





# 2022

## Annual Comprehensive Financial Report

**FOR THE FISCAL YEARS ENDED JUNE 30, 2022 AND JUNE 30, 2021**

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM - A FIDUCIARY FUND OF THE CITY OF NEW YORK

NEW YORK STATE

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**THE NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM**

**BROOKLYN, NEW YORK**

**A FIDUCIARY FUND OF THE CITY OF NEW YORK**

**COMPREHENSIVE ANNUAL FINANCIAL REPORT**

**FOR THE FISCAL YEARS ENDED**

**JUNE 30, 2022 AND JUNE 30, 2021**

**Prepared by:** **The Finance Division of the  
New York City Employees' Retirement System**

**Chun Gong, Acting Director, Finance**

**Executive Director:** **Melanie Whinnery**

**Actuary:** **Marek Tyszkiewicz, Chief Actuary**

**Custodian of Funds:** **Brad Lander,  
Comptroller of the City of New York**

**Headquarters Address:** **335 Adams Street, Suite 2300  
Brooklyn, N.Y. 11201-3724**

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM ANNUAL COMPREHENSIVE FINANCIAL REPORT FOR THE FISCAL YEARS ENDED JUNE 30, 2022 AND JUNE 30, 2021

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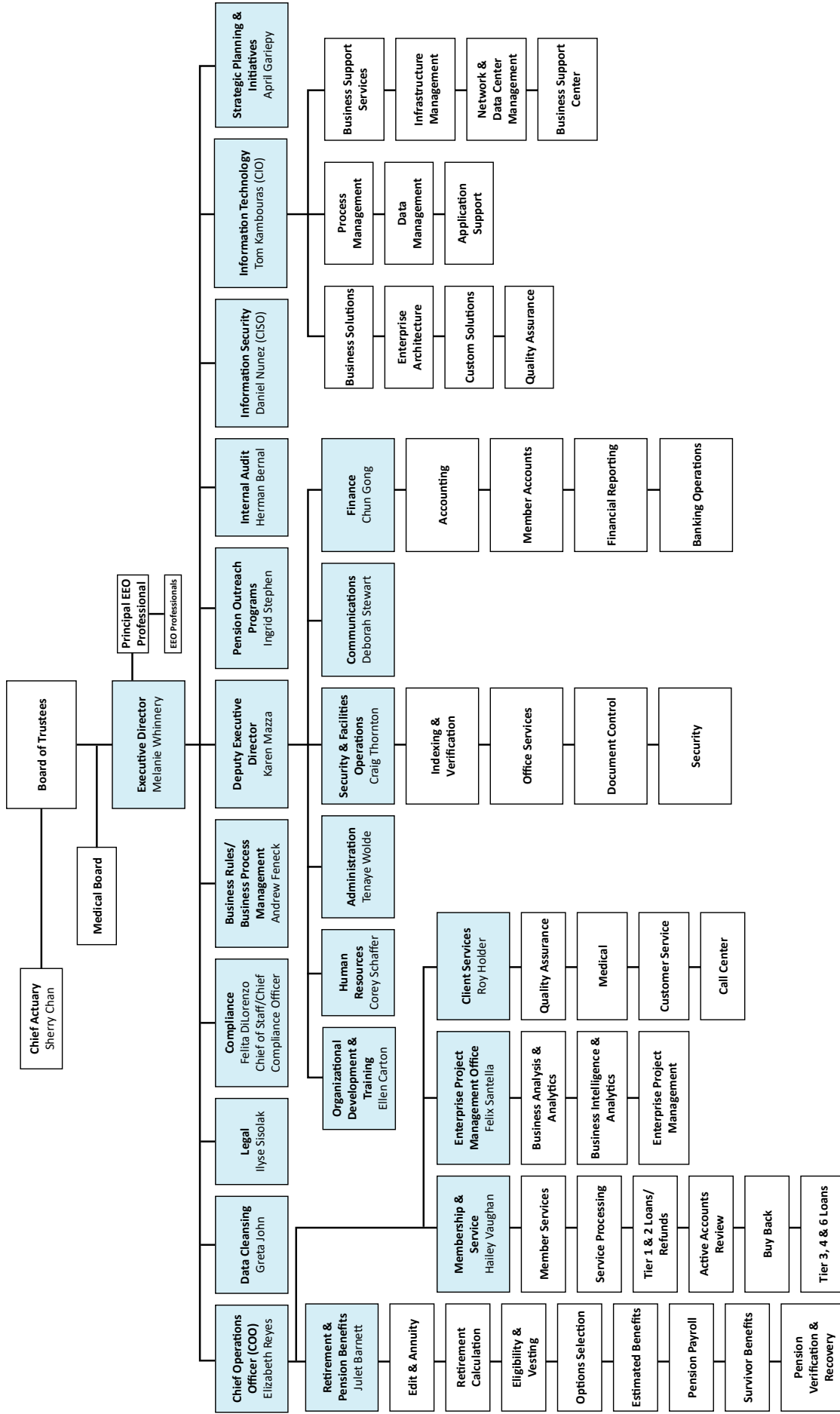


## BOARD OF TRUSTEES

<p><b>Mayor's Representative</b> Preston Niblack, Chairperson</p>	
<p><b>Honorable Brad Lander</b> Comptroller of the City of New York</p>	<p><b>Honorable Donovan Richards, Jr.</b> Borough President of Queens</p>
<p><b>Honorable Jumaane Williams</b> Public Advocate</p>	<p><b>Honorable Vito Fossella</b> Borough President of Staten Island</p>
<p><b>Honorable Mark Levine</b> Borough President of Manhattan</p>	<p><b>Henry Garrido</b> Executive Director District Council 37, AFSCME</p>
<p><b>Honorable Antonio Reynoso</b> Borough President of Brooklyn</p>	<p><b>Anthony Utano</b> President Transport Workers Union, Local 100</p>
<p><b>Honorable Vanessa Gibson</b> Borough President of The Bronx</p>	<p><b>Gregory Floyd</b> President International Brotherhood of Teamsters, Local 237</p>

**Melanie Whinnery**  
NYCERS Executive Director





Updated as of 5/24/2022



Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

**New York City Employees' Retirement System  
New York**

For its Annual Comprehensive  
Financial Report  
For the Fiscal Year Ended

June 30, 2021

*Christopher P. Morill*

Executive Director/CEO





Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2022***

Presented to

**New York City Employees' Retirement System**

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

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

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

A handwritten signature in cursive script that reads "Alan H. Winkle".

Alan H. Winkle  
Program Administrator



December 23, 2022

Dear NYCERS Members and Retirees:

We are pleased to submit the Annual Comprehensive Financial Report (ACFR) of the New York City Employees' Retirement System (Plan) for the fiscal year ended June 30, 2022. The ACFR consists of five sections:

1. The *Introductory Section* contains this Letter of Transmittal, the Administrative Organization, the Certificate of Achievement for Excellence in Financial Reporting, the Public Pension Standards Award, the Summary of Plan Provisions, and a summary of legislation enacted during the fiscal year.
2. The *Financial Section* contains the report of independent certified public accountants, the Management Discussion and Analysis (MD&A), the financial statements of the Plan, and other required supplementary financial information and tables. The MD&A provides an overview of the current year's financial activity with an analysis of the effects of any significant changes from the prior year.
3. The *Investment Section* contains a report on investment policies and activity, investment results, and various investment schedules.
4. The *Actuarial Section* contains the Plan's actuarial certification letter and various actuarial tables.
5. The *Statistical Section* contains various statistical tables consisting of significant data pertaining to the Plan.

## ACCOUNTING SYSTEM AND REPORTS

This ACFR has been prepared in conformity with generally accepted accounting principles (GAAP) for governmental units, as set forth by the Governmental Accounting Standards Board (GASB), as well as the reporting requirements prescribed by the Government Finance Officers Association of the United States and Canada (GFOA). Preparation of the ACFR is the responsibility of the Plan's management. The accrual basis of accounting is used to record assets and liabilities and revenue and expenses. Revenue for the system is taken into account when earned, without regard to date of collection, and expenses are recorded when the corresponding liabilities are incurred, regardless of when payment is made. Investments are valued at fair value.

The management of the Plan is responsible for establishing and maintaining a system of internal accounting control. In fulfilling this responsibility, estimates and judgments made by management are required to assess the expected benefits and related costs of control procedures so that the cost of a control does not exceed the derived benefit.

The objective of a system of internal accounting controls is to provide management with reasonable assurance that assets are safeguarded against loss from unauthorized use or disposition. Internal accounting controls should also ensure that transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of financial statements in conformity with GAAP.

The internal accounting controls of the system are adequate to meet the above objectives. There have been no irregularities that have had a material effect on the financial statements. The supporting schedules and statistical tables fairly reflect the status and operations of the system.

## INDEPENDENT AUDIT

The New York City Employees' Retirement System (NYCERS) undergoes a comprehensive audit conducted by the City's Independent Certified Public Accountant on an annual basis. The audit is performed in accordance with auditing standards generally accepted in the United States of America as established by the American Institute of Certified Public Accountants.

In the opinion of Grant Thornton LLP, the City's Independent Auditor, the Plan's Combining Financial Statements presented fairly, in all material respects, the combining fiduciary net position as of June 30, 2022 and 2021, 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.

## AWARDS

The GFOA awarded a Certificate of Achievement for Excellence in Financial Reporting to NYCERS for its ACFR for the fiscal year ended June 30, 2021. In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized ACFR, the contents of which conform to program standards. Such financial reports must satisfy both generally accepted accounting principles and applicable legal requirements. The Plan has received this certificate for the last 36 years.

A Certificate of Achievement is valid for a period of one year only. We believe our ACFR for the fiscal year ended June 30, 2022 continues to conform to the Certificate of Achievement Program requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

The Public Pension Coordinating Council (PPCC) awarded a Public Pension Standards Award for Funding and Administration to NYCERS for 2022. This is the thirteenth year that NYCERS has applied for and received an award from the PPCC. In order to be awarded a Public Pension Standards Award, a public pension program must meet professional standards for plan design, administration, and/or funding, as set forth in the Public Pension Standards. The Public Pension Standards are intended to reflect minimum expectations for public retirement system management and administration, as well as serve as a benchmark by which all defined benefit public plans should be measured. A Public Pension Standards Award is valid for a period of one year.

## ADMINISTRATION

NYCERS was established by an act of the Legislature of the State of New York under Chapter 427 of the Laws of 1920. Chapter 427 created a retirement system in accordance with sound actuarial principles. The governing statutes are contained in the New York State Retirement and Social Security Law (RSSL) and the New York City Administrative Code. The head of the retirement system is the Board of Trustees. The system became operational on October 1, 1920 with 13,331 original members. As of June 30, 2020, the date of the Plan's most recent actuarial valuation, the Plan's membership included 191,237 members in active pay status, 159,906 retirees and beneficiaries receiving benefits, 23,034 terminated vested members who are not yet receiving benefits, and 32,027 terminated non-vested members who are on leave with insufficient service for vesting and assumed to not return to active service.

## INITIATIVES

### Executive Vision Statement through 2027 (Vision 2027)

In 2021, NYCERS executive leadership developed the agency's vision for the next five years, known as Vision 2027.

Vision 2027 (stated below) was created using inputs from NYCERS' mission and values; feedback from the Board of Trustees, clients, and stakeholders; internal risk assessments; and retirement benefit administration/global trends:

NYCERS exists to serve its members, retirees, and beneficiaries. By 2027, the client experience will be easy, intuitive, and accurate. All of the work we do as a NYCERS team affects the client experience. In order to anticipate client needs and proactively deliver the information they need when they need it, our focus for the next five years will be to:

- Identify, manage and mitigate or minimize risk;
- Develop and support our workforce through change to ensure that they are skilled, ready for the future, and can deliver on NYCERS' Mission and Vision 2027;
- Ensure NYCERS' organizational structure has the capacity to be adaptable, effective, and future-focused, while making continuous improvements to our business processes; and
- Invest in technology solutions that increase automation and ensure that our technology infrastructure and systems are agile, secure, and resilient, while enhancing self-service options offered to clients.

Vision 2027 established seven strategic objectives that inform NYCERS' strategic initiatives and projects for the next five years:

1. Grow readiness capabilities (Workforce Development)
2. Streamline processes, digitize work, and simplify IT infrastructure (Operations)
3. Grow the client experience (Digitalization)
4. Grow business intelligence capabilities (Key Performance Indicators)
5. Enhance cyber security capabilities (Cyber Security)
6. Continuously innovate services (Benchmarking, Research & Development)
7. Grow partnership services for employers (Employers)



## Legacy Replacement Project

The Legacy Replacement Project (LRP) is a complex, multi-year initiative to modernize NYCERS' business processes and related technologies. The principal objective of the LRP is to replace NYCERS' legacy production application with a new pension administration system. This new pension administration system will transform the way NYCERS does business and interacts with its members, retirees, employers, and other City agencies. This will be accomplished using flexible up-to-date technologies that will provide ongoing value into the future. The LRP began in June 2021 and is expected to be completed by June 2026 over five phases. Phase 1 is scheduled to launch in January 2023.

## Pension Outreach Programs

NYCERS' Pension Outreach Programs conducts various educational pension seminars for Tier 4 and Tier 6 members enrolled in basic, uniformed and special plans, and for members in the Tier 3 Uniformed Correction Force Plans and 22-Year Plans. Programs include general seminars for new and mid-career members and Comprehensive Pre-Retirement Planning Seminars in partnership with the NYC Office of Labor Relations and the Social Security Administration. Comprehensive Seminars are designed to assist members with retirement planning and are the most popularly attended events. In addition, NYCERS participates in onboarding events sponsored by employer and labor partners for new City employees and hosts a Prospective Member Seminar Program for long-term City employees who have not yet joined NYCERS. Programs for employer and labor partners also included a Train-the-Trainer Seminar.

NYCERS' Employer Advisory Committee, comprised of participating employer representatives, provides insights on matters affecting NYCERS' membership from a stakeholder perspective. NYCERS' goal is to strengthen employer partnerships, increase awareness, and receive feedback about improvements related to the Legacy Replacement Project and other business initiatives.

During the fiscal year ending June 30, 2022, Pension Outreach Programs participated in 111 virtual events attended by approximately 14,525 participants. These seminars explain the benefits of NYCERS' membership and encourage members to establish a MyNYCERS account to conduct transactions including, but not limited to, registering for a NYCERS membership and filing applications for a loan, buy-back or retirement. Seminar materials, including information from the Office of Labor Relations and the Social Security Administration, are available at [www.nycers.org](http://www.nycers.org), along with a link to the NYC Department for the Aging, where they share valuable resources available to NYC employees who reside in the City after retirement.

## Contact Center Modernization

In Fiscal Year 2021, NYCERS began implementing a multi-phase technology initiative, Call Center as a Service (CCaaS), to modernize Call Center operations and further enhance client service.

CCaaS Phase 1, implemented in April 2021, integrated Salesforce Customer Relationship Management, provided staff with a unified user interface, and eliminated the Call Center's dependency on physical, onsite equipment, which improved NYCERS' business continuity and contingency posture.



CCaaS Phase 2 consists of five (5) implementation releases, which began in June 2022 and includes the launch of an Interactive Voice Response (IVR) system and basic self-service options, such as: answering callers' frequently asked questions; advising callers of their expected wait times in the queue; providing targeted hold messages specific to the type of queue the caller is in; providing loan eligibility and loan balance information; offering an SMS feature that will send callers text messages with links to forms and other online content; and voiceprint enrollment.

Phase 2 releases 1 through 3 have been completed. Release 4 introduces voiceprint technology to safeguard information made available through the IVR and is targeted to be completed by the end of the year. In the final release of the project, release 5, voiceprint enrolled callers will be able to obtain the status of certain pending applications and access to frequently asked questions pertaining to their NYCERS pension account. Release 5 is anticipated to be completed by the end of June 2023.

The successful completion of CCaaS Phase 2 will reduce client wait times; provide the Call Center with a greater level of flexibility, scalability, resiliency, and continuity; provide clients with around-the-clock opportunities for self-service on critical inquiries via the voice channel; and bring NYCERS closer to an omni-channel experience for clients by allowing them to access NYCERS services in a more personalized and interactive manner.

## MEMBERSHIP

Membership in NYCERS is available to all New York City employees who are not eligible to participate in the New York City Teachers' Retirement System, the New York City Police Pension Fund, the New York City Fire Department Pension Fund, or the New York City Board of Education Retirement System.

All persons holding permanent civil service positions in the competitive or labor class are required to become members of the system six months after their date of appointment, but may voluntarily elect to join the system prior to their mandated membership date. All other eligible employees have the option to join the system upon appointment or at any time thereafter.

All members who joined NYCERS prior to July 1, 1973 are Tier 1 members.

All members who joined NYCERS on or after July 1, 1973, but prior to July 27, 1976, and Investigator Members employed in any New York City District Attorney Office who joined NYCERS on or after July 1, 1973, but prior to April 1, 2012, are Tier 2 members subject to Article 11 of the RSSL.

All members of the uniformed force of the NYC Department of Correction who joined NYCERS on or after July 27, 1976, but prior to April 1, 2012, are Tier 3 members subject to Article 14 of the RSSL.

All members (except members of the uniformed force of the Department of Correction and Investigator Members employed in a New York City District Attorney Office) who joined NYCERS on or after July 27, 1976, but prior to April 1, 2012, are Tier 4 members subject to Article 15 of the RSSL. Tier 4 members who joined NYCERS on or after July 27, 1976, but prior to September 1, 1983, retain all rights, benefits, and privileges provided under Article 14 of the RSSL (Tier 3).



All members who joined or join NYCERS on or after April 1, 2012 are Tier 6 members except members of the uniformed force of the Department of Correction, members of the uniformed force of the Department of Sanitation, and Investigator Members employed in a New York City District Attorney Office. These members are subject to Article 14 of the RSSL.

## EMPLOYERS

The Plan is a cost-sharing, multiple-employer public employee retirement system. In addition to the various departments of the City of New York, members of NYCERS are also employed by the New York City (NYC) Transit Authority, the NYC Housing Authority, the NYC Health and Hospitals Corporation, MTA Bridges and Tunnels, the NYC School Construction Authority, NYC Housing Development Corporation, the City University of New York (Senior Colleges), the New York State Courts, and the NYC Municipal Water Authority. A table listing these employers and the number of their respective participating employees may be found on page 212 in the Actuarial Section.

## CONTRIBUTIONS

The benefits of the system are financed by employer contributions, employee contributions, and from earnings on the invested funds of the system.

As of July 1, 1970, Tier 1 and Tier 2 Transit operating-force employees enrolled in the Transit 20-Year Plan are non-contributory. For all other Tier 1 and Tier 2 members, contributions are dependent upon the member's age and the retirement plan elected. For Tier 3 and Tier 4 members, Basic Member Contributions (BMCs) are 3% of gross wages and cease upon the attainment of 10 years of Credited Service or the tenth anniversary of membership (except for certain Correction, Sanitation and District Attorney members as noted below), whichever occurs first. Tier 4 Transit operating-force members, however, pay 2% of gross wages for as long as they remain in service. Certain Tier 2, Tier 3, and Tier 4 members who are participants in special retirement plans are required to make Additional Member Contributions (AMCs) in addition to their BMCs.

Tier 6 members are generally mandated to contribute BMCs until they separate from City service or until they retire. The BMC rate for most Tier 6 members is dependent on annual wages earned during a plan year; the rate ranges from 3% for salaries up to \$45,000, to 6% for salaries greater than \$100,000. Tier 6 Special Plan members, such as those in the Special Peace Officer 25-Year Plan, must also contribute AMCs in accordance with the rates and durations specified for their particular special plan.

Uniformed members of the Department of Correction, uniformed members of the Department of Sanitation, and District Attorney ("DA") Investigator members employed in a District Attorney office, who became employed in one of these titles on or after April 1, 2012, participate in a 22-year Plan. These members are required to contribute 3% of gross wages until the earlier of 25 years of service or until they retire.

The Chief Actuary of the system determines employer contributions annually.

## REVENUES

As mentioned previously, the funds needed to finance retirement benefits are accumulated from a combination of employer contributions, employee contributions, and income on investments. Investment loss for fiscal year 2022 is greater than revenues received through employer and employee contributions; the net effect of negative \$2.5 billion is a decrease of \$25.1 billion from \$22.6 billion in fiscal year 2021. As discussed in the Financial Section, the decrease was the result of weaker performance in the investment portfolio. The Table of Additions on page 228 present these amounts for the last 10 years.

## EXPENSES

The primary expenses of the Plan relate to the payment of benefits to eligible retirees and beneficiaries. Consequently, recurring monthly retirement benefit payments, death benefit payments, and refunds of contributions to terminated members comprise the major expenses of the Plan. The Table of Benefit Payments by Type on page 232 presents the details of the different expenses over the last 10 years.

