	0	0	0	1,629
30 TO 34	2,214	1,266	205	0	0	0	0	0	0	3,685
35 TO 39	319	1,450	287	278	0	0	0	0	0	2,334
40 TO 44	85	726	394	1,288	547	0	0	0	0	3,041
45 TO 49	138	0	306	1,147	589	0	0	0	0	2,180
50 TO 54	146	173	0	271	659	0	0	0	0	1,249
55 TO 59	145	193	0	0	0	161	0	0	0	499
60 TO 64	0	0	173	0	0	0	0	0	0	173
65 TO 69	0	0	0	0	0	0	0	0	0	0
70 & UP	0	0	0	0	176	0	0	0	0	176
<b>TOTAL<sup>1</sup></b>	<b>4,373</b>	<b>4,110</b>	<b>1,366</b>	<b>2,984</b>	<b>1,972</b>	<b>161</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,965</b>

*AVERAGE SALARIES:<sup>2</sup>*

UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	0	0	0	0	0	0	0	0	0	0
25 TO 29	66,336	100,771	0	0	0	0	0	0	0	70,828
30 TO 34	71,410	115,064	102,682	0	0	0	0	0	0	83,745
35 TO 39	106,422	131,778	143,494	139,244	0	0	0	0	0	129,683
40 TO 44	84,752	120,986	131,496	143,106	136,861	0	0	0	0	132,198
45 TO 49	138,384	0	153,041	143,317	147,242	0	0	0	0	145,331
50 TO 54	145,622	173,444	0	135,433	164,773	0	0	0	0	156,128
55 TO 59	144,513	193,363	0	0	0	160,646	0	0	0	166,174
60 TO 64	0	0	173,085	0	0	0	0	0	0	173,085
65 TO 69	0	0	0	0	0	0	0	0	0	0
70 & UP	0	0	0	0	176,000	0	0	0	0	176,000
<b>TOTAL</b>	<b>75,396</b>	<b>124,555</b>	<b>136,600</b>	<b>142,088</b>	<b>151,654</b>	<b>160,646</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>110,039</b>

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

<sup>1</sup> Total may not add up due to rounding.

<sup>2</sup> Average based on unrounded salary.

NEW YORK CITY FIRE PENSION FUND  
 DATA USED IN THE JUNE 30, 2021 ACTUARIAL VALUATION  
 FOR DETERMINING FINAL FISCAL YEAR 2023 EMPLOYER CONTRIBUTIONS

MALES AND FEMALES

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP ALL YEARS	
<i>NUMBER:</i>										
UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	33	0	0	0	0	0	0	0	0	33
25 TO 29	699	196	0	0	0	0	0	0	0	895
30 TO 34	895	1,088	76	1	0	0	0	0	0	2,060
35 TO 39	106	797	484	575	1	0	0	0	0	1,963
40 TO 44	19	93	288	1,381	330	3	0	0	0	2,114
45 TO 49	2	2	73	916	594	109	2	0	0	1,698
50 TO 54	2	1	2	192	462	362	107	0	0	1,128
55 TO 59	2	1	1	0	143	219	196	92	0	654
60 TO 64	0	0	1	1	1	36	70	82	45	236
65 TO 69	0	0	0	0	1	0	3	5	0	9
70 & UP	0	0	0	1	1	1	0	0	0	3
<b>TOTAL</b>	<b>1,758</b>	<b>2,178</b>	<b>925</b>	<b>3,067</b>	<b>1,533</b>	<b>730</b>	<b>378</b>	<b>179</b>	<b>45</b>	<b>10,793</b>