## FUNDING

One of the most important measures of a retirement system is the level of funding. A higher funding percentage translates into a larger ratio of assets available to meet the system's future obligations. A well-funded plan improves the likelihood that the assets that are irrevocably committed to the payment of benefits will be adequate to cover the required benefit payments. The goal is to fund members' future retirement benefits during their working careers. As of June 30, 2020, the Plan's most recent actuarial valuation date, the Plan's funded ratio is 78.1%, an increase from 76.8% as of June 30, 2019. This ratio was determined by the Actuary using the Entry Age Actuarial Cost Method. Please refer to the Actuarial Section for details concerning the actuarial methods and assumptions used in determining the required funding.

Under the Accounting Standard "GASB Statement No. 67, Financial Reporting for Pension Plans," a defined-benefit pension plan is also required to report fiduciary net position as a percentage of the plan's total pension liability. This method reports assets at current fair value and, as such, is more sensitive to market volatility. As of June 30, 2022, the fiduciary net position represents 81.3% of total pension liability for NYCERS and the five Variable Supplement Funds.

## INVESTMENTS

The investment portfolio is a significant component in the funding of the system. The Administrative Code of the City of New York authorizes the investment of Plan assets subject to the terms, conditions, limitations, and restrictions imposed by law for investments by savings banks. The New York State Retirement and Social Security Law (RSSL) establishes the criteria for permissible investments.



The Plan's Board of Trustees adopts investment policies. The Board creates the overall investment policy under which the Plan's funds are invested and, in defining the investment objectives, develops a framework under which specific objectives are established with regard to allocating the assets of the Plan among various investment types. The current policy target mix consists of 27.0% in domestic equities, 17.0% in an international equity fund, 36.5% in fixed income, and 19.5% in alternative investments.

For the one-year period that ended on June 30, 2022, the Plan's rate of return on investments was -8.39%, higher than NYCERS' Policy Benchmark, which had a rate of return of -8.70%. Further details concerning the criteria for the Plan's investments, policies, investment performance, and other investment tables may be found in the Investment Section.

Listings of the Plan's major domestic equity and long-term bond holdings can be found on pages 154 and 155. Although this ACFR does not include a full list of the Plan's investment securities, such information is available upon request from the NYC Comptroller's Office.

## PROFESSIONAL SERVICES

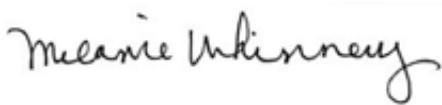
The report of independent certified public accountants on the Plan's financial statements is included in this ACFR. The Comptroller of the City of New York is the custodian of the Plan's assets and provides investment services through independent advisors and consultants who are listed in the Investment Section's Schedule of Fees Paid to Investment Managers and Consultants on page 157. A listing of brokerage firms, and the amounts paid to such firms, can be found in the Schedule of Brokers' Commissions on page 167. Other consultant services are shown in the Financial Section's Schedule of Payments to Consultants on page 143. Actuarial services are provided to the Plan by the Chief Actuary of the City of New York, who is appointed by the Board of Trustees. The City's Corporation Counsel provides legal services to the Plan.

## ACKNOWLEDGMENTS

The compilation of this ACFR reflects the combined effort of NYCERS' staff, under the leadership of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, as a means of determining compliance with legal provisions, and as a means for determining responsible stewardship for the assets contributed by the members and their employers.

On behalf of the Board of Trustees, we would like to take this opportunity to express our gratitude to the staff, the advisors, and the many people who have worked diligently to ensure the continued successful operation of the system.

Respectfully submitted,



Melanie Whinnery  
Executive Director



Chun Gong  
Acting Director of Finance

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# Legislation (enacted between 7/1/21 and 6/30/22)

## Laws of 2021

(enacted between July 1, 2021 and December 31, 2021)

### **Chapter 214 of the Laws of 2021 – Prohibits public employers from retaliating against employees for absences related to COVID-19**

This Law amends the Civil Service Law to prohibit public employers, including NYCERS, from taking retaliatory adverse personnel actions against employees who use sick leave or compensatory time to quarantine, seek medical treatment, or take any other time for COVID related issues. This Law is deemed to have been in effect as of March 1, 2020.

### **Chapter 327 of the Laws of 2021 – Increasing certain special accidental death benefits**

This law amends the Retirement and Social Security Law (RSSL) § 361-a(c) and General Municipal Law (GML) § 208-f(c) by increasing the deceased member's salary used in the computation of the special accidental death benefit by adding to it an additional percentage. The beneficiaries of the following NYCERS members are covered: Correction Officers, Housing and Transit Police, Uniformed Sanitation members, certain EMTs and TBTA members. This law is effective as of July 1, 2021.

### **Chapter 391 of the Laws of 2021 – Actuarial interest rate assumptions extension**

This law extends for two fiscal years, until June 30, 2023, the 7% rate of interest used by the Chief Actuary for NYCERS in valuing the retirement system liabilities for the purpose of computing the amount of employer contributions. The law also extends for two fiscal years the rate of interest to be paid into certain constituent funds of the City retirement systems and the amount of interest to be credited on AMCs and Increased Take Home Pay (ITHP) reserves for Tier 1 and Tier 2 members. This law is deemed to have been in effect as of July 1, 2021.

### **Chapter 417 (Part E) of the Laws of 2021 – Permits remote meetings by a public body during the COVID-19 state disaster emergency**

Part E of this law permits any public body to hold meetings remotely and without in-person access during the COVID-19 state disaster emergency. This law is deemed to have been in effect as of September 2, 2021.

### **Chapter 424 of the Laws of 2021 – Expands eligibility of certain public service employees for participation in the World Trade Center Rescue, Recovery or Clean-up Operations**

This Act amends the Retirement and Social Security Law (RSSL) to include employees who became NYCERS members after the qualifying period under the World Trade Center (WTC) law, but were employees of a public employer during the covered time period and purchased some or all of that pre-membership period. This law is effective as of September 13, 2021.

### **Chapter 425 of the Laws of 2021 – Electronic submission for Notice of Participation in World Trade Center Rescue, Recovery or Clean-up Operations**

This Act amends the Retirement and Social Security Law and the New York City Administrative Code to allow for the electronic submission of a notice that a member participated in World Trade Center Rescue, Recovery or Clean-up Operations for a qualifying period. This law is effective as of September 13, 2021.

### **Chapter 481 of the Laws of 2021 – Documents to be discussed during open meeting of a public body to be made available upon request or posted on agency's website**

This Act amends the Public Officers Law to require documents to be discussed at open meetings be made available upon request or posted on the agency's website, to the extent practicable, at least 24 hours prior to the open meeting.

### **Chapter 587 of the Laws of 2021 – Meeting minutes of a public body to be posted on agency's website**

This Act amends the Public Officers Law to require the minutes of meetings of a public body to be posted on their agency's website in instances where the website is routinely updated and utilizes a high speed internet connection. This posting is required within 14 days of the meeting or within seven days of an executive session where a formal vote is taken. Unabridged video recordings or unabridged written transcripts may be deemed as meeting minutes for this purpose. This law is effective as of November 8, 2021.

### **Chapter 767 of the Laws of 2021 – Provides for electronic notarization and authorizes the use of video and audio conference technology in identifying individuals for electronic notarization**

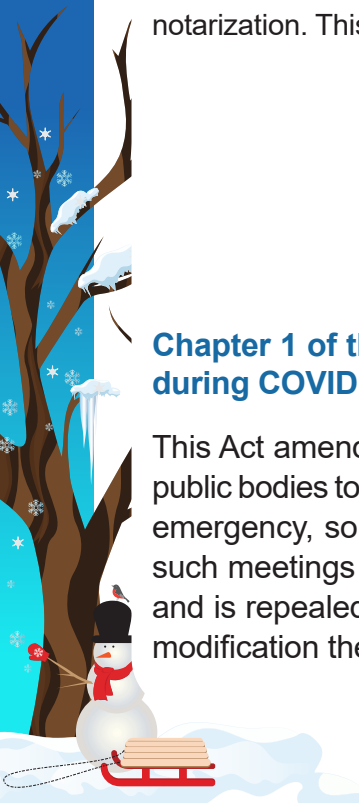
This act amends the Executive Law, by adding §137-a, to allow notarizations to be done electronically with the use of video conference technology. In addition, the act sets forth comprehensive requirements for electronic notarization. This act is effective as of June 20, 2022.

## **Laws of 2022**

**(enacted between January 1, 2022 and June 30, 2022)**

### **Chapter 1 of the Laws of 2022 – Extends authorization of public body to hold remote meeting during COVID-19 state of emergency**

This Act amends portions of Chapter 417 of the Laws of 2021 extending the current authorization for public bodies to hold meetings remotely and without in-person access during the COVID-19 state disaster emergency, so long as the public has the ability to view or listen to such proceedings and provided such meetings are recorded and later transcribed. This law shall be effective as of January 14, 2022 and is repealed upon the expiration or termination of Executive Order 11 of 2021 or any extension or modification thereof.



### **Chapter 56 of the Laws of 2022 (Budget Bill Part HH) – Waives certain RSSL §§ 211 & 212 income limitations for employment in public schools**

Amends the RSSL to waive §§ 211 & 212 approval and income limitations on retirees as a result of earnings from employment in public schools in the state. The law is effective April 9, 2022 and shall expire and be deemed repealed June 30, 2023.

### **Chapter 56 of the Laws of 2022 (Budget Bill Part SS) – Excludes certain pensionable earnings of Tier 6 members for determining contribution rates**

Amends the RSSL to exclude pensionable earnings above the annual base wages of Tier 6 members, such as overtime payments, for purposes of calculating Basic Member Contribution (BMC) rates for plan years April 1, 2022 through April 1, 2024. This law is effective as of April 1, 2022.

### **Chapter 56 of the Laws of 2022 (Budget Bill Part TT) – Reduces Tier 6 member vesting requirement from 10 years to 5 years of credited service**

Amends the RSSL to lower the minimum number of years required for Tier 6 members to vest for service retirement from 10 years to 5 years of credited service. This law is effective as of April 9, 2022.

### **Chapter 56 of the Laws of 2022 (Budget Bill Part WW) – Permits videoconferencing and remote participation in public meetings**

Amends the Public Officers Law to permit videoconferencing and remote participation in public meetings under certain circumstances and provides that a quorum of the public body must be present in physical locations where the public may attend. In addition, it continues the state of affairs prior to passage of the law through June 9, 2022 in which all-remote public meetings may be held. This law is effective April 9, 2022, and shall expire and be deemed repealed July 1, 2024.

### **Chapter 225 of the Laws of 2022 – Establishes the New York City Public Housing Preservation Trust**

Establishes the New York City Public Housing Preservation Trust. Employment with the Trust is considered City service for purposes of participation in NYCERS. Member employees of the NYCHA transferred to the Trust as a result of the law shall remain a member of NYCERS. This law is effective August 15, 2022.

### **Chapter 234 of the Laws of 2022 – Extends certain provisions of Chapter 77 of the Laws of 2021**

Chapter 234 amends the provisions of Chapter 77 of the Laws of 2021. This act extends the ability for NYC and NYS employees to get 4 (four) hours of paid leave per COVID injection to December 31, 2023. The law also permits collective bargaining agreements to provide for more than the 4 (four) hours. The paid leave offered is excused and is not chargeable against any other leave. The act also prohibits employers from retaliation against an employee for taking leave to receive the COVID-19 vaccine. This law is effective June 28, 2022.



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## SUMMARY OF PLAN PROVISIONS

### GLOSSARY OF TERMS

#### ***Accumulated Deductions***

The total of all contributions made by members, **plus** compounded interest earned on such contributions (8.25% for Tiers 1 and 2; 5% for Tiers 3, 4 and 6).

#### ***Active Service***

Service rendered while a member is on the payroll and being paid by the City of New York or a Participating Employer.

#### ***Additional Member Contributions (AMCs)***

Contributions made by participants in a special plan in addition to Basic Member Contributions. AMC rates vary according to special plan provisions. AMCs are held in the Retirement Reserve Fund for each special plan.

#### ***Allowable Correction Service***

Service rendered in the uniformed force of the New York City (NYC) Department of Correction. Layoff time, union leave and child care leave, and certain Military service are also allowable. Additionally, service in one of the uniformed forces listed below will count as Allowable Correction Service, so long as that service was rendered immediately prior to becoming a member of the uniformed force of the NYC Department of Correction:

- o NYC Housing Police
- o NYC Transit Police
- o NYC Department of Sanitation
- o NYC Police Department
- o NYC Fire Department

Note: The 22-Year Plan for Uniformed Correction Force members (CF-22) is a Credited Service plan, not an Allowable Service plan.

#### ***Allowable Sanitation Service***

Service rendered in the uniformed force of the New York City (NYC) Department of Sanitation. Layoff time, union leave, and certain Military service are also allowable. Additionally, service in one of the uniformed forces listed below will count as Allowable Sanitation Service, so long as that service was rendered immediately prior to becoming a member of the uniformed force of the NYC Department of Sanitation:

- o NYC Housing Police
- o NYC Transit Police
- o NYC Department of Correction
- o NYC Police Department
- o NYC Fire Department

Note: The 22-Year Plan for Uniformed Sanitation Force members (SA-22) is a Credited Service plan, not an Allowable Service plan.

#### ***Allowable Service as a Dispatcher Member***

Service rendered while employed by the City of New York as a Fire Alarm Dispatcher, Supervising Fire Alarm Dispatcher (Levels 1 and 2), Director of Dispatch Operations or Deputy Director of Dispatch Operations, and all service rendered in the following NYC Civil Service titles, or in a title whose duties require the supervision of employees serving in such titles:



Chief Fire Alarm Dispatcher	Administrative Fire Alarm Dispatcher	Bus Operator (Transit)
Train Dispatcher (Transit)	Firefighter	Police Officer
Correction Officer	Fire Marshal	Probation Officer
Police Communications Technician	Supervising Police Communications Technician	Principal Police Communications Technician
Police Administrative Aide	Senior Police Administrative Aide	Emergency Medical Technician
Advanced Emergency Medical Technician	Emergency Medical Service Specialist, Levels 1 and 2	Fire Prevention Inspector
Fire Protection Inspector	Senior Fire Prevention Inspector	Principal Fire Prevention Inspector
Associate Fire Protection Inspector	County Detective	Detective (NYPD)
Detective Investigator	Senior Detective Investigator	Deputy Sheriff
Senior Deputy Sheriff	Inspector of Fire Alarm Boxes	Radio Operator
Radio Repair Technician	Supervisor of Radio Repair Operations	Taxi and Limousine Inspector
Senior Taxi and Limousine Inspector	MTA Bridge and Tunnel Officer	

***Allowable Service as an EMT Member***

Service rendered while employed by the City of New York or the NYC Health & Hospitals Corporation in a title whose duties are those of an Emergency Medical Technician or Advanced Emergency Medical Technician, or in a title whose duties require the supervision of employees serving in such titles. Service rendered in the title of Motor Vehicle Operator with the City of New York or NYC Health & Hospitals Corporation is also considered Allowable Service as an EMT Member.

***Allowable Service as a Special Officer***

Service rendered in the following titles whose duties are those of a peace officer under the NYS Criminal Procedure Law:

- o Special Officer (employed by a City agency, the NYC Health and Hospitals Corporation, or the NYC Housing Authority)
- o Urban Park Ranger (employed by the NYC Parks Department)
- o Parking Control Specialist (employed by the NYC Department of Transportation)
- o School Safety Agent (employed by the NYPD/ NYC Department of Education)
- o Campus Peace Officer (employed by the City University of New York)
- o Taxi and Limousine Inspector (employed by the NYC Taxi and Limousine Commission)

***Allowable Service in the Transit Authority***

Membership Service while employed by the New York City Transit Authority in a Career and Salary title or Transit Operating Force title. In addition, certain military service, union leave service, and layoff time can be considered allowable service.

**Annuity**

Payments made for the life of a Tier 1 or Tier 2 retiree derived from their Accumulated Deductions. These payments are typically based on the contributions the employee made to NYCERS throughout their membership.

**Average Compensation (applies only to certain Tier 1 and 2 plans)**

The average of compensation earned from the completion of 20 years to the date of retirement.

**Career Pension Plan Position**

Any position in City service other than a Transit Operating Force position, a position in the uniformed force of the NYC Department of Sanitation, or the uniformed force of the NYC Department of Correction.

**Career Pension Plan Qualifying Service**

In general, Membership Service rendered in a Career Pension Plan Position or Membership Service rendered prior to July 1, 1968; Transferred Service from another New York City or New York State public employee retirement system; Up to six months of Purchased Service, provided such service was continuous and immediately preceded membership prior to January 1, 1968; or Pension Enhancement Service.

**Credited Service**

The total amount of service used for members' pension calculations, except for participants of special plans that exclusively have an Allowable Service requirement. The following types of service are included in the total:

- o Service rendered while a member of NYCERS, and
- o Service rendered while a member of another retirement system within New York City or New York State and transferred to NYCERS, and
- o Service purchased under applicable laws and rules for buy-back
- o Membership Reinstatement Service
- o Military Service
- o Union Leave Service

**Designated Beneficiary**

The person(s) nominated by a member or retiree to receive an Ordinary Death Benefit or Post-Retirement Death Benefit, respectively, upon their death. A Designated Beneficiary can be a Primary Beneficiary or a Contingent Beneficiary (entitled to receive benefits only if there are no surviving Primary Beneficiaries).

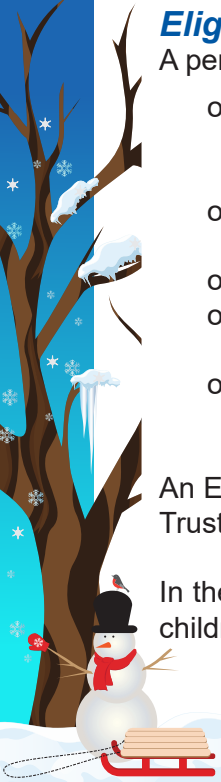
**Eligible Beneficiary**

A person who is eligible to be paid an Accidental Death Benefit, in the following order of priority:

- o A surviving spouse who has not remarried (a surviving spouse of a uniformed worker of the NYC Department of Sanitation who has not renounced survivorship rights in a separation agreement may subsequently remarry and still retain the Accidental Death Benefit)
- o Dependent child, up to age 18 for Tiers 1 and 2 members; or up to age 25 for Tiers 3, 4, and 6 members
- o Dependent parents
- o Any person, up to age 21, who qualified as a dependent on the member's final Federal income tax return (Tiers 3, 4 and 6 members)
- o Anyone you name as your beneficiary for your Ordinary Death Benefit (not applicable to 22-Year Plan members)

An Eligible Beneficiary must apply for an Accidental Death Benefit and NYCERS' Medical Board and Board of Trustees must approve the application.

In the event that a class of Eligible Beneficiaries consists of more than one person (for example, two or more children under the age of 25), benefits will be divided equally among such persons.



### **Enhanced Disability Benefit (EDB)**

A retirement benefit enhancement program for eligible 22-Year Plan members of the Uniformed Correction Force and Uniformed Sanitation Force.

### **Excess Contributions**

Contributions a Tier 1 or Tier 2 member makes, and all interest earned on such contributions, after the member has satisfied the requirements for their plan.

### **Excess Increased-Take-Home-Pay**

Contributions made by the employer of a Tier 1 or Tier 2 member after the member has satisfied the requirements for their plan.

### **Final Average Salary (FAS)**

*For Tiers 2, 3 and 4:*

The greater of the average annual wages earned during any three consecutive calendar years or the final 36 months immediately preceding a member's retirement date. **But**, if the salary earned during any year included in the calculation of the member's FAS exceeds the specific limits for Tier 2, Tier 3 or Tier 4 members, the amount in excess of such limits is excluded from the computation.

*For 22-Year Plans and Tier 6:*

The greater of the average annual wages earned during any five consecutive calendar years or the final 60 months immediately preceding a member's retirement date. **But**, if the salary earned during any year included in the calculation of the member's FAS exceeds the specific limits for Tier 6 members, the amount in excess of such limits is excluded from the computation.

### **Final Compensation**

The average compensation earned during the five-year period immediately preceding a member's retirement date or any consecutive five calendar years prior to the member's retirement date that would provide them with the greatest average compensation.

### **Final Salary (Tier 1 Members and Tier 2 DA Investigators in the 20-Year Plan)**

*For members of the uniformed forces of the departments of Sanitation and Correction who joined the retirement system prior to July 1, 1973:*

- o The annual rate of salary earnable on the day before the date of retirement.