*SALARIES (IN THOUSANDS):*

UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	1,970	0	0	0	0	0	0	0	0	1,970
25 TO 29	46,632	23,212	0	0	0	0	0	0	0	69,844
30 TO 34	64,069	130,568	9,833	147	0	0	0	0	0	204,617
35 TO 39	8,602	99,021	64,929	80,969	138	0	0	0	0	253,659
40 TO 44	1,661	11,479	38,847	197,271	50,506	406	0	0	0	300,171
45 TO 49	214	324	9,873	131,291	91,919	17,281	324	0	0	251,226
50 TO 54	296	173	306	27,522	69,926	57,914	18,118	0	0	174,255
55 TO 59	288	193	174	0	21,396	33,945	32,759	16,180	0	104,936
60 TO 64	0	0	173	175	176	5,506	11,037	13,749	7,842	38,658
65 TO 69	0	0	0	0	175	0	406	933	0	1,514
70 & UP	0	0	0	175	176	176	0	0	0	527
<b>TOTAL <sup>1</sup></b>	<b>123,733</b>	<b>264,970</b>	<b>124,135</b>	<b>437,550</b>	<b>234,413</b>	<b>115,229</b>	<b>62,644</b>	<b>30,862</b>	<b>7,842</b>	<b>1,401,378</b>

*AVERAGE SALARIES: <sup>2</sup>*

UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	59,699	0	0	0	0	0	0	0	0	59,699
25 TO 29	66,713	118,429	0	0	0	0	0	0	0	78,038
30 TO 34	71,586	120,007	129,381	146,726	0	0	0	0	0	99,329
35 TO 39	81,149	124,242	134,151	140,816	138,048	0	0	0	0	129,220
40 TO 44	87,446	123,426	134,886	142,847	153,049	135,432	0	0	0	141,992
45 TO 49	106,882	161,762	135,253	143,331	154,746	158,543	161,794	0	0	147,954
50 TO 54	148,212	173,444	152,811	143,342	151,356	159,984	169,326	0	0	154,482
55 TO 59	143,910	193,363	173,890	0	149,624	155,002	167,139	175,873	0	160,453
60 TO 64	0	0	173,085	174,955	175,918	152,954	157,678	167,666	174,259	163,805
65 TO 69	0	0	0	0	174,955	0	135,416	186,529	0	168,205
70 & UP	0	0	0	174,600	176,000	176,000	0	0	0	175,533
<b>TOTAL</b>	<b>70,383</b>	<b>121,658</b>	<b>134,200</b>	<b>142,664</b>	<b>152,911</b>	<b>157,848</b>	<b>165,726</b>	<b>172,411</b>	<b>174,259</b>	<b>129,841</b>

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

<sup>1</sup> Total may not add up due to rounding.

<sup>2</sup> Average based on unrounded salary.

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**New York City Fire Pension Funds**  
**Annual Comprehensive Financial Report**  
**A Fiduciary Fund of The City of New York**



**Appendix B**  
**Census Data for Pensioners**  
**As of June 30, 2023**

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NEW YORK CITY FIRE PENSION FUND  
 DATA USED IN THE JUNE 30, 2021 ACTUARIAL VALUATION  
 FOR DETERMINING FINAL FISCAL YEAR 2023 EMPLOYER CONTRIBUTIONS  
 SUMMARY OF PENSIONERS BY CAUSE AND GENDER

ALL FILES (ALL BENEFITS)