*For all others:*

- o Earned or earnable salary in the year before retirement or the average of annual compensation earned during any three calendar years.

Tier 1 members with a membership date after June 17, 1971 and Tier 2 DA Investigators in the 20-Year Plan are subject to certain limits if their Final Salary exceeds that of the prior year by more than 20%.

### **Increased-Take-Home-Pay (ITHP)**

Contributions for Tier 1 and Tier 2 members that are contributed by their employer equal to 2% of the members' gross salaries; 2.5% for Correction Officers.

### **Pension Reserve**

The total amount computed to pay retirement benefits over a retiree's lifetime, including ITHP but excluding Accumulated Deductions.

### ***Physically-Taxing Position***

A position in City service included on the Official List of Physically-Taxing Positions promulgated and maintained by the NYC Office of Labor Relations.

### ***Post-Retirement Death Benefit (Death Benefit Plan 2 only)***

A lump-sum death benefit payable to the person(s) designated by certain members of Tiers 2, 3, 4 and 6. The amount of the benefit is dependent upon the date of the member's death after retirement. This benefit is in addition to any benefit payable under a retirement option.

### ***Primary Social Security Benefit***

The benefit payable by the Social Security Administration which is determined by a formula based upon wages earned from a public employer from which Social Security deductions were taken.

### ***Reserve for Increased-Take-Home-Pay (ITHP)***

For some Tier 1 and Tier 2 members, an amount which, at the time of death or retirement is equal to the accumulation of the contributions for ITHP, **plus** interest earned thereon.

### ***Total Reserve***

The total amount computed to pay retirement benefits over a retiree's lifetime, including ITHP and Accumulated Deductions.



## CAREER PENSION PLAN (PLAN A)

### SERVICE RETIREMENT

- Participants may retire: at age 55 with 25 or more years of Career Pension Plan (CPP) Qualifying Service; at age 50 with 25 or more years of physically-taxing service; or with 20 or more years of CPP service, but benefits are payable when member would have completed 25 years of service or reached age 55 (age 50 for physically-taxing)
- The Service Retirement Benefit is:
  - For the first 25 years of CPP Qualifying Service: 2.20% of Final Salary; less Required Amount; plus Accumulated Deductions; plus
  - For all years other than the first 25 years of CPP Qualifying Service: 1.20% of Final Salary (years prior to 07/01/68); plus 1.70% of Final Salary (years after 06/30/68); plus
  - A Pension for excess Increased-Take-Home-Pay (ITHP) and an Annuity for Excess Contributions

### VESTED RETIREMENT

- No provision for vesting. CPP members must withdraw from Plan A and switch to Plan B (See Plan B on this page.)

### DISABILITY RETIREMENT

- Ordinary - must have 10 or more years of Credited Service; Accidental –no minimum service, but disability resulted from an on-the-job accident
- Disability Retirement Benefit:
  - Ordinary: 1.53% x Final Salary for each year after June 30, 1968; 1.20% x Final Salary for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary/Beneficiaries
- Ordinary: lump sum of ITHP; plus lump sum of Accumulated Deductions; plus if less than 10 years of service - six months of Earnable Salary; 10 or more years - 12 months of Earnable Salary; 20 or more years -24 months of Earnable Salary
- Accidental: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- Death Gamble: The greater of the Ordinary Death Benefit or Total Reserve
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## FIFTY-FIVE YEAR INCREASED SERVICE FRACTION PLAN (PLAN B)

### SERVICE RETIREMENT

- Participants may retire at age 55 with benefits payable immediately
- The Service Retirement Benefit is:
  - For each year of Credited Service prior to July 1, 1968: 1.20% of Final Salary; plus
  - For each year of Credited Service after June 30, 1968: 1.53% of Final Salary; plus
  - A Pension for Increased-Take-Home-Pay (ITHP); plus
  - Annuity of Accumulated Deductions

### VESTED RETIREMENT

- Eligible with at least five years of service; benefit payable at age 55
- Vested Retirement Benefit is calculated the same as the Service Retirement Benefit

### DISABILITY RETIREMENT

- Ordinary - must have 10 or more years of Credited Service; Accidental –no minimum service, but disability resulted from an on-the-job accident
- Disability Retirement Benefit is:
  - Ordinary: 1.53% x Final Salary for each year after June 30, 1968; 1.20% x Final Salary for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary/Beneficiaries
- Ordinary: lump sum of ITHP; plus lump sum of Accumulated Deductions; plus if less than 10 years of service - six months of Earnable Salary; 10 or more years - 12 months of Earnable Salary
- Accidental: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- Death Gamble: The greater of the Ordinary Death Benefit or Total Reserve
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## TRANSIT 20-YEAR RETIREMENT PLAN (T-20) TRANSIT 20-YEAR NON-CONTRIBUTORY RETIREMENT PLAN (20N/C)

### SERVICE RETIREMENT

- Participants may retire at age 50 with 20 or more years of Transit Operating Service (TOS)
- The Service Retirement Benefit is:
  - First 20 years of TOS: 50% of Final Salary, plus
  - Each year of TOS above 20: 1.5% x Final Compensation x TOS rendered on or after 07/01/68, plus
  - Each year of other service: 1% x Final Compensation x years of other service, plus
  - Pension for Increased-Take-Home-Pay (ITHP), plus
  - Pension for members prior to 07/01/70 who elected to make voluntary contributions
  - If 55 with less than 20 years of TOS, may switch to the Age 55 1/100 Plan and retire with immediate payability

### VESTED RETIREMENT

- No provision for vesting

### DISABILITY RETIREMENT

- Ordinary: Must have 10 or more years of Credited Service
- Accidental: No minimum service but disability resulted from an on-the-job accident
  - Ordinary: Less than age 50: 2.5% x Final Compensation x TOS up to 20 years; plus 1.5% x Final Compensation x TOS above 20 years rendered on or after 07/01/68; plus 1% x Final Compensation x all other service. If 20 or more years of TOS and age 50, benefit equals Service Retirement Benefit
  - Accidental: Pension of 75% of Final Compensation; plus a pension based on the ITHP; plus an annuity based on any Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- Members may file for benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary/Beneficiaries
- Ordinary: lump sum of ITHP; plus lump sum of Accumulated Deductions; plus if less than 10 years of service: six months of Earnable Salary; 10 or more years: 12 months of Earnable Salary
- Accidental: Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- Death Gamble: The greater of the Ordinary Death Benefit or Total Reserve
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## SANITATION 20-YEAR RETIREMENT PLAN (S-20)

### SERVICE RETIREMENT

- Participants may retire with 20 or more years of Allowable Sanitation Service
- The Service Retirement Benefit is:
  - For the first 20 years of Allowable Service: 50% of Final Salary, less Required Amount, plus Accumulated Deductions
  - For each year of service (other than the first 20) prior to July 3, 1965: 1% of Final Compensation; plus
  - For each year of service (other than the first 20) after July 2, 1965: 1.5% of Final Compensation, plus
  - A Pension for excess Increased-Take-Home-Pay (ITHP) and an Annuity for Excess Contributions

### VESTED RETIREMENT

- Must have five or more years of Allowable Sanitation Service, but less than 20 years; payable the date the member would have reached 20 years if they had not discontinued service
- For each year of Allowable Service: 2.5% of Final Salary; plus
- For years other than Allowable Service: 1% of Final Compensation

### DISABILITY RETIREMENT

- Ordinary - must have five or more years of Credited Service; Accidental - no minimum service, but disability resulted from an on-the-job accident
- Disability Retirement Benefit:
  - Ordinary: If 10 or more years of Allowable Service - 50% of Final Salary; if less than 10 years - 1/3 of Final Salary; if eligible for service retirement, benefit = Service Retirement Benefit
  - Accidental: 75% of Final Salary; plus ITHP; plus Accumulated Deductions; plus if more than 20 years of Allowable Service, 1% x Average Compensation x years in excess of 20; plus .5% x Average Compensation x years in excess of 20 rendered on or after July 1, 1967
- Heart Presumption: Diseases of the heart resulting in disability presumed accidental; accidental benefit payable
- Members may file for benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary/Beneficiaries
- Ordinary: lump sum of ITHP; plus lump sum of Accumulated Deductions; plus if less than 10 years of service - six months of Earnable Salary; 10 or more years - 12 months of Earnable Salary
- Accidental: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP
- Death Gamble: The greater of the Ordinary Death Benefit or Total Reserve
- Heart Presumption: Death due to heart ailment presumed accidental; accidental death benefit payable
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## SANITATION 25-YEAR RETIREMENT PLAN (S-25)

### SERVICE RETIREMENT

- ♦ Participants may retire with 25 or more years of Allowable Sanitation Service
- ♦ The Service Retirement Benefit is:
  - ♦ For the first 25 years of Allowable Service: 50% of Final Salary, less Required Amount plus Accumulated Deductions
  - ♦ For each year of service (other than the first 20) prior to July 3, 1965: 1% of Final Compensation; plus
  - ♦ For each year of service (other than the first 20) after July 2, 1965: 1.5% of Final Compensation; plus
  - ♦ A Pension for excess Increased-Take-Home-Pay (ITHP) and an Annuity for Excess Contributions

### VESTED RETIREMENT

- ♦ Must have five or more years of Allowable Sanitation Service, but less than 25 years; benefit payable when member would have reached 25 years if they had not discontinued service
- ♦ For each year of Allowable Service: 1% x Final Compensation; plus
- ♦ For each year of Allowable Sanitation Service rendered after July 2, 1965: .5% x Final Compensation

### DISABILITY RETIREMENT

- ♦ Ordinary - must have five or more years of Credited Service; Accidental – no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary: If 10 or more years of Allowable Service – 50% of Final Salary; If less than 10 years – 1/3 of Final Salary; If eligible for service retirement, benefit = Service Retirement Benefit
  - ♦ Accidental: 75% of Final Salary; plus ITHP; plus Accumulated Deductions
- ♦ Heart Presumption: Diseases of the heart resulting in disability presumed accidental; accidental benefit payable
- ♦ Members may file for benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary/Beneficiaries
- ♦ Ordinary: lump sum of ITHP; plus lump sum of Accumulated Deductions; plus if less than 10 years of service - six months of Earnable Salary; 10 or more years -12 months of Earnable Salary
- ♦ Accidental: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP
- ♦ Death Gamble: The greater of the Ordinary Death Benefit or Total Reserve
- ♦ Heart Presumption: Death due to heart ailment presumed accidental; accidental death benefit payable
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## AGE 55 ONE-PERCENT RETIREMENT PLAN (1/100)

### SERVICE RETIREMENT

- ♦ Participants may retire at age 55 irrespective of the amount of Credited Service attained by such age
- ♦ The Service Retirement Benefit is:
  - ♦ For each year of Credited Service: 1% of Final Compensation; plus
  - ♦ A Pension for Increased-Take-Home-Pay (ITHP); plus
  - ♦ An Annuity for Accumulated Member Contributions

### VESTED RETIREMENT

- ♦ There is no provision for vesting

### DISABILITY RETIREMENT

- ♦ Ordinary – must have 10 or more years of Membership Service; Accidental–no minimum service, but disability resulted from on-the-job accident.
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary: If age 55, benefit = Service Retirement Benefit
  - ♦ If less than age 55, benefit = 2 x 1/100 for each year of service that would have been completed upon reaching age 55 for eligibility for service retirement x Final Compensation, up to 25% of Final Compensation; or, if greater:
    - ♦ 2 x 1/100 for each year of actual service completed to date x Final Compensation
    - ♦ Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary/Beneficiaries
- ♦ Ordinary: lump sum of ITHP; plus lump sum of Accumulated Deductions; plus if less than 10 years of service - six months of Earnable Salary; 10 or more years -12 months of Earnable Salary
- ♦ Accidental: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Death Gamble: The greater of the Ordinary Death Benefit or Total Reserve
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## DISPATCHERS 25-YEAR RETIREMENT PLAN (D-25)

### SERVICE RETIREMENT

- Participants may retire after 25 years of Allowable Service as a Dispatcher Member
- The Service Retirement Benefit is:
  - For the first 25 years of Allowable Service: An Annuity (the actuarial equivalent of the member's required contributions), plus a Pension for Increased-Take-Home-Pay (ITHP), plus a Pension, which when added to the Annuity and Pension for ITHP equals 55% of Final Salary; plus
  - For each year beyond the first 25 years of Allowable Service: 1.70% of Final Salary; plus
  - A Pension for excess ITHP and an Annuity for Excess Contributions

### VESTED RETIREMENT

- Must have five or more years of Allowable Service as a Dispatcher Member, but less than 25
- Payability Date: The date the member would have reached 25 years if they had not discontinued service
- Vested Benefit: For each year of Allowable Service as a Dispatcher Member: 2.2% of Final Salary

### DISABILITY RETIREMENT

- Ordinary - must have 10 or more years of Credited Service; Accidental - no minimum service, but disability resulted from an on-the-job accident
- Disability Retirement Benefit:
  - Ordinary: 1.53% x Final Salary for each year after June 30, 1968; 1.20% x Final Salary for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary/Beneficiaries
- Ordinary: lump sum of ITHP; plus lump sum of Accumulated Deductions; plus if less than 10 years of service - six months of Earnable Salary; 10 or more years - 12 months of Earnable Salary
- Accidental: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- Death Gamble: The greater of the Ordinary Death Benefit or Total Reserve
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## EMERGENCY MEDICAL TECHNICIAN (EMT) 25-YEAR RETIREMENT PLAN (E-25)

### SERVICE RETIREMENT

- Participants may retire after 25 years of Allowable Service as an EMT Member
- The Service Retirement Benefit is:
  - For the first 25 years of Allowable Service: An Annuity (the actuarial equivalent of the member's required contributions), plus a Pension for Increased-Take-Home-Pay (ITHP), plus a Pension, which when added to the Annuity and Pension for ITHP equals 55% of Final Salary; plus
  - For each year beyond the first 25 years of Allowable Service: 1.7% of Final Salary; plus
  - A Pension for excess ITHP and an Annuity for Excess Contributions

### VESTED RETIREMENT

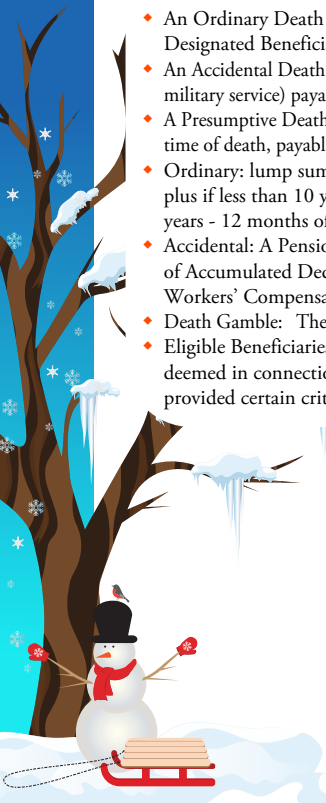
- Need five or more years of Allowable Service, but less than 25; payable when member would have reached 25 years
- For each year of Allowable Service: 2.2% of Final Salary

### DISABILITY RETIREMENT

- Ordinary - must have 10 or more years of Credited Service; Accidental - no minimum service, but disability resulted from an on-the-job accident
- Disability Retirement Benefit:
  - Ordinary: 1.53% x Final Salary for each year after June 30, 1968; 1.20% x Final Salary for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- Heart Presumption: Heart ailments resulting in disability presumed line-of-duty; accidental benefit payable
- HAT Presumption: HIV, tuberculosis or hepatitis resulting in disability presumed line-of-duty; accidental benefit payable
- Members may file for benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary/Beneficiaries
- Ordinary: lump sum of ITHP; plus lump sum of Accumulated Deductions; plus if less than 10 years of service - six months of Earnable Salary; 10 or more years - 12 months of Earnable Salary
- Accidental: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- Death Gamble: The greater of the Ordinary Death Benefit or Total Reserve
- Heart Presumption: Death due to heart ailment presumed line-of-duty; accidental benefit payable
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## SPECIAL OFFICER 25-YEAR RETIREMENT PLAN (SPO)

## 20-YEAR RETIREMENT PLAN FOR CORRECTION OFFICERS (P-20)

### SERVICE RETIREMENT

- ♦ Participants may retire after 25 years of Allowable Service as a Special Officer Member
- ♦ The Service Retirement Benefit is:
  - ♦ For the first 25 years of Allowable Service: An Annuity (the actuarial equivalent of the member's required contributions), plus a Pension for Increased-Take-Home-Pay (ITHP), plus a Pension, which when added to the Annuity and Pension for ITHP equals 55% of Final Salary; plus
  - ♦ For each year beyond the first 25 years of Allowable Service: 1.70% of Final Salary; plus
  - ♦ A Pension for excess ITHP and an Annuity for Excess Contributions

### VESTED RETIREMENT

- ♦ Must have five or more years of Allowable Service as a Special Officer Member, but less than 25 years
- ♦ Payability Date: The date the member would have reached 25 years if they had not discontinued service
- ♦ Vested Benefit: For each year of Allowable Service: 2.2% of Final Salary

### DISABILITY RETIREMENT

- ♦ Ordinary - must have 10 or more years of Credited Service; Accidental - no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary: 1.53% x Final Salary for each year after June 30, 1968; 1.20% x Final Salary for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - ♦ Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary/Beneficiaries
- ♦ Ordinary: lump sum of ITHP; plus lump sum of Accumulated Deductions; plus if less than 10 years of service - six months of Earnable Salary; 10 or more years - 12 months of Earnable Salary
- ♦ Accidental: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Death Gamble: The greater of the Ordinary Death Benefit or Total Reserve
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### SERVICE RETIREMENT

- ♦ Participants may retire with 20 or more years of Allowable Correction Service (ACS) regardless of age
- ♦ The Service Retirement Benefit is:
  - ♦ First 20 years of ACS: 50% of Final Salary, plus
  - ♦ For years other than the first 20 years of ACS: 1.67% of the Average Compensation, plus
  - ♦ A Pension for excess Increased-Take-Home-Pay (ITHP) and an Annuity for Excess Contributions, plus
  - ♦ 75% x 1.67% x Final Compensation x Credited Service on or after 9/30/51
  - ♦ 55% x 1.67% x Final Compensation x Credited Service prior to 10/1/51

### VESTED RETIREMENT

- ♦ Need at least five years but less than 20 years of ACS; payable when member would have reached 20 years of ACS
- ♦ The Vested Retirement Benefit is:
  - ♦ 2.5% x Final Salary x Years of ACS up to 20 years, plus
  - ♦ 75% x 1.67% x Final Compensation x Credited Service on or after 09/30/51, plus
  - ♦ 55% x 1.67% x Final Compensation x Credited Service prior to 10/1/51

### DISABILITY RETIREMENT

- ♦ Ordinary: If less than 10 years of ACS - 1/3 of Final Salary; more than 10 years, but less than 20 - 50% of Final Salary; more than 20 - 2.5% x Final Salary x Credited Service
- ♦ Accidental: 75% of Final Salary; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ♦ Heart Presumption: Diseases of the heart resulting in disability presumed accidental; accidental benefit payable
- ♦ HAT Presumption: HIV, tuberculosis or hepatitis resulting in disability presumed accidental; accidental benefit payable
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries(member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary: lump sum of ITHP; plus lump sum of Accumulated Deductions; plus if less than 10 years of service - six months of Earnable Salary; 10 or more years - 12 months of Earnable Salary
- ♦ Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- ♦ Heart Presumption: Diseases of the heart resulting in death presumed accidental; 50% of salary payable
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## TIER 1 RETIREMENT OPTIONS

### MAXIMUM RETIREMENT ALLOWANCE

If a member, upon retirement, does not elect one of the options below, their benefit will be paid as a Maximum Retirement Allowance payable in monthly installments throughout their life, with all payments ceasing at death.

### OPTION 1: UNMODIFIED AND MODIFIED INITIAL RESERVE

Option 1 provides the retiree with a reduced monthly lifetime allowance. If the retiree dies before their payments equal the total value of the initial reserve set aside to provide their benefits on the date of retirement, the balance is paid to the designated beneficiary/beneficiaries in either a lump-sum or monthly payments. More than one beneficiary may be named and the beneficiary/beneficiaries may be changed at any time.

### OPTION 2: 100% JOINT-AND-SURVIVOR

The retiree receives a reduced monthly lifetime allowance. When the retiree dies, the surviving beneficiary receives 100% of the reduced allowance for life. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect.

### OPTION 3: 50% JOINT-AND-SURVIVOR

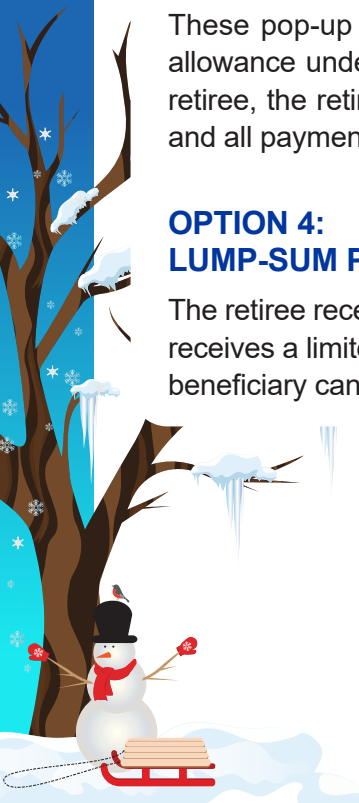
The retiree receives a reduced monthly lifetime allowance. When the retiree dies, the surviving beneficiary receives 50% of the reduced allowance for life. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect.

### OPTIONS 4-2 AND 4-3: POP-UP JOINT-AND-SURVIVOR OPTIONS

These pop-up options are variations of Options 2 and 3. The retiree receives a reduced monthly lifetime allowance under either a 100% or 50% joint-and-survivor arrangement, but if the beneficiary dies before the retiree, the retiree's benefit "pops-up," that is, it automatically becomes the Maximum Retirement Allowance, and all payments cease at death.

### OPTION 4: LUMP-SUM PAYMENT

The retiree receives a reduced monthly lifetime allowance with the provision that when they die, the beneficiary receives a limited lump-sum payment specified by the retiree at the time they chose this option. More than one beneficiary can be named, and the beneficiary/beneficiaries can be changed at any time.



#### **OPTION 4: CONTINUING BENEFIT**

The retiree receives a reduced monthly lifetime benefit with the provision that when they die, a percentage of the reduced monthly benefit or a specific dollar amount will continue to be paid to the beneficiary. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect.

#### **OPTION 4-4: CONTINUING BENEFIT WITH POP-UP**

The retiree receives a reduced monthly lifetime benefit with the provision that when they die, a percentage of the reduced monthly benefit or a specific dollar amount will continue to be paid to the beneficiary. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect. If the beneficiary predeceases the retiree, the retiree's benefit "pops up," that is, it automatically becomes the Maximum Retirement Allowance, and all payments cease at death.

#### **SPLIT OPTION**

Under certain circumstances, you may split your retirement allowance and receive payment of your Pension Reserve (City portion and ITHP) and your Annuity Reserve (your accumulated salary deductions) under different options. If you wish to elect a split option, NYCERS will supply you with figures and the necessary forms, upon request.

**NOTE:** A retiree may elect to receive any form of payment that is the actuarial equivalent of their Maximum Retirement Allowance, as certified by NYCERS' Chief Actuary and approved by the Board of Trustees.

## MODIFIED CAREER PENSION PLAN (PLAN C)

### SERVICE RETIREMENT

- ♦ Participants may retire at age 62, or 55 on a reduced basis, with 25 years of Career Pension Plan Qualifying Service
- ♦ The Service Retirement Benefit is:
  - ♦ 55% of Final Average Salary (FAS), plus  
For all years other than the first 25:
  - ♦ 1.7% x FAS x years after June 30, 1968, plus
  - ♦ 1.2% x FAS x years before July 1, 1968, plus
  - ♦ A Pension based on excess Increased-Take-Home-Pay (ITHP) and an Annuity based on Excess Contributions

### VESTED RETIREMENT

- ♦ No provision for Vesting. Plan C members must switch to Plan D to become eligible for a Vested Retirement Benefit (See Plan D on this page). However, all Tier 2 members with at least 10 years of Credited Service are eligible for the Death Benefit for Vested Members (see below).

### DISABILITY RETIREMENT

- ♦ Ordinary - must have 10 or more years of Credited Service
- ♦ Accidental – no minimum service requirement, but disability resulted from an accident sustained on-the-job
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary: 1.53% x FAS for each year after June 30, 1968; 1.20% x FAS for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - ♦ Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions. Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## MODIFIED INCREASED SERVICE FRACTION PLAN (PLAN D)

### SERVICE RETIREMENT

- ♦ Participants may retire at age 62, or 55 on a reduced basis, with five or more years of Credited Service
- ♦ The Service Retirement Benefit is:
  - ♦ 1.53% x Final Average Salary (FAS) x years of service after June 30, 1968, plus
  - ♦ 1.20% x FAS x years of service before July 1, 1968, plus
  - ♦ A Pension based on Increased-Take-Home-Pay (ITHP), plus
  - ♦ An Annuity based on Accumulated Deductions

### VESTED RETIREMENT

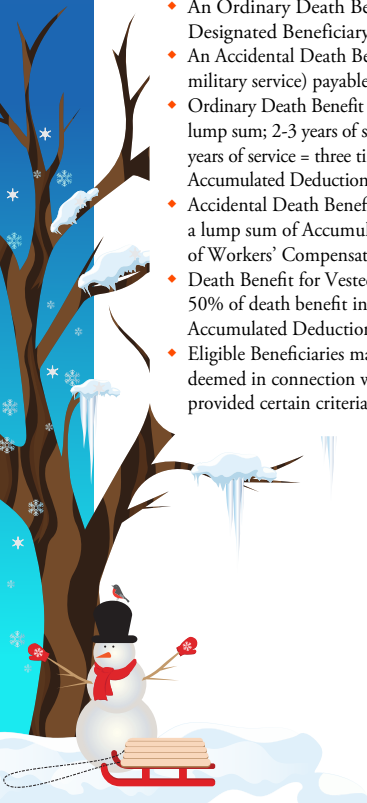
- ♦ Need a minimum of five years of Credited Service
- ♦ Payability Date: Age 62 on an unreduced basis or age 55 on a reduced basis
- ♦ Vested Retirement Benefit is the same as the Service Retirement Benefit

### DISABILITY RETIREMENT

- ♦ Ordinary - must have 10 or more years of Credited Service
- ♦ Accidental – no minimum service requirement, but disability resulted from an accident sustained on-the-job
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary: 1.53% x FAS for each year after June 30, 1968; 1.20% x FAS for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - ♦ Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions. Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## AGE 55 IMPROVED BENEFIT RETIREMENT PLAN (CPP-I)

## AGE 55 IMPROVED INCREASED SERVICE FRACTION PLAN (ISF-I)

### SERVICE RETIREMENT

- Participants may retire at age 55, or age 50 in a physically-taxing position, with 25 years of Career Pension Plan Qualifying Service
- The Service Retirement Benefit is:
  - First 25 years of Career Pension Plan Qualifying Service: 55% of Final Average Salary (FAS), plus
  - 1.7% x FAS x years of service after June 30, 1968, plus
  - 1.2% x FAS x years of service before July 1, 1968, plus
  - A Pension based on excess Increased-Take-Home-Pay (ITHP) and an Annuity based on Excess Contributions

### VESTED RETIREMENT

- No provision for Vesting. Plan CPP-I members must switch to Plan ISF-I to become eligible for a Vested Retirement Benefit (See Plan ISF-I on this page). However, all Tier 2 members with at least 10 years of Credited Service are eligible for the Death Benefit for Vested Members (see below).

### DISABILITY RETIREMENT

- Ordinary - must have 10 or more years of Credited Service
- Accidental – no minimum service requirement, but disability resulted from an accident sustained on-the-job
- Disability Retirement Benefit:
  - Ordinary: 1.53% x FAS for each year after June 30, 1968; 1.20% x FAS for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions (basic and employee portion of Additional Member Contributions). Retirees are eligible for a Post-Retirement Death Benefit
- Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions (basic and employee portion of Additional Member Contributions)
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### SERVICE RETIREMENT

- Participants may retire at age 55 with 25 or more years of Credited Service
- The Service Retirement Benefit is:
  - 1.53% x Final Average Salary (FAS) x years of service after June 30, 1968, plus
  - 1.20% x FAS x years of service before July 1, 1968, plus
  - A Pension based on Increased-Take-Home-Pay (ITHP), plus
  - An Annuity based on Accumulated Deductions

### VESTED RETIREMENT

- Need a minimum of five years of Credited Service
- Payability Date: Age 62 on an unreduced basis, or age 55 on a reduced basis
- Vested Retirement Benefit is the same as the Service Retirement Benefit

### DISABILITY RETIREMENT

- Ordinary - must have 10 or more years of Credited Service
- Accidental – No minimum service requirement, but disability resulted from an accident sustained on-the-job
- Disability Retirement Benefit:
  - Ordinary: 1.53% x FAS for each year after June 30, 1968; 1.20% x FAS for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions. Retirees are eligible for a Post-Retirement Death Benefit.
- Accidental: Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions.
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## MODIFIED 20-YEAR PLAN FOR CORRECTION OFFICERS (P-20)

### SERVICE RETIREMENT

- ♦ Participants may retire with an unreduced pension after completing 25 years of Allowable Correction Service (ACS):
- ♦ The Service Retirement Benefit is:
  - ♦ First 20 years of ACS: 50% of Final Average Salary (FAS), plus
  - ♦ Each year of ACS after 20: 1.67% x Average Compensation (or FAS if the comp period is less than three years) x the years of ACS in excess of 20, plus
  - ♦ Each year of Credited Service: 75% x 1.67% x Final Compensation x Credited Service, plus
  - ♦ Pension based on the excess Increased-Take-Home-Pay (ITHP), and an Annuity for excess contributions
  - ♦ Benefit limited to 30 years

### VESTED RETIREMENT

- ♦ Need at least five but less than 20 years of ACS; payable when member would have reached 20 years of ACS
- ♦ Vested Retirement Benefit is:
  - ♦ 2.5% x FAS x the years of ACS, plus
  - ♦ 75% x 1.67% x Final Compensation x Credited Service on or after 10/01/51

### DISABILITY RETIREMENT

- ♦ Ordinary: If less than 10 years of ACS - 1/3 of FAS; more than 10 years, but less than 20 - 50% of FAS; more than 20 - 2.5% x FAS x Credited Service
- ♦ Accidental: 75% of FAS; 1.67% x Average Compensation x years of ACS in excess of 20; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ♦ Heart Presumption: Diseases of the heart resulting in disability presumed accidental; accidental benefit payable
- ♦ HAT Presumption: HIV, tuberculosis or hepatitis resulting in disability presumed accidental; accidental benefit payable
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Designated Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit: Need more than 90 days of service; benefit equal to three times current salary in a lump sum, plus a return of Accumulated Deductions
- ♦ Accidental Death Benefit: A pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- ♦ Vested Members: With 10 or more years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions
- ♦ Heart Presumption: Diseases of the heart resulting in death presumed accidental; accidental benefit payable
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## MODIFIED ONE PERCENT RETIREMENT PLAN (1/100) TRANSIT ONLY

### SERVICE RETIREMENT

- ♦ Participants may retire at age 62 with an unreduced benefit or at age 55 with a reduced benefit, regardless of the amount of Credited Service attained
- ♦ The Service Retirement Benefit is:
  - ♦ For each year of Credited Service 1% of Final Compensation; plus
  - ♦ A Pension based on Increased-Take-Home-Pay (ITHP), plus
  - ♦ An Annuity based on Accumulated Member Contributions

### VESTED RETIREMENT

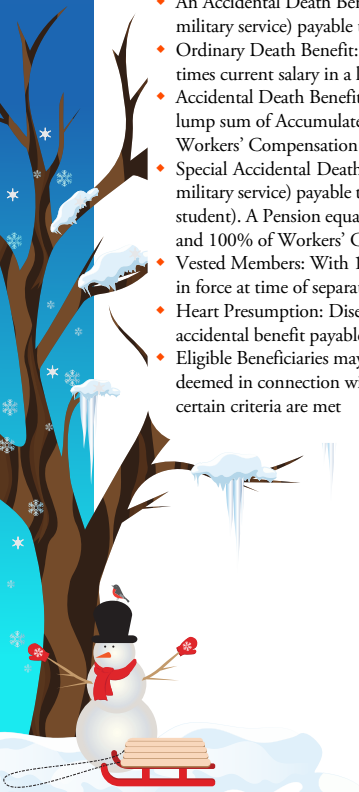
- ♦ No provision for vesting. However, all Tier 2 members with at least 10 years of Credited Service are eligible for the Death Benefit for Vested Members (see below).

### DISABILITY RETIREMENT

- ♦ Ordinary – must have 10 or more years of Membership Service; Accidental – no minimum service, but disability resulted from on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary: If age 62, benefit = Service Retirement Benefit
  - ♦ If less than age 62, benefit = 2 x 1/100 for each year of service that would have been completed upon reaching age 62 for eligibility for service retirement x Final Compensation, up to 25% of Final Compensation; or, if greater:
    - ♦ 2 x 1/100 for each year of actual service completed to date x Final Compensation
  - ♦ Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary: Need more than 90 days of service; benefit equal to three times current salary in a lump sum
- ♦ Accidental: Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of the death benefit in force at time of separation from service
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## MODIFIED TRANSIT 20-YEAR RETIREMENT PLAN (T-20)

### SERVICE RETIREMENT

- ◆ Participants may retire at age 55 with 25 or more years of Transit Operating Service (TOS) but may retire with a reduced benefit as early as age 50 with at least 20 years of TOS
- ◆ The Service Retirement Benefit is:
  - ◆ First 20 years of TOS: 50% of Final Average Salary (FAS), plus
  - ◆ Each year of TOS above 20: 1.5% x Final Compensation x years of TOS on or after 07/01/68, plus
  - ◆ Each year of other service: 1% x Final Compensation x years of other service
- ◆ The Reduced Service Retirement Benefit is:
  - ◆ 2% x FAS x Credited Service (exclusive of any benefit provided on account of member contributions)
- ◆ Members may switch to the Modified Age 55 1/100 Plan and retire with immediate payability (See Modified 1/100 Plan on previous page)

### VESTED RETIREMENT

- ◆ No provision for vesting. However, all Tier 2 members with at least 10 years of Credited Service are eligible for the Death Benefit for Vested Members (see below).

### DISABILITY RETIREMENT

- ◆ Ordinary: Must have 10 or more years of Credited Service
- ◆ Accidental: No minimum service but disability resulted from an on-the-job accident
- ◆ Ordinary: Less than age 55 and less than 25 years of TOS: 2.5% x Final Compensation x TOS up to 20 years; plus 1.5% x Final Compensation x TOS above 20 years rendered on or after 07/01/68; plus 1% x Final Compensation x all other service. If 25 or more years of TOS and age 55, benefit equals Service Retirement Benefit
- ◆ Accidental: Pension of 75% of Final Compensation; plus a pension based on the ITHP; plus an annuity based on any Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ◆ Members may file for benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ◆ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ◆ Ordinary: Need more than 90 days of service; benefit equal to three times current salary in a lump sum
- ◆ Accidental: Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ◆ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of the death benefit in force at time of separation from service
- ◆ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## 20-YEAR PLAN FOR CORRECTION MEMBERS BELOW THE RANK OF CAPTAIN (CI-20)

### SERVICE RETIREMENT

- ◆ Participants may retire with 20 or more years of Allowable Correction Service (ACS) regardless of age (Benefit limited to 30 years)
- ◆ The Service Retirement Benefit is:
  - ◆ First 20 years of ACS: 50% of Final Average Salary (FAS), plus
  - ◆ For years other than the first 20 years of ACS: 1.67% of the Average Compensation, plus
  - ◆ A Pension for excess Increased-Take-Home-Pay (ITHP) and an Annuity based on Excess Contributions, plus
  - ◆ 75% x 1.67% x Final Compensation for each year on or after 09/30/51
  - ◆ 55% x 1.67% x Final Compensation x Credited Service prior to 10/11/51
- ◆ Not eligible for service retirement with a deficit in Additional Member Contributions (AMCs)

### VESTED RETIREMENT

- ◆ Need at least five years but less than 20 years of ACS; benefit payable when member would have reached 20 years of ACS
- ◆ The Vested Retirement Benefit is:
  - ◆ 2.5% x FAS x years of ACS up to 20 years, plus
  - ◆ 75% x 1.67% x Final Compensation x Credited Service on or after 09/30/51, plus
  - ◆ 55% x 1.67% x Final Compensation x Credited Service prior to 10/11/51

### DISABILITY RETIREMENT

- ◆ Ordinary: If less than 10 years of ACS - 1/3 of FAS; more than 10 years, but less than 20 - 50% of FAS; more than 20 years - 2.5% x FAS x Credited Service
- ◆ Accidental: 75% of FAS; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ◆ Heart Presumption: Diseases of the heart resulting in disability presumed accidental; accidental benefit payable
- ◆ HAT Presumption: HIV, tuberculosis or hepatitis resulting in disability presumed accidental; accidental benefit payable
- ◆ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ◆ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ◆ Ordinary Death Benefit: Need more than 90 days of service; benefit equal to three times current salary in a lump sum, plus a return of Accumulated Deductions (basic and additional)
- ◆ Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions (basic and additional); plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ◆ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- ◆ Vested Members: With 10 or more years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions (basic and additional)
- ◆ Heart Presumption: Diseases of the heart resulting in death presumed accidental; accidental benefit payable
- ◆ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## 20-YEAR PLAN FOR CORRECTION MEMBERS ABOVE THE RANK OF CAPTAIN (CP-20)

## MODIFIED SANITATION 20-YEAR RETIREMENT PLAN (S-20)

### SERVICE RETIREMENT

- ◆ Participants may retire with 20 or more years of Allowable Correction Service (ACS) regardless of age
- ◆ The Service Retirement Benefit is:
  - ◆ First 20 years of ACS: 50% of Final Average Salary (FAS), plus
  - ◆ For years other than the first 20 years of ACS: 1.67% of the Average Compensation, plus
  - ◆ A Pension for excess Increased-Take-Home-Pay (ITHP) and an Annuity based on Excess Contribution, plus
  - ◆ 75% x 1.67% x Final Compensation for each year on or after 09/30/51
  - ◆ 55% x 1.67% x Final Compensation x Credited Service prior to 10/1/51
  - ◆ Benefit limited to 30 years

### VESTED RETIREMENT

- ◆ Need at least five years but less than 20 years of ACS; payable when member would have reached 20 years of ACS
- ◆ The Vested Retirement Benefit is:
  - ◆ 2.5% x FAS x Years of ACS up to 20 years, plus
  - ◆ 75% x 1.67% x Final Compensation x Credited Service on or after 09/30/51, plus
  - ◆ 55% x 1.67% x Final Compensation x Credited Service prior to 10/1/51

### DISABILITY RETIREMENT

- ◆ Ordinary: If less than 10 years of ACS - 1/3 of FAS; more than 10 years, but less than 20 - 50% of FAS; more than 20 years - 2.5% x FAS x Credited Service
- ◆ Accidental: 75% of FAS; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ◆ Heart Presumption: Diseases of the heart resulting in disability presumed accidental; accidental benefit payable
- ◆ HAT Presumption: HIV, tuberculosis or hepatitis resulting in disability presumed accidental; accidental benefit payable
- ◆ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ◆ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ◆ Ordinary Death Benefit: Need more than 90 days of service; benefit equal to three times current salary in a lump sum, plus a return of Accumulated Deductions (basic and additional)
- ◆ Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions (basic and additional); plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ◆ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- ◆ Vested Members: With 10 or more years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions (basic and additional)
- ◆ Heart Presumption: Diseases of the heart resulting in death presumed accidental; accidental benefit payable
- ◆ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### SERVICE RETIREMENT

- ◆ Participants may retire with 25 years of Allowable Sanitation Service or with a reduced benefit after 20 years
- ◆ The Service Retirement Benefit is:
  - ◆ First 20 years of Allowable Sanitation Service: 50% of Final Average Salary (FAS), plus
  - ◆ 1.5% x Final Compensation x Allowable Sanitation Service after first 20 years, plus
  - ◆ 1% x Final Compensation x all other service, plus
  - ◆ A Pension based on excess Increased Take-Home-Pay (ITHP) and an Annuity based on Excess Contributions
- ◆ The Reduced Service Retirement Benefit is:
  - ◆ Same as above, except employer portion of the benefit cannot exceed 2% x FAS x years of Credited Service

### VESTED RETIREMENT

- ◆ Need at least five, but less than 20 years of Allowable Sanitation Service; payable when member would have reached 20 years of such service
- ◆ 2.5% x FAS x each year of Allowable Sanitation Service; plus
- ◆ 1% x Final Compensation x each year of Credited Service