AGE	MALE			FEMALE			TOTAL		
	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
<i>SERVICE RETIREMENT:</i>									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	0	0	0	0	0	0
35 TO 39	0	0	0	0	0	0	0	0	0
40 TO 44	14	1,117,573	79,827	0	0	0	14	1,117,573	79,827
45 TO 49	59	4,134,113	70,070	2	159,876	79,938	61	4,293,989	70,393
50 TO 54	147	12,060,386	82,043	0	0	0	147	12,060,386	82,043
55 TO 59	316	26,963,161	85,326	0	0	0	316	26,963,161	85,326
60 TO 64	599	46,177,715	77,091	1	109,156	109,156	600	46,286,871	77,145
65 TO 69	721	51,353,609	71,226	4	187,942	46,986	725	51,541,551	71,092
70 TO 74	545	30,332,950	55,657	3	259,015	86,338	548	30,591,965	55,825
75 TO 79	700	33,789,567	48,271	0	0	0	700	33,789,567	48,271
80 TO 84	762	32,359,081	42,466	0	0	0	762	32,359,081	42,466
85 TO 89	537	20,224,220	37,661	0	0	0	537	20,224,220	37,661
90 & UP	257	9,323,751	36,279	0	0	0	257	9,323,751	36,279
<b>TOTAL</b>	<b>4,657</b>	<b>267,836,126</b>	<b>57,513</b>	<b>10</b>	<b>715,989</b>	<b>71,599</b>	<b>4,667</b>	<b>268,552,115</b>	<b>57,543</b>
<i>ORDINARY DISABILITY:</i>									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	0	0	0	0	0	0
35 TO 39	1	61,466	61,466	0	0	0	1	61,466	61,466
40 TO 44	9	429,449	47,717	0	0	0	9	429,449	47,717
45 TO 49	9	431,410	47,934	0	0	0	9	431,410	47,934
50 TO 54	9	348,363	38,707	0	0	0	9	348,363	38,707
55 TO 59	12	430,294	35,858	0	0	0	12	430,294	35,858
60 TO 64	31	853,228	27,523	1	29,940	29,940	32	883,168	27,599
65 TO 69	40	1,075,433	26,886	0	0	0	40	1,075,433	26,886
70 TO 74	41	1,995,619	48,674	0	0	0	41	1,995,619	48,674
75 TO 79	69	5,088,169	73,742	0	0	0	69	5,088,169	73,742
80 TO 84	164	10,182,363	62,088	0	0	0	164	10,182,363	62,088
85 TO 89	129	7,600,279	58,917	0	0	0	129	7,600,279	58,917
90 & UP	75	4,131,253	55,083	0	0	0	75	4,131,253	55,083
<b>TOTAL</b>	<b>589</b>	<b>32,627,326</b>	<b>55,394</b>	<b>1</b>	<b>29,940</b>	<b>29,940</b>	<b>590</b>	<b>32,657,266</b>	<b>55,351</b>
<i>ACCIDENTAL DISABILITY:</i>									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	0	0	0	0	0	0
35 TO 39	56	5,169,983	92,321	1	69,352	69,352	57	5,239,335	91,918
40 TO 44	326	33,043,190	101,359	1	136,534	136,534	327	33,179,724	101,467
45 TO 49	613	64,662,271	105,485	2	171,730	85,865	615	64,834,001	105,421
50 TO 54	1,060	115,251,791	108,728	1	87,218	87,218	1,061	115,339,009	108,708
55 TO 59	1,622	182,049,677	112,238	1	104,724	104,724	1,623	182,154,401	112,233
60 TO 64	1,969	213,707,453	108,536	5	472,812	94,562	1,974	214,180,265	108,501
65 TO 69	1,708	172,184,572	100,811	4	304,946	76,237	1,712	172,489,518	100,753
70 TO 74	868	73,204,226	84,337	5	540,819	108,164	873	73,745,045	84,473
75 TO 79	771	53,765,861	69,735	0	0	0	771	53,765,861	69,735
80 TO 84	733	43,201,616	58,938	0	0	0	733	43,201,616	58,938
85 TO 89	439	22,258,926	50,704	0	0	0	439	22,258,926	50,704
90 & UP	150	7,090,396	47,269	0	0	0	150	7,090,396	47,269
<b>TOTAL</b>	<b>10,315</b>	<b>985,589,962</b>	<b>95,549</b>	<b>20</b>	<b>1,888,135</b>	<b>94,407</b>	<b>10,335</b>	<b>987,478,097</b>	<b>95,547</b>

NEW YORK CITY FIRE PENSION FUND  
 DATA USED IN THE JUNE 30, 2021 ACTUARIAL VALUATION  
 FOR DETERMINING FINAL FISCAL YEAR 2023 EMPLOYER CONTRIBUTIONS  
 SUMMARY OF PENSIONERS BY CAUSE AND GENDER

ALL FILES (ALL BENEFITS)