### DISABILITY RETIREMENT

- ◆ Ordinary: Need five or more years of Credited Service;
- ◆ Accidental: No minimum service, but disability resulted from an on-the-job accident
- ◆ Disability Retirement Benefit:
  - ◆ Ordinary: Less than 10 years of Allowable Sanitation Service: 1/3 of FAS; 10 - 20 years: 50% of FAS; more than 25 years: Benefit = Service Retirement Benefit
  - ◆ Accidental: 75% of FAS; plus ITHP; plus Accumulated Deductions, plus if more than 25 years of Allowable Sanitation Service, 1% x Average Compensation x years in excess of 20, plus .5% x Average Compensation x years of Allowable Sanitation Service in excess of 20
- ◆ Heart Presumption: Diseases of the heart resulting in disability presumed accidental; accidental benefit payable
- ◆ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ◆ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ◆ Ordinary: Need more than 90 days of service; benefit equal to three times current salary in a lump sum; plus Accumulated Deductions
- ◆ Accidental: Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ◆ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of the death benefit in force at time of separation from service, plus Accumulated Deductions
- ◆ Heart Presumption: Death due to heart ailment presumed accidental; accidental death benefit payable
- ◆ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## 20-YEAR RETIREMENT PLAN FOR UNIFORMED SANITATION MEMBERS (SI-20)

### SERVICE RETIREMENT

- Participants may retire with 20 or more years of Allowable Sanitation Service regardless of age
- The Service Retirement Benefit is:
  - First 20 years of Allowable Sanitation Service: 50% of Final Average Salary (FAS), plus
  - Other than the first 20 years of such service: 1.5% of Final Compensation, plus
  - For each year of all other Credited Service: 1% of Final Compensation, plus
  - A Pension based on excess Increased Take-Home-Pay (ITHP) and an Annuity for Excess Contributions
  - Benefit limited to 30 years
- Not eligible for service retirement with a deficit in Additional Member Contributions (AMCs)

### VESTED RETIREMENT

- Need at least five years but less than 20 years of Allowable Sanitation Service; benefit payable when member would have reached 20 years of such service
- The Vested Retirement Benefit is:
  - 2.5% x FAS x each year of Allowable Sanitation Service, plus
  - 1% x Final Compensation x each year of Credited Service

### DISABILITY RETIREMENT

- Ordinary - must have five or more years of Credited Service; Accidental –no minimum service, but disability resulted from an on-the-job accident
- Disability Retirement Benefit:
  - Ordinary: If 10 or more years of Allowable Sanitation Service – 50% of FAS; If less than 10 years – one-third of FAS; If eligible for service retirement, benefit = Service Retirement Benefit
  - Accidental: 75% of FAS; plus ITHP; plus Accumulated Deductions
- Heart Presumption: Diseases of the heart resulting in disability presumed accidental; accidental benefit payable
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary Death Benefit: Need more than 90 days of service; benefit equal to three times current salary in a lump sum, plus a return of Accumulated Deductions (basic and additional)
- Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions (basic and additional); plus a lump sum of ITHP
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions (basic and additional)
- Heart Presumption: Diseases of the heart resulting in death presumed accidental; accidental benefit payable
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## 20-YEAR, AGE-50 RETIREMENT PLAN FOR TBTA OFFICERS, SERGEANTS & LIEUTENANTS (2050I)

### SERVICE RETIREMENT

- Participants may retire with 20 or more years of Allowable Service at age 50
- The Service Retirement Benefit is:
  - For the first 20 years of Allowable Service: 50% of Final Average Salary (FAS), plus
  - For each additional year of Allowable Service (up to a maximum of 30 years): 1.5% x FAS
- Not eligible for service retirement with a deficit in Additional Member Contributions (AMCs).

### VESTED RETIREMENT

- No provision for vesting. However, all Tier 2 members with at least 10 years of Credited Service are eligible for the Death Benefit for Vested Members (see below).

### DISABILITY RETIREMENT

- Ordinary - must have 10 or more years of Credited Service; Accidental –no minimum service, but disability resulted from an on-the-job accident
- Disability Retirement Benefit:
  - Ordinary: 1.53% x FAS for each year after June 30, 1968; 1.20% x FAS for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; If eligible for service retirement, benefit = Service Retirement Benefit
  - Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions, basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit.
- Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions, basic and additional (if less than 15 years of service); plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions, basic and additional (if less than 15 years of service)
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## 25-YEAR RETIREMENT PLAN FOR DISTRICT ATTORNEY INVESTIGATORS (25IDA)

### SERVICE RETIREMENT

- ♦ Participants may retire with 25 or more years of Credited Service regardless of age
- ♦ The Service Retirement Benefit is:
  - ♦ For the first 25 years of Credited Service:  $55\% \times \text{Final Salary}$ , plus
  - ♦ For each additional year (up to a maximum of 32):  $1.70\% \times \text{Final Average Salary (FAS)}$
  - ♦ A Pension for excess Increased-Take-Home-Pay (ITHP) and an Annuity for Excess Contributions

### VESTED RETIREMENT

- ♦ Need at least 15, but less than 25 years of Credited Service
- ♦ Benefit payable when member could have completed 25 years of such service
- ♦ The Vested Retirement Benefit is:
  - ♦  $2.20\% \times \text{FAS} \times \text{each year of Credited Service}$

### DISABILITY RETIREMENT

- ♦ Ordinary - must have 10 or more years of Credited Service; Accidental – no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary:  $1.53\% \times \text{FAS}$  for each year after June 30, 1968;  $1.20\% \times \text{FAS}$  for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - ♦ Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions. Retirees are eligible for a Post-Retirement Death Benefit.
- ♦ Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions.
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## 20-YEAR RETIREMENT PLAN FOR DISTRICT ATTORNEY INVESTIGATORS (20IDA)

### SERVICE RETIREMENT

- ♦ Participants may retire with credit for 20 or more years of Allowable Service in a District Attorney's Office as an Investigator (Allowable IDA Service)
- ♦ The Service Retirement Benefit is:
  - ♦ For the first 20 years of Allowable IDA Service: 50% of Final Salary, plus
  - ♦ For each additional year of Allowable IDA Service: 1.67% of Average Compensation, plus
  - ♦  $75\% \times 1.67\% \times \text{Final Compensation} \times \text{Credited Service on or after September 30, 1951}$ , plus
  - ♦  $55\% \times 1.67\% \times \text{Final Compensation} \times \text{Credited Service prior to October 1, 1951}$
  - ♦ A Pension for excess Increased-Take-Home-Pay (ITHP) and an Annuity for Excess Contributions
  - ♦ Benefit limited to 32 years

### VESTED RETIREMENT

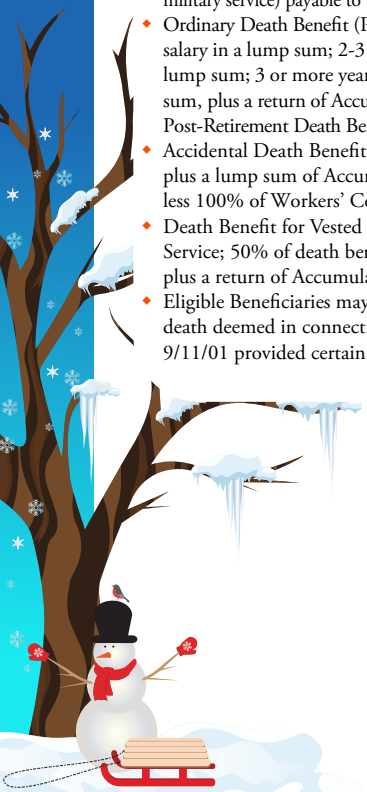
- ♦ Need at least five, but less than 20 years of Allowable IDA Service
- ♦ Benefit payable when member could have reached 20 years of such service
- ♦ Vested Retirement Benefit is: 2.5% of Final Salary for each year of Allowable IDA Service

### DISABILITY RETIREMENT

- ♦ Ordinary - must have 10 or more years of Credited Service; Accidental – no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary:  $1.53\% \times \text{FAS}$  for each year after June 30, 1968;  $1.20\% \times \text{FAS}$  for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - ♦ Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions. Retirees are eligible for a Post-Retirement Death Benefit.
- ♦ Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions; plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions.
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## 25-YEAR RETIREMENT PLAN FOR DISPATCHERS (DIS-I)

### SERVICE RETIREMENT

- ♦ Participants may retire with 25 or more years of Allowable Service as a Dispatcher Member
- ♦ The Service Retirement Benefit is:
  - ♦ An Annuity (the actuarial equivalent of contributions for the first 25 years of Allowable Service), plus
  - ♦ A Pension for Increased-Take-Home-Pay (ITHP) for the first 25 years, plus
  - ♦ A Pension, which when added to the Annuity and ITHP equals 50% of Final Average Salary (FAS), plus
  - ♦ 2% of FAS for each year beyond the first 25 years of Allowable Service (not to exceed five years)
  - ♦ A Pension for excess (ITHP) and an Annuity for Excess Contributions

### VESTED RETIREMENT

- ♦ No provision for vesting. However, all Tier 2 members with at least 10 years of Credited Service are eligible for the Death Benefit for Vested Members (see below).

### DISABILITY RETIREMENT

- ♦ Ordinary - must have 10 or more years of Credited Service; Accidental –no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary: 1.53% x FAS for each year after June 30, 1968; 1.20% x FAS for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - ♦ Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions, basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit.
- ♦ Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions, basic and additional (if less than 15 years of service); plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions, basic and additional (if less than 15 years of service).
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## 25-YEAR RETIREMENT PLAN FOR EMERGENCY MEDICAL TECHNICIANS (EMT-I)

### SERVICE RETIREMENT

- ♦ Participants may retire with 25 or more years of Allowable Service as an EMT Member
- ♦ The Service Retirement Benefit is:
  - ♦ An Annuity (the actuarial equivalent of contributions for the first 25 years of Allowable Service), plus
  - ♦ A Pension for Increased-Take-Home-Pay (ITHP) for the first 25 years, plus
  - ♦ A Pension, which when added to the Annuity and ITHP equals 50% of Final Average Salary (FAS), plus
  - ♦ 2% of FAS for each year beyond the first 25 years of Allowable Service (not to exceed five years)
  - ♦ A Pension for excess ITHP and an Annuity for Excess Contributions

### VESTED RETIREMENT

- ♦ No provision for vesting. However, all Tier 2 members with at least 10 years of Credited Service are eligible for the Death Benefit for Vested Members (see below).

### DISABILITY RETIREMENT

- ♦ Ordinary - must have 10 or more years of Credited Service; Accidental –no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary: 1.53% x FAS for each year after June 30, 1968; 1.20% x FAS for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - ♦ Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ♦ Heart Presumption: Diseases of the heart resulting in disability presumed line-of-duty; accidental benefit payable
- ♦ HAT Presumption: HIV, tuberculosis or hepatitis resulting in disability presumed line-of-duty; accidental benefit payable
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions, basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit.
- ♦ Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions, basic and additional (if less than 15 years of service); plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under 18 (or age 23 if student). A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- ♦ Heart Presumption: Diseases of the heart resulting in death presumed line-of-duty; accidental benefit payable
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions, basic and additional (if less than 15 years of service).
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## 25-YEAR RETIREMENT PLAN FOR NYC DEPUTY SHERIFFS (DSH-I)

### SERVICE RETIREMENT

- ♦ Participants may retire after having credit for 25 or more years of Credited Service regardless of age
- ♦ The Service Retirement Benefit is:
  - ♦ An Annuity (the actuarial equivalent of contributions for the first 25 years of Credited Service), plus
  - ♦ A Pension for Increased-Take-Home-Pay (ITHP) for the first 25 years, plus
  - ♦ A Pension, which when added to the Annuity and ITHP equals 55% of Final Average Salary (FAS), plus
  - ♦ 1.7% of FAS for each year beyond the first 25 years of Credited Service (not to exceed five years)
  - ♦ A Pension for excess ITHP and an Annuity for Excess Contributions

### VESTED RETIREMENT

- ♦ No provision for vesting. However, all Tier 2 members with at least 10 years of Credited Service are eligible for the Death Benefit for Vested Members (see below).

### DISABILITY RETIREMENT

- ♦ Ordinary - must have 10 or more years of Credited Service; Accidental –no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary: 1.53% x FAS for each year after June 30, 1968; 1.20% x FAS for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - ♦ Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions, basic and additional (if less than five years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions, basic and additional (if less than five years of service); plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions, basic and additional (if less than five years of service)
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## 25-YEAR/AGE-50 RETIREMENT PLAN FOR AUTOMOTIVE WORKERS (AUT-I)

### SERVICE RETIREMENT

- ♦ Participants with 25 or more years of Credited Service may retire at age 50
- ♦ The Service Retirement Benefit is:
  - ♦ An Annuity (the actuarial equivalent of contributions for the first 25 years of Credited Service), plus
  - ♦ A Pension for Increased-Take-Home-Pay (ITHP) for the first 25 years, plus
  - ♦ A Pension, which when added to the Annuity and ITHP equals 50% of Final Average Salary (FAS), plus
  - ♦ 2% of FAS for each year beyond the first 25 years of Credited Service (not to exceed five years)
  - ♦ A Pension for excess ITHP and an Annuity for Excess Contributions

### VESTED RETIREMENT

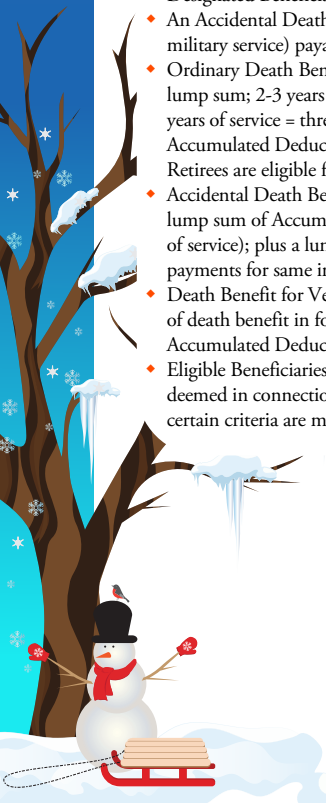
- ♦ No provision for vesting. However, all Tier 2 members with at least 10 years of Credited Service are eligible for the Death Benefit for Vested Members (see below).

### DISABILITY RETIREMENT

- ♦ Ordinary - must have 10 or more years of Credited Service; Accidental –no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary: 1.53% x FAS for each year after June 30, 1968; 1.20% x FAS for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - ♦ Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions, basic and additional (if less than five years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions, basic and additional (if less than five years of service); plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions, basic and additional (if less than five years of service)
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## 25-YEAR RETIREMENT PLAN FOR SPECIAL OFFICERS (SPO-I)

## 25-YEAR RETIREMENT PLAN FOR POLICE COMMUNICATION OPERATORS (911)

### SERVICE RETIREMENT

- ♦ Participants may retire with 25 or more years of Allowable Service as a Special Officer regardless of age
- ♦ The Service Retirement Benefit is:
  - ♦ An Annuity (the actuarial equivalent of contributions for the first 25 years of Allowable Service), plus
  - ♦ A Pension for Increased-Take-Home-Pay (ITHP) for the first 25 years, plus
  - ♦ A Pension, which when added to the Annuity and ITHP equals 50% of Final Average Salary (FAS), plus
  - ♦ 2% of FAS for each year beyond the first 25 years of Allowable Service (not to exceed five years)
  - ♦ A Pension for excess ITHP and an Annuity for Excess Contributions

### VESTED RETIREMENT

- ♦ No provision for vesting. However, all Tier 2 members with at least 10 years of Credited Service are eligible for the Death Benefit for Vested Members (see below).

### DISABILITY RETIREMENT

- ♦ Ordinary - must have 10 or more years of Credited Service; Accidental –no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary: 1.53% x FAS for each year after June 30, 1968; 1.20% x FAS for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - ♦ Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions, basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit.
- ♦ Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions, basic and additional (if less than 15 years of service); plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions, basic and additional (if less than 15 years of service)
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### SERVICE RETIREMENT

- ♦ Participants with 25 or more years of Credited Service may retire regardless of age
- ♦ The Service Retirement Benefit is:
  - ♦ An Annuity (the actuarial equivalent of contributions for the first 25 years of Credited Service), plus
  - ♦ A Pension for Increased-Take-Home-Pay (ITHP) for the first 25 years, plus
  - ♦ A Pension, which when added to the Annuity and ITHP equals 50% of Final Average Salary (FAS), plus
  - ♦ 2% of FAS for each year beyond the first 25 years of Credited Service (not to exceed five years)
  - ♦ A Pension for excess ITHP and an Annuity for Excess Contributions

### VESTED RETIREMENT

- ♦ No provision for vesting. However, all Tier 2 members with at least 10 years of Credited Service are eligible for the Death Benefit for Vested Members (see below).

### DISABILITY RETIREMENT

- ♦ Ordinary - must have 10 or more years of Credited Service; Accidental –no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary: 1.53% x FAS for each year after June 30, 1968; 1.20% x FAS for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - ♦ Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions, basic and additional (if less than five years of service). Retirees are eligible for a Post-Retirement Death Benefit.
- ♦ Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions, basic and additional (if less than five years of service); plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions, basic and additional (if less than five years of service)
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## TIER 2 RETIREMENT OPTIONS

### MAXIMUM RETIREMENT ALLOWANCE

If a member, upon retirement, does not elect one of the options listed below, their benefit will be paid as a Maximum Retirement Allowance payable in monthly installments throughout their life, with all payments ceasing at death.

### OPTION 1: RETURN OF ANNUITY RESERVE

Option 1 provides the retiree with a reduced monthly lifetime allowance. If the retiree dies before the Annuity portion of their payments equal the total value of the Annuity reserve set aside to pay their Annuity on the date of retirement, the balance is paid to the designated beneficiary in either a lump sum or monthly payments. Option 1 cannot be elected for the ITHP or Pension portions of the retirement allowance. More than one beneficiary may be named, and the beneficiary/beneficiaries may be changed at any time.

### OPTION 2: 100% JOINT-AND-SURVIVOR

The retiree receives a reduced monthly lifetime allowance. When the retiree dies, the surviving beneficiary receives 100% of the reduced monthly allowance for life. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect.

### OPTION 3: 50% JOINT-AND-SURVIVOR

The retiree receives a reduced monthly lifetime allowance. When the retiree dies, the surviving beneficiary receives 50% of the reduced monthly allowance for life. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect.

### OPTIONS 4-2 AND 4-3: POP-UP JOINT-AND-SURVIVOR OPTIONS

These options are variations of Options 2 and 3. The retiree receives a reduced monthly lifetime allowance under either a 100% or 50% joint-and-survivor arrangement, but if the beneficiary dies before the retiree, the retiree's benefit "pops-up," that is, it automatically becomes the Maximum Retirement Allowance, and all payments cease at death.

### OPTION 4: LUMP-SUM PAYMENT

The retiree receives a reduced monthly lifetime allowance. When the retiree dies, the surviving beneficiary/beneficiaries receives a limited lump-sum payment specified by the retiree at the time they chose this option. More than one beneficiary can be named, and the beneficiary/beneficiaries can be changed at any time.

### OPTION 4: CONTINUING BENEFIT

The retiree receives a reduced monthly lifetime benefit with the provision that when they die, a percentage of the reduced monthly benefit or a specific dollar amount will continue to be paid to the beneficiary. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect.



#### **OPTION 4-4: CONTINUING BENEFIT WITH POP-UP**

The retiree receives a reduced monthly lifetime benefit with the provision that when they die, a percentage of the reduced monthly benefit or a specific dollar amount will continue to be paid to the beneficiary. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect. If the beneficiary predeceases the retiree, the retiree's benefit "pops up," that is, it automatically becomes the Maximum Retirement Allowance, and all payments cease at death.

#### **OPTION 5: FIVE-YEAR CERTAIN**

The retiree receives a reduced monthly lifetime benefit. If the retiree dies within five years from the date of retirement having designated only one primary beneficiary, the reduced monthly retirement benefit will continue to be paid to the designated primary beneficiary for the unexpired balance of the five-year period. In the event of the death of the primary beneficiary after such beneficiary has begun to receive payment, the unexpended benefit will be paid in a lump sum to the contingent beneficiary or, if no contingent beneficiary exists, to the estate of the primary beneficiary.

If multiple primaries have been designated, the unexpended benefit will be paid in a lump sum, divided equally, to the surviving primary beneficiaries. In the event that all primary beneficiaries predecease the retiree, then upon the death of the retiree the unexpended benefit will be paid in a lump sum, divided equally, to the surviving contingent beneficiaries. If all beneficiaries predecease the retiree, the unexpended benefit will be paid in a lump sum to the retiree's estate. If the retiree dies later than five years following the effective retirement date, all retirement allowance payments will cease.

The retiree may change the beneficiary/beneficiaries any time within the five-year period.

#### **OPTION 6: TEN-YEAR CERTAIN**

The retiree receives a reduced monthly lifetime benefit. If the retiree dies within 10 years from the date of retirement having designated only one primary beneficiary, the reduced monthly retirement benefit will continue to be paid to the designated primary beneficiary for the unexpired balance of the 10-year period. In the event of the death of the primary beneficiary after such beneficiary has begun to receive payment, the unexpended benefit will be paid in a lump sum to the contingent beneficiary or, if no contingent beneficiary exists, to the estate of the primary beneficiary.

If multiple primaries have been designated, the unexpended benefit will be paid in a lump sum, divided equally, to the surviving primary beneficiaries. In the event that all primary beneficiaries predecease the retiree, then upon the death of the retiree the unexpended benefit will be paid in a lump sum, divided equally, to the surviving contingent beneficiaries. If all beneficiaries predecease the retiree, the unexpended benefit will be paid in a lump sum to the retiree's estate. If the retiree dies later than 10 years following the effective retirement date, all retirement allowance payments will cease.

The retiree may change the beneficiary/beneficiaries any time within the 10-year period.

#### **SPLIT OPTION**

Under certain circumstances, you may split your retirement allowance and receive payment of your Pension Reserve (City portion and ITHP) and your Annuity Reserve (your accumulated salary deductions) under different options. If you wish to elect a split option, NYCERS will supply you with figures and the necessary forms, upon request.

**NOTE:** A retiree may elect to receive any form of payment that is the actuarial equivalent of their Maximum Retirement Allowance, as certified by NYCERS' Chief Actuary and approved by the Board of Trustees.

## RETIREMENT PLAN FOR GENERAL MEMBERS

## UNIFORMED CORRECTION FORCE 25 - YEAR PLAN (CO-25)

### SERVICE RETIREMENT

- Participants may retire with an unreduced benefit at age 62 and as early as age 55, with a reduced benefit
- Service Retirement Benefit is:
  - Less than 20 years of Credited Service:  $1.67\% \times$  each year of Credited Service  $\times$  Final Average Salary (FAS)
  - 20 or more years of Credited Service:  $2\% \times$  each year of Credited Service  $\times$  FAS
- Benefit is reduced by 50% of the Primary Social Security Benefit (PSSB) beginning at age 62
- Post-retirement escalations depending on age at retirement

### VESTED RETIREMENT

- A member with five or more years of Credited Service at age 62 may receive an unreduced vested retirement benefit or the member may elect to receive a reduced benefit prior to age 62, as early as age 55
- Benefit calculation same as service retirement benefit calculation

### DISABILITY RETIREMENT

- May receive an Ordinary Disability Benefit (ODB) or Accidental Disability Benefit (ADB)
- ODB: If you have at least five years of service and deemed disabled by the Social Security Administration the ODB is equal to the greater of  $1/3$  of FAS or  $2\% \times$  Credited Service  $\times$  FAS (both are reduced by 50% of the PSSB & 100% of Workers' Compensation payments for any injury)
- ADB: Eligible if your disability is deemed to be the result of an accidental injury sustained in the performance of duty. The benefit is 60% of FAS minus 50% of the PSSB and 100% of Workers' Compensation payments for any injury
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum. A return of Basic Member Contributions included. Retirees are eligible for a Post-Retirement Death Benefit
- Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Accumulated Deductions
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service. A return of Basic Member Contributions included
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### SERVICE RETIREMENT

- Correction Officers appointed after July 27, 1976 can retire after 25 years of Credited Service without regard to age, and without a benefit reduction due to retirement prior to age 62
- The Service Retirement Benefit is 50% of Final Average Salary (FAS)

### VESTED RETIREMENT

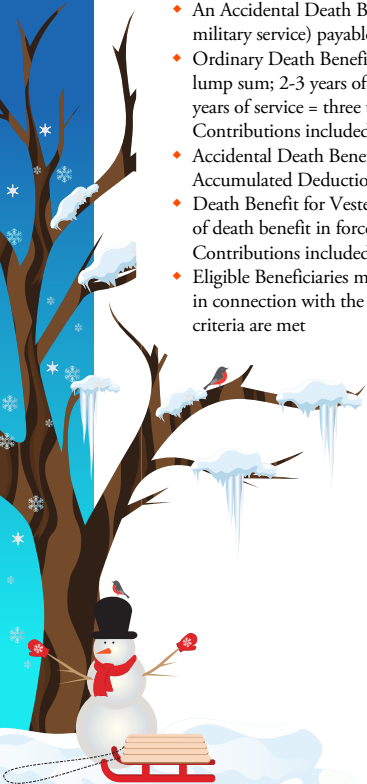
- There is no vesting provision with this plan; however, members may vest under the basic Tier 3 vesting provisions (See "Retirement Plan for General Members" on this page) and are eligible for the Death Benefit for Vested Members if they have 10 or more years of Credited Service (see below).

### DISABILITY RETIREMENT

- May receive an Ordinary Disability Benefit (ODB), special disability benefit, performance of duty disability benefit or Accidental Disability Benefit (ADB)
- ODB: See "Retirement Plan for General Members" on this page
- Dual Purpose Disability Benefit: Eligible with 10 or more years of Credited Service. If less than 10 years, may qualify if injury is due to an on-the-job accident  $\text{Benefit} = 1/3 \text{ of FAS or } 1.67\% \times \text{ each year of Credited Service } \times \text{ FAS}$  If eligible for service retirement,  $\text{benefit} = \text{Service Retirement Benefit}$
- Performance of Duty Disability Benefit: Eligible if your disability is deemed to be the result of an accidental injury sustained in the performance of duty, by an act of an inmate; 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- ADB: See "Retirement Plan for General Members" on this page
- Heart Presumption: Diseases of the heart resulting in disability presumed line-of-duty; 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- HAT Presumption: HIV, tuberculosis or hepatitis resulting in disability presumed line-of-duty; 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary Death Benefit: members with more than 90 days of service will receive a death benefit equal to three times current salary in a lump sum, plus a return of Basic Member Contributions
- Accidental Death Benefit: A Pension equal to 50% of salary payable
- Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Basic Member Contributions
- Heart Presumption: Diseases of the heart resulting in death presumed accidental; accidental benefit payable
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## UNIFORMED CORRECTION OFFICER 20 - YEAR RETIREMENT PLAN (CO-20)

## CORRECTION CAPTAIN 20 - YEAR RETIREMENT PLAN (CC-20)

### SERVICE RETIREMENT

- Participants may retire with 20 or more years of Credited Service or Allowable Correction Service (ACS) (type of service required depends on membership date), without regard to age
- The Service Retirement Benefit is:
  - For the first 20 years of Credited Service or ACS: 50% of FAS
  - For all years of Credited Service or ACS, other than the first 20 years of such service, 1.67% x years of service x FAS (not to exceed 30 years)
- Not eligible for service retirement with a deficit in Additional Member Contributions (AMCs)

### VESTED RETIREMENT

- Must have at least five years of Credited Service or ACS, but less than 20 years of such service
- Benefit payable on the earliest date the member could have retired with 20 years of Credited Service or ACS
- The Vested Retirement Benefit is: 2.5% x years of service x FAS
- Not eligible for vested retirement with a deficit in AMCs

### DISABILITY RETIREMENT

- May receive an Ordinary Disability Benefit (ODB), special disability benefit, performance of duty disability benefit or Accidental Disability Benefit (ADB)
- ODB: See "Retirement Plan for General Members" on page 48
- Dual Purpose Disability Benefit: Eligible with 10 or more years of Credited Service. If less than 10 years, may qualify if injury is due to an on-the-job accident. Benefit = 1/3 of FAS or 1.67% x each year of Credited Service x FAS. If eligible for service retirement, benefit = Service Retirement Benefit
- Performance of Duty Disability: Eligible if your disability is deemed to be the result of an injury sustained in the performance of duty by an act of an inmate; 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- ADB: See "Retirement Plan for General Members" on page 48
- Heart Presumption: Diseases of the heart resulting in disability presumed line-of-duty; 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- HAT Presumption: HIV, tuberculosis or hepatitis resulting in disability presumed line-of-duty; 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary Death Benefit: members with more than 90 days of service will receive a death benefit equal to three times current salary in a lump sum, plus a return of Accumulated Deductions, basic and additional
- Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions
- Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions, basic and additional
- Heart Presumption: Diseases of the heart resulting in death presumed accidental; accidental benefit payable
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### SERVICE RETIREMENT

- Participants may retire with 20 or more years of Credited Service or Allowable Correction Service (ACS) (type of service required depends on membership date), without regard to age
- The Service Retirement Benefit is:
  - For the first 20 years of Credited Service or ACS: 50% of FAS
  - For all years of Credited Service or ACS, other than the first 20 years of such service, 1.67% of FAS years of such service (not to exceed 30 years)

### VESTED RETIREMENT

- Must have at least five years of Credited Service or ACS, but less than 20 years of such service
- Benefit payable on the earliest date the member could have retired with 20 years of Credited Service or ACS
- The Vested Retirement Benefit is: 2.5% x years of service x FAS

### DISABILITY RETIREMENT

- May receive an Ordinary Disability Benefit (ODB), special disability benefit, performance of duty disability benefit or Accidental Disability Benefit (ADB)
- ODB: See "Retirement Plan for General Members" on page 48
- Dual Purpose Disability Benefit: Eligible with 10 or more years of Credited Service. If less than 10 years, may qualify if injury is due to an on-the-job accident. Benefit = 1/3 of FAS or 1.67% x each year of Credited Service x FAS. If eligible for service retirement, benefit = Service Retirement Benefit
- Performance of Duty Disability Benefit: Eligible if your disability is deemed to be the result of an injury sustained in the performance of duty by an act of an inmate; 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- ADB: See "Retirement Plan for General Members" on page 48
- Heart Presumption: Diseases of the heart resulting in disability presumed line-of-duty; 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- HAT Presumption: HIV, tuberculosis or hepatitis resulting in disability presumed line-of-duty; 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary Death Benefit: members with more than 90 days of service will receive a death benefit equal to three times current salary in a lump sum, plus a return of Accumulated Deductions, basic and additional
- Accidental Death Benefit: A pension equal to 50% of salary payable, plus a return of Additional Member Contributions
- Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions, basic and additional
- Heart Presumption: Diseases of the heart resulting in death presumed accidental; accidental benefit payable
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## UNIFORMED CORRECTION FORCE 20 - YEAR RETIREMENT PLAN (CF-20)

## DA INVESTIGATORS 22-YEAR RETIREMENT PLAN (DA-22)

### SERVICE RETIREMENT

- ◆ Participants may retire with 20 or more years of Allowable Correction Service (ACS), without regard to age
- ◆ The Service Retirement Benefit is:
  - ◆ For the first 20 years of ACS: 50% of Final Average Salary (FAS)
  - ◆ For all years of ACS other than the first 20 years of such service: 1.67 % of FAS x years of such service (not to exceed 30 years)

### VESTED RETIREMENT

- ◆ Must have at least five years of ACS, but less than 20 years of such service
- ◆ Benefit payable on the earliest date the member could have retired with 20 years of ACS
- ◆ The Vested Retirement Benefit is: 2.5% of FAS for each year of ACS

### DISABILITY RETIREMENT

- ◆ May receive an Ordinary Disability Benefit (ODB), special disability benefit, performance of duty disability benefit or Accidental Disability Benefit (ADB)
- ◆ ODB: See "Retirement Plan for General Members" on page 48
- ◆ Dual Purpose Disability Benefit: Eligible with 10 or more years of Credited Service. If less than 10 years, may qualify if injury is due to an on-the-job accident. Benefit = 1/3 of FAS or 1.67% x each year of Credited Service x FAS. If eligible for service retirement, benefit = Service Retirement Benefit.
- ◆ Performance of Duty Disability Benefit: Eligible if your disability is deemed to be the result of an injury sustained in the performance of duty by an act of an inmate; 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- ◆ ADB: See "Retirement Plan for General Members" on page 48
- ◆ Heart Presumption: Diseases of the heart resulting in disability presumed line-of-duty; 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- ◆ HAT Presumption: HIV, tuberculosis or hepatitis resulting in disability presumed line-of-duty; 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- ◆ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ◆ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ◆ Ordinary Death Benefit: members with more than 90 days of service will receive a death benefit equal to three times current salary in a lump sum, plus a return of Accumulated Deductions, basic and additional
- ◆ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions
- ◆ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- ◆ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions, basic and additional
- ◆ Heart Presumption: Diseases of the heart resulting in death presumed accidental; accidental benefit payable
- ◆ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### SERVICE RETIREMENT

- ◆ Participants may retire for service with 22 years of Credited Service regardless of age
- ◆ The Service Retirement Benefit is:
  - ◆ 50% of Final Average Salary (FAS), minus
  - ◆ 50% of Primary Social Security Benefit commencing at age 62
- ◆ Participants may retire with Early Service Retirement benefit with at least 20 years of Credited Service:
  - ◆ 2.1% x FAS x years of Credited Service at the completion of 20 years of Credited Service; plus
  - ◆ .33% x FAS x each month of service in excess of 20 years, but not more than 50% of FAS; minus
  - ◆ 50% of member's Primary Social Security Benefit commencing at age 62

### VESTED RETIREMENT

- ◆ Must have at least five years of Credited Service
- ◆ Payability Date: the date member would have attained 20 years of Credited Service
- ◆ The Vested Retirement Benefit is:
  - ◆ 2.1% x FAS x years of Credited Service; minus
  - ◆ 50% of member's Primary Social Security Benefit commencing at age 62
  - ◆ May elect to receive reduced vested benefit prior to date member would have attained 20 years of Credited Service but not earlier than age 55

### DISABILITY RETIREMENT

- ◆ Ordinary Disability: Must have at least five years of Credited Service and be considered disabled by Social Security Administration. Benefit equal to the greater of:
  - ◆ 1/3 of FAS or
  - ◆ 2% x FAS x Credited Service, if eligible for service retirement, not in excess of 22 years of such service, minus
  - ◆ 50% of Primary Social Security Disability Benefit and 100% of Workers' Compensation payments for any injury
- ◆ Accidental Disability: Disabled because of a natural or proximate result of an accident sustained on the job. Benefit is:
  - ◆ 50% of FAS, minus
  - ◆ 50% of Primary Social Security Disability Benefit or Primary Social Security Benefit, whichever begins first, and 100% of Workers' Compensation payments for any injury

### DEATH BENEFITS

- ◆ An Ordinary Death Benefit payable to the Designated Beneficiary/Beneficiaries if member was in City service for at least 90 days and in active service at time of death. Benefit is three times salary lump sum, plus a return of Accumulated Deductions
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law): A Pension equal to 50% of salary payable
- ◆ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service plus a return of Accumulated Deductions

### ESCALATION

- ◆ Escalation of Service Retirement, Vested Retirement, or Early Service Retirement benefit based on years of service and date of election of payment
- ◆ Escalation of Ordinary Disability benefits, Accidental Disability benefits, and Accidental Death benefits first day of the month following date retiree or beneficiary becomes eligible for benefit



## UNIFORMED CORRECTION FORCE 22-YEAR RETIREMENT PLAN (CF-22)

## UNIFORMED CORRECTION FORCE 22-YEAR ENHANCED DISABILITY RETIREMENT PLAN (CF-22E)

### SERVICE RETIREMENT

- ◆ Participants may retire for service with 22 years of Credited Service regardless of age
- ◆ The Service Retirement Benefit is:
  - ◆ 50% of Final Average Salary (FAS), minus
  - ◆ 50% of Primary Social Security Benefit commencing at age 62
- ◆ Participants may retire with Early Service Retirement benefit with at least 20 years of Credited Service:
  - ◆  $2.1\% \times \text{FAS} \times \text{years of Credited Service at the completion of 20 years of Credited Service}$ ; plus
  - ◆  $.33\% \times \text{FAS} \times \text{each month of service in excess of 20 years, but not more than 50\% of FAS}$ ; minus
  - ◆ 50% of member's Primary Social Security Benefit commencing at age 62

### VESTED RETIREMENT

- ◆ Must have at least five years of Credited Service
- ◆ Payability Date: the date member would have attained 20 years of Credited Service
- ◆ The Vested Retirement Benefit is:
  - ◆  $2.1\% \times \text{FAS} \times \text{years of Credited Service}$ ; minus
  - ◆ 50% of member's Primary Social Security Benefit commencing at age 62
- ◆ May elect to receive reduced vested benefit prior to date member would have attained 20 years of Credited Service but not earlier than age 55

### DISABILITY RETIREMENT

- ◆ Ordinary Disability: Must have at least five years of Credited Service and be considered disabled by Social Security Administration. Benefit equal to the greater of:
  - ◆ 1/3 of FAS or
  - ◆  $2\% \times \text{FAS} \times \text{years of Credited Service, if eligible for service retirement, not in excess of 22 years of such service, minus}$
  - ◆ 50% of Primary Social Security Disability Benefit and 100% of Workers' Compensation payments for any injury
- ◆ Accidental Disability: Disabled because of a natural or proximate result of an accident sustained on the job. Benefit is:
  - ◆ 50% of FAS, minus
  - ◆ 50% of Primary Social Security Disability Benefit or Primary Social Security Benefit, whichever begins first, and 100% of Workers' Compensation payments for any injury

### DEATH BENEFITS

- ◆ An Ordinary Death Benefit payable to Designated Beneficiary/Beneficiaries if member was in City service for at least 90 days and in active service at time of death. Benefit is three times salary (rounded to nearest thousand) lump sum, plus a return of Accumulated Deductions (plus 5% interest)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable annually to the Eligible Beneficiary/Beneficiaries (defined in law): A Pension equal to 50% of final average salary
- ◆ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of compensation earned in prior 12 months, minus Social Security benefits and 100% of Workers' Compensation payments
- ◆ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service plus a return of Accumulated Deductions

### ESCALATION and COLA

- ◆ Service Retirees and Vested Retirees who defer collection of their retirement benefit until their Full Escalation Date are eligible for Escalation
- ◆ Normal Service Retirees are eligible for the better of COLA or Escalation
- ◆ Early Service Retirees are eligible for COLA only (not Escalation)
- ◆ Disability retirees who have been retired for at least five years are eligible for Cost-of-Living Adjustment (COLA), not Escalation

### SERVICE RETIREMENT

- ◆ Participants may retire with Service Retirement benefit upon attaining 22 years of Credited Service regardless of age
- ◆ The Service Retirement Benefit is:
  - ◆ 50% of Final Average Salary (FAS), minus
  - ◆ 50% of Primary Social Security Benefit commencing at age 62
- ◆ Participants may retire with Early Service Retirement benefit after attaining at least 20 years of Credited Service
- ◆ The Early Service Retirement Benefit is:
  - ◆  $2.1\% \times \text{FAS} \times \text{years of Credited Service at the completion of 20 years of Credited Service}$ ; plus
  - ◆  $.33\% \times \text{FAS} \times \text{each month of service in excess of 20 years, but not more than 50\% of FAS}$ ; minus
  - ◆ 50% of member's Primary Social Security Benefit commencing at age 62

### VESTED RETIREMENT

- ◆ Must have at least five years of Credited Service
- ◆ Payability Date: the date member would have attained 20 years of Credited Service
- ◆ The Vested Retirement Benefit is:
  - ◆  $2.1\% \times \text{FAS} \times \text{years of Credited Service}$ ; minus
  - ◆ 50% of member's Primary Social Security Benefit commencing at age 62
- ◆ May elect to receive reduced vested benefit prior to date member would have attained 20 years of Credited Service, but not earlier than age 55

### ENHANCED DISABILITY RETIREMENT

- ◆ Ordinary Disability Benefit: Must have at least five years of Credited Service and be considered disabled by Social Security Administration. Benefit equal to the greater of:
  - ◆ 1/3 of FAS or
  - ◆  $2\% \times \text{FAS} \times \text{years of Credited Service, but not in excess of 22 years of such service}$
- ◆ Disability Retirement RSSL §507-a: Must have at least 10 years of Credited Service or disabled because of a natural or proximate result of an accident sustained on-the-job. Benefit equal to the greater of:
  - ◆ 1/3 of FAS or
  - ◆  $1.67\% \times \text{FAS} \times \text{years of Credited Service up to 22 years, or}$
  - ◆ If eligible to retire for service, the service retirement benefit
- ◆ Accidental Disability Benefit: Must be awarded Primary Social Security Disability Benefits or found to be disabled by NYCERS Medical Board, and the Board of Trustees determines the disability is the natural and proximate result of an accident sustained on-the-job. Benefit equal to:
  - ◆ 60% of FAS less
  - ◆ 50% of Primary Social Security Disability Benefit, if any, and 100% of any Workers' Compensation
- ◆ Heart Law: Certain diseases of the heart resulting in disability presumed line-of-duty. Benefit equal to 75% of FAS minus 100% of Workers' Compensation payments for same injury
- ◆ HAT Law: HIV, tuberculosis or hepatitis resulting in disability presumed line-of-duty. Benefit equal to 75% of FAS minus 100% of Workers' Compensation payments for same injury
- ◆ Act of an Inmate: Eligible for Accidental Disability benefit if disabled as a natural and proximate result of an act of an inmate. Benefit equal to 75% of FAS minus 100% of Workers' Compensation payments for same injury
- ◆ World Trade Center Law: Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met. Benefit equal to 75% of FAS minus 100% of Workers' Compensation payments for same injury

### DEATH BENEFITS

- ◆ An Ordinary Death Benefit payable to Designated Beneficiary/Beneficiaries if member was in City service for at least 90 days and in active service at time of death. Benefit is three times salary (rounded to nearest thousand) lump sum, plus a return of Accumulated Deductions (plus 5% interest)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable annually to the Eligible Beneficiary/Beneficiaries (defined in law): A Pension equal to 50% of final average salary
- ◆ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of compensation earned in prior 12 months, minus Social Security benefits and 100% of Workers' Compensation payments
- ◆ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service plus a return of Accumulated Deductions

### ESCALATION AND COLA

- ◆ Escalation of Service Retirement, Vested Retirement, or Early Service Retirement benefit based on years of service and date of election of payment
- ◆ Disability retirees who have been retired for at least five years are eligible for Cost-of-Living Adjustment (COLA), not escalation.