AGE	MALE			FEMALE			TOTAL		
	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
<i>ACCIDENTAL DEATH:</i>									
UNDER 30	0	0	0	8	817,344	102,168	8	817,344	102,168
30 TO 34	0	0	0	1	96,565	96,565	1	96,565	96,565
35 TO 39	0	0	0	3	487,745	162,582	3	487,745	162,582
40 TO 44	0	0	0	3	353,274	117,758	3	353,274	117,758
45 TO 49	0	0	0	31	3,924,274	126,589	31	3,924,274	126,589
50 TO 54	0	0	0	59	7,536,924	127,744	59	7,536,924	127,744
55 TO 59	0	0	0	103	13,739,050	133,389	103	13,739,050	133,389
60 TO 64	1	53,800	53,800	130	17,661,005	135,854	131	17,714,805	135,228
65 TO 69	0	0	0	87	11,928,944	137,114	87	11,928,944	137,114
70 TO 74	3	315,047	105,016	69	8,974,131	130,060	72	9,289,178	129,016
75 TO 79	0	0	0	67	8,222,367	122,722	67	8,222,367	122,722
80 TO 84	0	0	0	48	5,611,191	116,900	48	5,611,191	116,900
85 TO 89	1	74,107	74,107	35	3,551,089	101,460	36	3,625,196	100,700
90 & UP	0	0	0	21	1,972,847	93,945	21	1,972,847	93,945
<b>TOTAL</b>	<b>5</b>	<b>442,954</b>	<b>88,591</b>	<b>665</b>	<b>84,876,750</b>	<b>127,634</b>	<b>670</b>	<b>85,319,704</b>	<b>127,343</b>
<i>OTHER BENEFICIARIES:</i>									
UNDER 30	1	56,989	56,989	0	0	0	1	56,989	56,989
30 TO 34	0	0	0	3	183,009	61,003	3	183,009	61,003
35 TO 39	0	0	0	5	310,376	62,075	5	310,376	62,075
40 TO 44	0	0	0	3	155,423	51,808	3	155,423	51,808
45 TO 49	0	0	0	0	0	0	0	0	0
50 TO 54	1	122,869	122,869	5	389,618	77,924	6	512,487	85,415
55 TO 59	1	23,535	23,535	11	650,169	59,106	12	673,704	56,142
60 TO 64	0	0	0	26	1,061,521	40,828	26	1,061,521	40,828
65 TO 69	0	0	0	31	1,205,404	38,884	31	1,205,404	38,884
70 TO 74	0	0	0	20	735,982	36,799	20	735,982	36,799
75 TO 79	0	0	0	43	1,503,261	34,960	43	1,503,261	34,960
80 TO 84	0	0	0	57	1,748,445	30,674	57	1,748,445	30,674
85 TO 89	0	0	0	38	732,462	19,275	38	732,462	19,275
90 & UP	0	0	0	71	783,189	11,031	71	783,189	11,031
<b>TOTAL</b>	<b>3</b>	<b>203,393</b>	<b>67,798</b>	<b>313</b>	<b>9,458,859</b>	<b>30,220</b>	<b>316</b>	<b>9,662,252</b>	<b>30,577</b>
<i>ALL PENSIONERS AND BENEFICIARIES:</i>									
UNDER 30	1	56,989	56,989	8	817,344	102,168	9	874,333	97,148
30 TO 34	0	0	0	4	279,574	69,894	4	279,574	69,894
35 TO 39	57	5,231,449	91,780	9	867,473	96,386	66	6,098,922	92,408
40 TO 44	349	34,590,212	99,112	7	645,231	92,176	356	35,235,443	98,976
45 TO 49	681	69,227,794	101,656	35	4,255,880	121,597	716	73,483,674	102,631
50 TO 54	1,217	127,783,409	104,999	65	8,013,760	123,289	1,282	135,797,169	105,926
55 TO 59	1,951	209,466,667	107,364	115	14,493,943	126,034	2,066	223,960,610	108,403
60 TO 64	2,600	260,792,196	100,305	163	19,334,434	118,616	2,763	280,126,630	101,385
65 TO 69	2,469	224,613,614	90,974	126	13,627,236	108,153	2,595	238,240,850	91,808
70 TO 74	1,457	105,847,842	72,648	97	10,509,947	108,350	1,554	116,357,789	74,876
75 TO 79	1,540	92,643,597	60,158	110	9,725,628	88,415	1,650	102,369,225	62,042
80 TO 84	1,659	85,743,060	51,684	105	7,359,636	70,092	1,764	93,102,696	52,779
85 TO 89	1,106	50,157,532	45,350	73	4,283,551	58,679	1,179	54,441,083	46,176
90 & UP	482	20,545,400	42,625	92	2,756,036	29,957	574	23,301,436	40,595
<b>TOTAL</b>	<b>15,569</b>	<b>1,286,699,761</b>	<b>82,645</b>	<b>1,009</b>	<b>96,969,673</b>	<b>96,105</b>	<b>16,578</b>	<b>1,383,669,434</b>	<b>83,464</b>