## UNIFORMED SANITATION FORCE 22-YEAR RETIREMENT PLAN (SA-22)

### SERVICE RETIREMENT

- ◆ Participants may retire for service with 22 years of Credited Service regardless of age
- ◆ The Service Retirement Benefit is:
  - ◆ 50% of Final Average Salary (FAS), minus
  - ◆ 50% of Primary Social Security Benefit commencing at age 62
- ◆ Participants may retire with Early Service Retirement benefit with at least 20 years of Credited Service:
  - ◆ 2.1% x FAS x years of Credited Service at the completion of 20 years of Credited Service; plus
  - ◆ .33% x FAS x each month of service in excess of 20 years, but not more than 50% of FAS; minus
  - ◆ 50% of member's Primary Social Security Benefit commencing at age 62

### VESTED RETIREMENT

- ◆ Must have at least five years of Credited Service
- ◆ Payability Date: the date member would have attained 20 years of Credited Service
- ◆ The Vested Retirement Benefit is:
  - ◆ 2.1% x FAS x years of Credited Service; minus
  - ◆ 50% of member's Primary Social Security Benefit commencing at age 62
- ◆ May elect to receive reduced vested benefit prior to date member would have attained 20 years of Credited Service but not earlier than age 55

### DISABILITY RETIREMENT

- ◆ Ordinary Disability: Must have at least five years of Credited Service and be considered disabled by Social Security Administration. Benefit equal to the greater of:
  - ◆ 1/3 of FAS or
  - ◆ 2% x FAS x Credited Service, if eligible for service retirement, not in excess of 22 years of such service, minus
  - ◆ 50% of Primary Social Security Disability Benefit
- ◆ Accidental Disability: Disabled because of a natural or proximate result of an accident sustained on the job. Benefit is:
  - ◆ 50% of FAS, minus
  - ◆ 50% of Primary Social Security Disability Benefit or Primary Social Security Benefit, whichever begins first

### DEATH BENEFITS

- ◆ An Ordinary Death Benefit payable to Designated Beneficiary/Beneficiaries if member was in City service for at least 90 days and in active service at time of death. Benefit is three times salary (rounded to nearest thousand) lump sum, plus a return of Accumulated Deductions (plus 5% interest)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable annually to the Eligible Beneficiary/Beneficiaries (defined in law): A Pension equal to 50% of final average salary
- ◆ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service plus a return of Accumulated Deductions
- ◆ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of compensation earned in prior 12 months, minus Social Security benefits and 100% of Workers' Compensation payments

### ESCALATION

- ◆ Service Retirees and Vested Retirees who defer collection of their retirement benefit until their Full Escalation Date are eligible for Escalation
- ◆ Normal Service Retirees are eligible for the better of COLA or Escalation
- ◆ Early Service Retirees are eligible for COLA, not escalation
- ◆ Disability retirees who have been retired for at least five years are eligible for an annual Cost-of-Living Adjustment (COLA), not escalation

## UNIFORMED SANITATION FORCE 22-YEAR ENHANCED DISABILITY RETIREMENT PLAN (SA-22E)

### SERVICE RETIREMENT

- ◆ Participants may retire with Service Retirement benefit upon attaining 22 years of Credited Service regardless of age
- ◆ The Service Retirement Benefit is:
  - ◆ 50% of Final Average Salary (FAS), minus
  - ◆ 50% of Primary Social Security Benefit commencing at age 62
- ◆ Participants may retire with Early Service Retirement benefit after attaining at least 20 years of Credited Service:
  - ◆ The Early Service Retirement Benefit is:
    - ◆ 2.1% x FAS x years of Credited Service at the completion of 20 years of Credited Service; plus
    - ◆ .33% x FAS x each month of service in excess of 20 years, but not more than 50% of FAS; minus
  - ◆ 50% of member's Primary Social Security Benefit commencing at age 62

### VESTED RETIREMENT

- ◆ Must have at least five years of Credited Service
- ◆ Payability Date: the date member would have attained 20 years of Credited Service
- ◆ The Vested Retirement Benefit is:
  - ◆ 2.1% x FAS x years of Credited Service; minus
  - ◆ 50% of member's Primary Social Security Benefit commencing at age 62
- ◆ May elect to receive reduced vested benefit prior to date member would have attained 20 years of Credited Service but not earlier than age 55

### ENHANCED DISABILITY RETIREMENT

- ◆ Ordinary Disability: Must have at least five years of Credited Service and be considered disabled by Social Security Administration. Benefit equal to the greater of:
  - ◆ 1/3 of FAS or
  - ◆ 2% x FAS x years of Credited Service, but not in excess of 22 years of such service
- ◆ Accidental Disability Benefit: Must be awarded Primary Social Security Disability Benefits or found to be disabled by NYCERS Medical Board, and Board of Trustees determines disability is the natural and proximate result of an accident sustained on-the-job. Benefit equal to 75% of FAS
- ◆ Heart Law: Certain diseases of the heart resulting in disability presumed line-of-duty. Benefit equal to 75% of FAS
- ◆ World Trade Center Law: Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met. Benefit equal to 75% of FAS

### DEATH BENEFITS

- ◆ An Ordinary Death Benefit payable to Designated Beneficiary/Beneficiaries if member was in City service for at least 90 days and in active service at time of death. Benefit is three times salary (rounded to nearest thousand) lump sum, plus a return of Accumulated Deductions (plus 5% interest)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable annually to the Eligible Beneficiary/Beneficiaries (defined in law): A Pension equal to 50% of final average salary
- ◆ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service plus a return of Accumulated Deductions
- ◆ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of compensation earned in prior 12 months, minus Social Security benefits and 100% of Workers' Compensation payments

### ESCALATION AND COLA

- ◆ Escalation of Service Retirement, Vested Retirement, or Early Service Retirement benefit based on years of service and date of election of payment
- ◆ Disability retirees who have been retired for at least five years are eligible for an annual Cost-of-Living Adjustment (COLA), not escalation



## TIER 3 RETIREMENT OPTIONS

### MAXIMUM RETIREMENT ALLOWANCE

If a member, upon retirement, does not elect one of the options listed below, their benefit will be paid as a Maximum Retirement Allowance, payable in monthly installments throughout their life, with all payments ceasing at death.

#### OPTION 1: 100% JOINT-AND-SURVIVOR

The retiree receives a reduced monthly lifetime benefit. When the retiree dies, the surviving beneficiary receives the same reduced monthly benefit for life. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect.

#### OPTION 2: OTHER JOINT-AND-SURVIVOR OPTIONS

The retiree receives a reduced monthly lifetime benefit. When the retiree dies, the surviving beneficiary receives a benefit of 90% or less (amount depends on the retiree's choice, in increments of not less than 10%) of the retiree's reduced monthly benefit for life. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect.

#### OPTION 3: FIVE-YEAR CERTAIN

The retiree receives a reduced monthly lifetime benefit. If the retiree dies within five years from the date of retirement having designated only one primary beneficiary, the reduced monthly retirement benefit will continue to be paid to the designated primary beneficiary for the unexpired balance of the five-year period. In the event of the death of the primary beneficiary after such beneficiary has begun to receive payment, the unexpended benefit will be paid in a lump sum to the contingent beneficiary or, if no contingent beneficiary exists, to the estate of the primary beneficiary.

If multiple primary beneficiaries have been designated, the unexpended benefit will be paid in a lump sum, divided equally, to the surviving primary beneficiaries. In the event that all primary beneficiaries predecease the retiree, then upon the death of the retiree the unexpended benefit will be paid in a lump sum, divided equally, to the surviving contingent beneficiaries. If all beneficiaries predecease the retiree, the unexpended benefit will be paid in a lump sum to the retiree's estate. If the retiree dies later than five years following the effective retirement date, all retirement allowance payments will cease. The retiree may change the beneficiary/beneficiaries any time within the five-year period.

#### OPTION 4: TEN-YEAR CERTAIN

The retiree receives a reduced monthly lifetime benefit. If the retiree dies within 10 years from the date of retirement having designated only one primary beneficiary, the reduced monthly retirement benefit will continue to be paid to the designated primary beneficiary for the unexpired balance of the 10-year period.



In the event of the death of the primary beneficiary after such beneficiary has begun to receive payment, the unexpended benefit will be paid in a lump sum to the contingent beneficiary or, if no contingent beneficiary exists, to the estate of the primary beneficiary.

If multiple primary beneficiaries have been designated, the unexpended benefit will be paid in a lump sum, divided equally, to the surviving primary beneficiaries. In the event that all primary beneficiaries predecease the retiree, then upon the death of the retiree the unexpended benefit will be paid in a lump sum, divided equally, to the surviving contingent beneficiaries. If all beneficiaries predecease the retiree, the unexpended benefit will be paid in a lump sum to the retiree's estate. If the retiree dies later than 10 years following the effective retirement date, all retirement allowance payments will cease.

The retiree may change the beneficiary/beneficiaries any time within the 10-year period.

**Members who retire on or after November 21, 1992 are eligible to elect Option 5, the *Pop-Up* Option.**

#### **OPTION 5: POP-UP OPTION**

The Pop-Up Option is a variation of a joint-and-survivor option. The retiree receives a reduced monthly lifetime benefit under a 100% or 50% joint-and-survivor option. If the beneficiary dies before the retiree, the retiree's benefit "pops-up," that is, it automatically becomes the Maximum Retirement Allowance, and all payments cease at death. The retiree cannot change the beneficiary/beneficiaries after the option election is in force.



## BASIC 62/5 RETIREMENT PLAN

## 55/25 RETIREMENT PLAN – CHAPTER 96 OF THE LAWS OF 1995

### SERVICE RETIREMENT

- ♦ Participants may retire at age 62 with five or more years of Credited Service
- ♦ Participants may retire as early as age 55 with a reduced benefit
- ♦ The Service Retirement Benefit is:
  - ♦ Less than 20 years of Credited Service: 1.67% x each year of Credited Service x Final Average Salary (FAS)
  - ♦ Between 20 and 30 years of Credited Service: 2% x each year of Credited Service x FAS
  - ♦ More than 30 years of Credited Service: 2% x each year for first 30 years of Credited Service x FAS, plus 1.5% x each year of Credited Service in excess of 30 years x FAS

### VESTED RETIREMENT

- ♦ Need a minimum of five years of Credited Service, two of which must be Membership Service
- ♦ Payability Date: Age 62
- ♦ Benefit calculation same as Service Retirement Benefit calculation for the 62/5 Plan

### DISABILITY RETIREMENT

- ♦ Eligibility: Must have 10 or more years of Credited Service, unless disability resulted from an accident sustained on-the-job
- ♦ Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS
- ♦ If eligible for Service Retirement, the benefit equals the Service Retirement Benefit if greater than above
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions. Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of salary payable
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### SERVICE RETIREMENT

- ♦ Participants may retire at age 55 with at least 25 years of Credited Service
- ♦ The Service Retirement Benefit is:
  - ♦ Between 25 and 30 years of Credited Service: 2% x each year of Credited Service x FAS
  - ♦ More than 30 years of Credited Service: 2% x each year for first 30 years of Credited Service x FAS, plus 1.5% x each year of Credited Service in excess of 30 years x FAS

### VESTED RETIREMENT

- ♦ There is no vesting provision under this plan; however, members always retain the right to vest under the basic 62/5 plan and are eligible for the Death Benefit for Vested Members if they have 10 or more years of Credited Service (see below)
- ♦ Benefit calculation same as Service Retirement Benefit calculation

### DISABILITY RETIREMENT

- ♦ Eligibility: Must have 10 or more years of Credited Service, unless disability resulted from an accident sustained on-the-job
- ♦ Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS
- ♦ If eligible for Service Retirement, the benefit equals the Service Retirement Benefit if greater than above
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions - basic and employee portion (50%) of Additional Member Contributions. Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of the employee portion (50%) of Additional Member Contributions
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions - basic and employee portion (50%) of Additional Member Contributions
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## 57/5 RETIREMENT PLAN – CHAPTER 96 OF THE LAWS OF 1995

## SANITATION 30-YEAR RETIREMENT PLAN (SA-30)

### SERVICE RETIREMENT

- Participants may retire at age 57 with five or more years of Credited Service
- The Service Retirement Benefit is:
  - Less than 20 years of Credited Service: 1.67% x each year of Credited Service x Final Average Salary (FAS)
  - Between 20 and 30 years of Credited Service: 2% x each year of Credited Service x FAS
  - More than 30 years of Credited Service: 2% x each year for first 30 years of Credited Service x FAS, plus 1.5% x each year of Credited Service in excess of 30 years x FAS

### VESTED RETIREMENT

- Need a minimum of five years of Credited Service, two of which must be Membership Service
- Payability Date: Age 57
- Benefit calculation same as Service Retirement Benefit calculation

### DISABILITY RETIREMENT

- Eligibility: Must have 10 or more years of Credited Service, unless disability resulted from an accident sustained on-the-job
- Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS
- If eligible for Service Retirement, the benefit equals the Service Retirement Benefit if greater than above
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions – basic and employee portion (50%) of Additional Member Contributions (AMCs). Retirees are eligible for a Post-Retirement Death Benefit
- Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of the employee portion (50%) of Additional Member Contributions
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions – basic and employee portion (50%) of Additional Member Contributions (AMCs)
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### SERVICE RETIREMENT

- Participants may retire at age 55 with 30 or more years of Credited Service
- The Service Retirement Benefit is:
  - With 30 years of Credited Service: 2% x each year of Credited Service x FAS
  - More than 30 years of Credited Service: 2% x each year for first 30 years of Credited Service x FAS, plus 1.5% x each year of Credited Service in excess of 30 years x FAS

### VESTED RETIREMENT

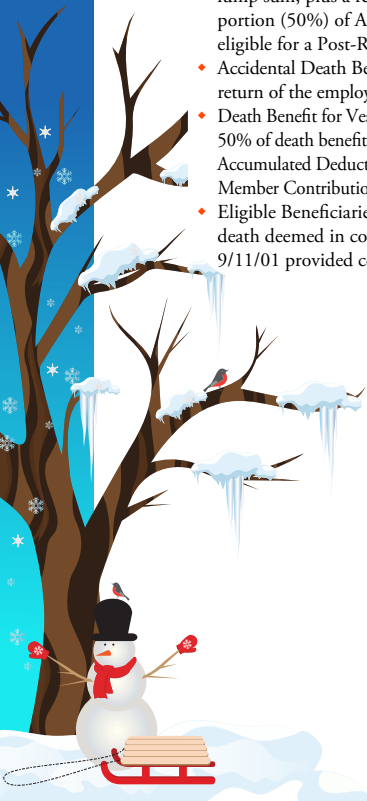
- Need a minimum of five years of Credited Service, two of which must be Membership Service
- Payability Date: Age 62
- Benefit calculation same as Service Retirement Benefit calculation in the Basic 62/5 Plan

### DISABILITY RETIREMENT

- Ordinary - must have 10 or more years of Credited Service, unless disability resulted from accident sustained on-the-job
- Accidental - no minimum service, but disability resulted from an on-the-job accident
- Ordinary: The greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS; If eligible for service retirement, the benefit equals the Service Retirement Benefit
- Accidental: 75% of FAS
- Heart Presumption: Heart ailment presumed accidental; member eligible for benefit of 75% of FAS
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary: Need more than 90 days of service; benefit equal to three times current salary in a lump sum, plus Accumulated Deductions
- Accidental Death Benefit: A Pension equal to 50% of salary payable
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of the death benefit in force at time of separation from service, plus Accumulated Deductions
- Heart Presumption: Death due to heart ailment presumed accidental; accidental death benefit payable
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## UNIFORMED SANITATION 20-YEAR RETIREMENT PLAN (SA-20)

### SERVICE RETIREMENT

- Participants may retire after 20 years of Allowable Sanitation Service, without regard to age
- The Service Retirement Benefit is:
  - For the first 20 years of Allowable Sanitation Service: 50% of Final Average Salary (FAS)
  - For all years of Allowable Sanitation Service in excess of the first 20: 1.5% of Final Compensation x years of such service; plus
  - For each year of Credited Service, other than Allowable Sanitation Service: 1% of Final Compensation
  - Benefit limited to 30 years
- Not eligible for service retirement with a deficit in Additional Member Contributions (AMCs)

### VESTED RETIREMENT

- Must have five or more years of Allowable Sanitation Service but less than 20
- Payability Date: The date the participant would have reached 20 years if they had not discontinued service
- Vested Benefit: For each year of Allowable Sanitation Service: 2.5% of FAS; plus, for each year of Credited Service other than Allowable Sanitation Service: 1% of Final Compensation
- Not eligible for vested retirement with a deficit in AMCs

### DISABILITY RETIREMENT

- Ordinary Disability: Must have 10 or more years of Credited Service; Benefit equals the greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS
- If eligible for Service Retirement, the benefit equals the Service Retirement Benefit if greater than above
- Accidental Disability: Disabled because of a natural or proximate result of an accident sustained on-the-job; benefit equal to 75% of FAS
- Heart Presumption: Heart ailment presumed accidental; member eligible for benefit of 75% of FAS
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary Death Benefit: Need at least 90 days of service; benefit equal to three times current salary in a lump sum, plus Accumulated Deductions - basic and additional
- Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus Accumulated Deductions - basic and additional
- Heart Presumption: Heart ailment presumed accidental; Accidental Death Benefit payable
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## TRANSIT 25 - YEAR / AGE - 55 RETIREMENT PLAN (T2555)

### SERVICE RETIREMENT

- Participants may retire at age 55 with credit for 25 or more years of Allowable Service in the Transit Authority
- The Service Retirement Benefit is:
  - For the first 25 years of Allowable Service in the Transit Authority, 50% of Final Average Salary (FAS), plus
  - For each additional year beyond the first 25 (up to 30 years of such service), 2% of FAS, plus
  - For each additional year in excess of 30 years of such service, 1.5% of FAS

### VESTED RETIREMENT

- A participant must have at least 25 years of Allowable Service and not have attained age 55; payable on their 55th birthday and calculated the same as the Service Retirement Benefit
- A participant with at least five years of Allowable or Credited Service, but less than 25, can vest under the Basic 62/5 Plan

### DISABILITY RETIREMENT

- Eligibility: Must have 10 or more years of Credited Service, unless disability resulted from an accident sustained on-the-job
- Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS
- If eligible for Service Retirement, the benefit equals the Service Retirement Benefit if greater than above
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions. Retirees are eligible for a Post-Retirement Death Benefit
- Accidental Death Benefit: A Pension equal to 50% of salary payable
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY 20 - YEAR / AGE - 50 RETIREMENT PLAN (TBTA-20/50)

## DISPATCHER 25 - YEAR RETIREMENT PLAN (DIS-25)

### SERVICE RETIREMENT

- ♦ Participants may retire with 20 or more years of Credited Service and as early as age 50
- ♦ The Service Retirement Benefit is:
  - ♦ 50% of Final Average Salary (FAS) for the first 20 years of Credited Service, plus
  - ♦ 1.5% of FAS for each year of Credited Service in excess of 20
  - ♦ Benefit limited to 30 years
- ♦ Not eligible for service retirement with a deficit in Additional Member Contributions (AMCs)

### VESTED RETIREMENT

- ♦ Must have at least five years but less than 20 years of Credited Service
- ♦ Payable on the earliest date the member could have retired for service
- ♦ 2.5% of FAS for each year of Credited Service
- ♦ Not eligible for vested retirement with a deficit in AMCs