NEW YORK CITY FIREFIGHTERS' VARIABLE SUPPLEMENTS FUND  
 DATA USED IN THE JUNE 30, 2021 ACTUARIAL VALUATION  
 FOR DETERMINING FINAL FISCAL YEAR 2023 EMPLOYER CONTRIBUTIONS  
 SUMMARY OF PENSIONERS BY GENDER

AGE	MALE			FEMALE			BOTH MALE & FEMALE		
	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
SERVICE RETIREMENT:									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	0	0	0	0	0	0
35 TO 39	0	0	0	0	0	0	0	0	0
40 TO 44	13	156,000	12,000	0	0	0	13	156,000	12,000
45 TO 49	40	480,000	12,000	2	24,000	12,000	42	504,000	12,000
50 TO 54	95	1,140,000	12,000	0	0	0	95	1,140,000	12,000
55 TO 59	210	2,520,000	12,000	0	0	0	210	2,520,000	12,000
60 TO 64	402	4,824,000	12,000	0	0	0	402	4,824,000	12,000
65 TO 69	477	5,724,000	12,000	3	36,000	12,000	480	5,760,000	12,000
70 TO 74	365	4,380,000	12,000	2	24,000	12,000	367	4,404,000	12,000
75 TO 79	455	5,460,000	12,000	0	0	0	455	5,460,000	12,000
80 TO 84	519	6,228,000	12,000	0	0	0	519	6,228,000	12,000
85 TO 89	403	4,836,000	12,000	0	0	0	403	4,836,000	12,000
90 & UP	144	1,728,000	12,000	0	0	0	144	1,728,000	12,000
<b>TOTAL</b>	<b>3,123</b>	<b>37,476,000</b>	<b>12,000</b>	<b>7</b>	<b>84,000</b>	<b>12,000</b>	<b>3,130</b>	<b>37,560,000</b>	<b>12,000</b>

NEW YORK CITY FIRE OFFICERS' VARIABLE SUPPLEMENTS FUND  
 DATA USED IN THE JUNE 30, 2021 ACTUARIAL VALUATION  
 FOR DETERMINING FINAL FISCAL YEAR 2023 EMPLOYER CONTRIBUTIONS  
 SUMMARY OF PENSIONERS BY GENDER

AGE	MALE			FEMALE			BOTH MALE & FEMALE		
	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
SERVICE RETIREMENT:									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	0	0	0	0	0	0
35 TO 39	0	0	0	0	0	0	0	0	0
40 TO 44	1	12,000	12,000	0	0	0	1	12,000	12,000
45 TO 49	9	108,000	12,000	0	0	0	9	108,000	12,000
50 TO 54	41	492,000	12,000	0	0	0	41	492,000	12,000
55 TO 59	95	1,140,000	12,000	0	0	0	95	1,140,000	12,000
60 TO 64	188	2,256,000	12,000	1	12,000	12,000	189	2,268,000	12,000
65 TO 69	240	2,880,000	12,000	1	12,000	12,000	241	2,892,000	12,000
70 TO 74	175	2,100,000	12,000	1	12,000	12,000	176	2,112,000	12,000
75 TO 79	240	2,880,000	12,000	0	0	0	240	2,880,000	12,000
80 TO 84	236	2,832,000	12,000	0	0	0	236	2,832,000	12,000
85 TO 89	133	1,596,000	12,000	0	0	0	133	1,596,000	12,000
90 & UP	106	1,272,000	12,000	0	0	0	106	1,272,000	12,000
<b>TOTAL</b>	<b>1,464</b>	<b>17,568,000</b>	<b>12,000</b>	<b>3</b>	<b>36,000</b>	<b>12,000</b>	<b>1,467</b>	<b>17,604,000</b>	<b>12,000</b>