### DISABILITY RETIREMENT

- ♦ Eligibility: Must have 10 or more years of Credited Service, unless disability resulted from an accident sustained on-the-job
- ♦ Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS
- ♦ If eligible for Service Retirement, the benefit equals the Service Retirement Benefit if greater than above
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions – basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than 15 years of service)
- ♦ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions – basic and additional (if less than 15 years of service)
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### SERVICE RETIREMENT

- ♦ Participants may retire for service with 25 or more years of Allowable Service as a Dispatcher Member, regardless of age
- ♦ The Service Retirement Benefit is:
  - ♦ 50% of Final Average Salary (FAS) for the first 25 years of Allowable Service, plus
  - ♦ 2% of FAS for each year of Allowable Service in excess of 25
  - ♦ Benefit limited to 30 years

### VESTED RETIREMENT

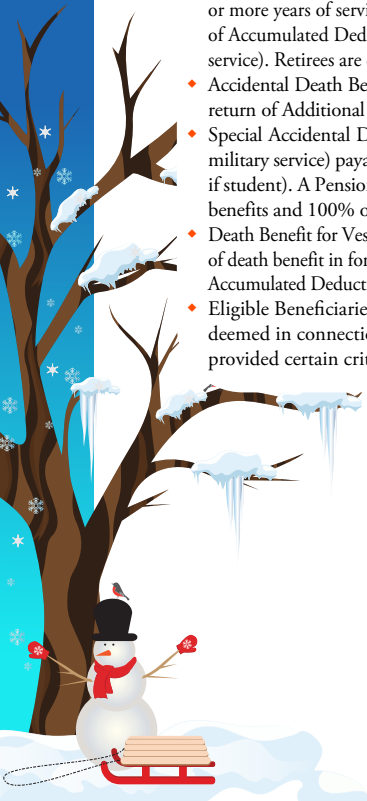
- ♦ Must have at least five years but less than 25 years of Allowable Service
- ♦ Payable on the date the member would have completed 25 years of Allowable Service
- ♦ 2% of FAS for each year of Allowable Service

### DISABILITY RETIREMENT

- ♦ Eligibility: Must have 10 or more years of Credited Service, unless disability resulted from an accident sustained on-the-job
- ♦ Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS
- ♦ If eligible for Service Retirement, the benefit equals the Service Retirement Benefit if greater than above
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions – basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than 15 years of service)
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions – basic and additional (if less than 15 years of service)
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## EMERGENCY MEDICAL TECHNICIAN 25-YEAR RETIREMENT PLAN (EMT-25)

## NYC DEPUTY SHERIFFS 25 - YEAR RETIREMENT PLAN (DSH-25)

### SERVICE RETIREMENT

- ♦ Participants may retire for service with 25 or more years of Allowable Service as an EMT Member, regardless of age
- ♦ The Service Retirement Benefit is:
  - ♦ 50% of Final Average Salary (FAS) for the first 25 years of Allowable Service, plus
  - ♦ 2% of FAS for each year of Allowable Service in excess of 25
  - ♦ Benefit limited to 30 years

### VESTED RETIREMENT

- ♦ Must have at least five years but less than 25 years of Allowable Service
- ♦ Payable on the date the member would have completed 25 years of Allowable Service
- ♦ 2% of FAS for each year of Allowable Service

### DISABILITY RETIREMENT

- ♦ Ordinary Disability: Must have 10 or more years of Credited Service; Benefit equals the greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS
- ♦ If eligible for Service Retirement, the benefit equals the Service Retirement Benefit if greater than above
- ♦ Line-of-Duty Disability: Disabled because of an injury sustained in the performance of duty; benefit equal to 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- ♦ Heart Presumption: Heart ailment presumed line-of-duty; benefit equals 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- ♦ HAT Presumption: HIV, tuberculosis or hepatitis resulting in disability presumed line-of-duty; benefit equals 75% of FAS payable minus 100% of Workers' Compensation payments for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions - basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than 15 years of service)
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions - basic and additional (if less than 15 years of service)
- ♦ Heart Presumption: Heart ailment presumed accidental; Accidental Death Benefit payable
- ♦ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 (or age 23 if student). A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### SERVICE RETIREMENT

- ♦ Participants may retire with 25 or more years of Credited Service, without regard to age
- ♦ The Service Retirement Benefit is:
  - ♦ For the first 25 years of Credited Service: 55% of Final Average Salary (FAS), plus
  - ♦ 1.7% of FAS for each year of Credited Service in excess of 25
  - ♦ Benefit limited to 30 years

### VESTED RETIREMENT

- ♦ Must have at least five, but less than 25 years of Credited Service
- ♦ Payable on the date the member would have completed 25 years of Credited Service
- ♦ 2.2% of FAS for each year of Credited Service

### DISABILITY RETIREMENT

- ♦ Ordinary Disability: Must have 10 or more years of Credited Service and are deemed physically or mentally incapacitated
- ♦ Ordinary Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS
- ♦ If eligible for Service Retirement, the benefit equals the Service Retirement Benefit if greater than above
- ♦ Accidental Disability: Disabled because of a natural or proximate result of an accident sustained on-the-job; benefit equal to 75% of Final Compensation, minus 100% of Workers' Compensation payments for same injury
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions - basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than 15 years of service)
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions - basic and additional (if less than 15 years of service)
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## AUTOMOTIVE SERVICE WORKERS 25 - YEAR / AGE - 50 RETIREMENT PLAN (AUT-25)

### SERVICE RETIREMENT

- ♦ Participants may retire for service with 25 or more years of Credited Service, at age 50
- ♦ The Service Retirement Benefit is:
  - ♦ 50% of Final Average Salary (FAS) for the first 25 years of Credited Service, plus
  - ♦ An additional 2% of FAS for each year in excess of 25
  - ♦ Benefit limited to 30 years

### VESTED RETIREMENT

- ♦ Must have at least five, but less than 25 years of Credited Service
- ♦ Payable on the date the member reaches at least age 50 AND would have completed 25 years of Credited Service
- ♦ 2% of FAS for each year of Credited Service

### DISABILITY RETIREMENT

- ♦ Eligibility: Must have 10 or more years of Credited Service, unless disability resulted from an accident sustained on-the-job
- ♦ Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS
- ♦ If eligible for Service Retirement, the benefit equals the Service Retirement Benefit if greater than above
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions - basic and additional (if less than five years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than five years of service)
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions - basic and additional (if less than five years of service)
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

## SPECIAL OFFICER 25 - YEAR RETIREMENT PLAN (SPO-25)

### SERVICE RETIREMENT

- ♦ Participants may retire for service with 25 or more years of Allowable Service as a Special Officer, regardless of age
- ♦ The Service Retirement Benefit is:
  - ♦ 50% of Final Average Salary (FAS) for the first 25 years of Allowable Service, plus
  - ♦ 2% of FAS for each year of Allowable Service in excess of 25
  - ♦ Benefit limited to 30 years

### VESTED RETIREMENT

- ♦ Must have at least five years, but less than 25 years of Allowable Service
- ♦ Payable on the date the member would have completed 25 years of Allowable Service
- ♦ 2% of FAS for each year of Allowable Service

### DISABILITY RETIREMENT

- ♦ Eligibility: Must have 10 or more years of Credited Service, unless disability resulted from an accident sustained on-the-job
- ♦ Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS
- ♦ If eligible for Service Retirement, the benefit equals the Service Retirement Benefit if greater than above
- ♦ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions - basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than 15 years of service)
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions - basic and additional (if less than 15 years of service)
- ♦ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## POLICE COMMUNICATIONS (911) TECHNICIANS 25-YEAR RETIREMENT PLAN (PCT 25)

### SERVICE RETIREMENT

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- ◆ Participants may retire for service with 25 or more years of Credited Service, regardless of age
- ◆ The Service Retirement Benefit is:
  - ◆ 50% of Final Average Salary (FAS) for the first 25 years of Credited Service, plus
  - ◆ 2% of FAS for each year of Credited Service in excess of 25
  - ◆ Benefit limited to 30 years

### VESTED RETIREMENT

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- ◆ Must have at least five years, but less than 25 years of Credited Service
- ◆ Payable on the date the member would have completed 25 years of Credited Service
- ◆ 2% of FAS for each year of Credited Service

### DISABILITY RETIREMENT

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- ◆ Eligibility: Must have 10 or more years of Credited Service, unless disability resulted from an accident sustained on-the-job
- ◆ Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS
- ◆ If eligible for Service Retirement, the benefit equals the Service Retirement Benefit if greater than above
- ◆ Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

### DEATH BENEFITS

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- ◆ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ◆ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum, plus a return of Accumulated Deductions - basic and additional (if less than five years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ◆ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than five years of service)
- ◆ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions - basic and additional (if less than five years of service)
- ◆ Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met



## TIER 4 RETIREMENT OPTIONS

### MAXIMUM RETIREMENT ALLOWANCE

If a member, upon retirement, does not elect one of the options listed below, their benefit will be paid as a Maximum Retirement Allowance payable in monthly installments throughout their life, with all payments ceasing at death.

#### OPTION 1: 100% JOINT-AND-SURVIVOR

The retiree receives a reduced monthly lifetime allowance. When the retiree dies, the surviving beneficiary receives the same reduced monthly allowance for life. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect.

#### OPTION 2: OTHER JOINT-AND-SURVIVOR OPTIONS

The retiree receives a reduced monthly lifetime allowance. When the retiree dies, the surviving beneficiary receives a lifetime benefit of 25%, 50% or 75% of the retiree's reduced monthly benefit, depending on the retiree's choice. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect.

#### OPTION 3: FIVE-YEAR CERTAIN

The retiree receives a reduced monthly lifetime benefit. If the retiree dies within five years from the date of retirement, the reduced monthly benefit will be paid to the surviving designated primary beneficiary for the unexpired balance of the five-year period. If the retiree's designated primary beneficiary predeceases the retiree, then upon the death of the retiree the balance of the payments due for the unexpired balance of the five-year period is paid in a lump sum to the retiree's contingent beneficiary or, if none exists, to the estate of the retiree. Should a designated primary beneficiary die after having started to receive payments and before the unexpired balance of the five-year period, the balance will be paid in a lump sum to the designated contingent beneficiary or, if none exists, to the estate of the primary beneficiary. The retiree may change the beneficiary/beneficiaries any time within the five-year period.

#### OPTION 4: TEN-YEAR CERTAIN

The retiree receives a reduced monthly lifetime benefit. If the retiree dies within 10 years from the date of retirement, the reduced monthly benefit will be paid to the surviving designated primary beneficiary for the unexpired balance of the 10-year period. If the retiree's designated primary beneficiary predeceases the retiree, then upon the death of the retiree the balance of the payments due for the unexpired balance of the 10-year period is paid in a lump sum to the retiree's contingent beneficiary or, if none exists, to the estate of the retiree. Should a designated primary beneficiary die after having started to receive payments and before the unexpired balance of the 10-year period, the balance will be paid in a lump sum to the designated contingent beneficiary or, if none exists, to the estate of the primary beneficiary. The retiree may change the beneficiary/beneficiaries any time within the 10-year period.

#### OPTION 5: POP-UP OPTION

The Pop-Up Option is a variation of a joint-and-survivor option. The retiree receives a reduced monthly lifetime benefit under a 100% or 50% joint-and-survivor option. If the beneficiary dies before the retiree, the retiree's benefit "pops-up," that is, it automatically becomes the Maximum Retirement Allowance, and all payments cease at death. The retiree cannot change the beneficiary/beneficiaries after the option election is in force.



## BASIC 63/5 RETIREMENT PLAN\*

\* 63/10 PLAN CHANGED TO 63/5 PLAN AS OF THE NEW LAW DATED 4/9/22

### SERVICE RETIREMENT

- Participants may retire at age 63 with five or more years of Credited Service
- Participants may retire as early as age 55 with a reduced benefit
- The Service Retirement is:
  - Less than 20 years of Credited Service:  $1.67\% \times \text{Final Average Salary (FAS)} \times \text{years of Credited Service}$
  - 20 or more years of Credited Service: 35% of FAS for the first 20 years of Credited Service, plus  $2\% \times \text{FAS} \times \text{each year of Credited Service in excess of 20}$

### VESTED RETIREMENT

- Need a minimum of five years of Credited Service, two of which must be Membership Service
- Payability Date: age 63
- Benefit calculation same as Service Retirement calculation for the 63/5 Plan

### DISABILITY RETIREMENT

- Must have 10 or more years of Credited Service unless disability resulted from an accident sustained on the job
- Disability Retirement Benefit: The greater of  $1/3$  of FAS or  $1.67\% \times \text{FAS} \times \text{years of service}$
- If eligible for Service Retirement, the benefit equals the Service Retirement if greater than above

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum; plus a return of Accumulated Deductions. Retirees are eligible for a Post-Retirement Death Benefit
- Accidental Death Benefit: A Pension equal to 50% of salary payable
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service plus return of Accumulated Deductions

## TRANSIT 25-YEAR/AGE 55 RETIREMENT PLAN (6TR-25)

### SERVICE RETIREMENT

- Participants may retire at age 55 with 25 or more years of Allowable Service in the Transit Authority
- The Service Retirement Benefit is:
  - $2\% \times \text{Final Average Salary (FAS)} \times \text{the number of years of Allowable Service, up to 30 years of such service, plus}$
  - $1.5\% \times \text{FAS} \times \text{the number of years of Allowable Service in excess of 30 years of such service}$

### VESTED RETIREMENT

- A Participant with at least 25 years of Allowable Service who has not yet attained the age of 55 is eligible for a Vested Retirement Benefit that becomes payable at age 63. The Vested Benefit payable is:
  - $2\% \times \text{Final Average Salary (FAS)} \times \text{the number of years of Allowable Service, up to 30 years of such service, plus}$
  - $1.5\% \times \text{FAS} \times \text{the number of years of Allowable Service in excess of 30 years of such service}$
- A Participant with at least five years of Credited Service (all service, at least two years of which are Membership Service) is entitled to a Vested Retirement Benefit that becomes payable at age 63. The Vested Benefit payable is:
  - For a participant with less than 20 years of Credited Service:  $1.67\% \times \text{FAS} \times \text{years of Credited Service}$
  - For a participant with more than 20 years of Credited Service: 35% of FAS for the first 20 years of Credited Service, plus  $2\% \times \text{FAS} \times \text{each year of Credited Service in excess of 20}$

### DISABILITY RETIREMENT

- Must have 10 or more years of Credited Service unless disability resulted from an accident sustained on the job
- Disability Retirement Benefit: The greater of  $1/3$  of FAS or  $1.67\% \times \text{FAS} \times \text{years of service}$
- If eligible for Service Retirement, the benefit equals the Service Retirement if greater than above

### DEATH BENEFITS

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum; plus a return of Accumulated Deductions. Retirees are eligible for a Post-Retirement Death Benefit
- Accidental Death Benefit: A Pension equal to 50% of salary payable
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service plus return of Accumulated Deductions

## TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY 20-YEAR/AGE 50 RETIREMENT PLAN (6TB-20)

### SERVICE RETIREMENT

- ♦ Participants may retire with 20 or more years of Credited Service and as early as age 50
- ♦ The Service Retirement Benefit is:
  - ♦ 50% of Final Average Salary (FAS) for the first 20 years of Credited Service, plus
  - ♦ 1.5% x FAS x the number of years of Credited Service in excess of 20, up to a maximum of 30 years
- ♦ Not eligible for service retirement with a deficit in Additional Member Contributions (AMCs)

### VESTED RETIREMENT

- ♦ Must have at least five, but less than 20 years of Credited Service
- ♦ Payability Date: age 63
- ♦ 2.5% x FAS x the number of years of Credited Service
- ♦ Not eligible for vested retirement with a deficit in AMCs

### DISABILITY RETIREMENT

- ♦ Must have 10 or more years of Credited Service, unless disability resulted from an accident sustained on the job
- ♦ Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x FAS x years of service
- ♦ If eligible for Service Retirement, the benefit equals the Service Retirement if greater than above

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum; plus a return of Accumulated Deductions -- basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than 15 years of service)
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation plus return of Accumulated Deductions -- basic and additional (if less than 15 years of service)
- ♦ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 or age 23 if student. A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury

## DISPATCHER 25-YEAR RETIREMENT PLAN (6DI-25)

### SERVICE RETIREMENT

- ♦ Participants may retire for service with 25 or more years of Allowable Service as a Dispatcher Member regardless of age
- ♦ The Service Retirement Benefit is:
  - ♦ 50% of Final Average Salary (FAS) for the first 25 years of Allowable Service, plus
  - ♦ 2% of FAS for each additional year of Allowable Service, up to a maximum of 30 years of such service

### VESTED RETIREMENT

- ♦ Must have at least five, but less than 25 years of Allowable Service
- ♦ Payability Date: age 63
- ♦ 2% x FAS x the number of years of Allowable Service

### DISABILITY RETIREMENT

- ♦ Must have 10 or more years of Credited Service unless disability resulted from an accident sustained on the job
- ♦ Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x FAS x years of service
- ♦ If eligible for Service Retirement, the benefit equals the Service Retirement if greater than above

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum; plus a return of Accumulated Deductions -- basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than 15 years of service)
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation plus return of Accumulated Deductions -- basic and additional (if less than 15 years of service)



## EMERGENCY MEDICAL TECHNICIAN 25-YEAR RETIREMENT PLAN (6EM-25)

## NYC DEPUTY SHERIFF 25-YEAR RETIREMENT PLAN (6DS-25)

### SERVICE RETIREMENT

- ♦ Participants may retire for service with 25 or more years of Allowable Service regardless of age
- ♦ The Service Retirement Benefit is:
  - ♦ 50% of Final Average Salary (FAS) for the first 25 years of Allowable Service, plus
  - ♦ 2% of FAS for each additional year of Allowable Service, up to a maximum of 30 years of such service

### VESTED RETIREMENT

- ♦ Must have at least five, but less than 25 years of Allowable Service
- ♦ Payability Date: age 63
- ♦ 2% x FAS x the number of years of Allowable Service

### DISABILITY RETIREMENT

- ♦ Ordinary Disability: Must have 10 or more years of Credited Service; benefit equals the greater of 1/3 of FAS or 1.67% x FAS x years of service
- ♦ If eligible for Service Retirement, the benefit equals the Service Retirement if greater than above
- ♦ Line-of-Duty Disability: Disabled because of an injury sustained in the performance of duty; benefit equal to 75% of FAS minus 100% of Workers' Compensation payments for same injury
- ♦ Heart Presumption: Heart ailment presumed line-of-duty; benefit equals 75% of FAS minus 100% of Workers' Compensation payments for same injury
- ♦ HAT Presumption: HIV, tuberculosis or hepatitis resulting in disability presumed line-of-duty; benefit equals 75% of FAS minus 100% of Workers' Compensation payments for same injury

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum; plus a return of Accumulated Deductions -- basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than 15 years of service)
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation plus return of Accumulated Deductions – basic and additional (if less than 15 years of service)
- ♦ Special Accidental Death Benefit (resulted from accident on-the-job or while in military service) payable to widow or widower or child under age 18 or age 23 if student. A Pension equal to 50% of salary payable, minus Social Security benefits and 100% of Workers' Compensation payments for same injury
- ♦ Heart Presumption: Heart ailment presumed accidental; Accidental and Special Accidental Death Benefits payable

### SERVICE RETIREMENT

- ♦ Participants may retire for service with 25 or more years of Credited Service regardless of age
- ♦ The Service Retirement Benefit is:
  - ♦ 55% of Final Average Salary (FAS) for the first 25 years of Credited Service, plus
  - ♦ 1.7% of FAS for each additional year of Credited Service, up to a maximum of 30 years of such service

### VESTED RETIREMENT

- ♦ Must have at least five, but less than 25 years of Credited Service
- ♦ Payability Date: age 63
- ♦ 2.2% x FAS x the number of years of Credited Service

### DISABILITY RETIREMENT

- ♦ Ordinary Disability: Must have 10 or more years of Credited Service; benefit equals the greater of 1/3 of FAS or 1.67% x FAS x years of service
- ♦ If eligible for Service Retirement, the benefit equals the Service Retirement if greater than above
- ♦ Accidental Disability: Disabled because of a natural or proximate result of an accident sustained on the job; benefit equal to 75% of Final Compensation minus 100% of Workers' Compensation payments for same injury

### DEATH BENEFITS

- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum; plus a return of Accumulated Deductions -- basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than 15 years of service)
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation plus return of Accumulated Deductions – basic and additional (if less than 15 years of service)

## AUTOMOTIVE MEMBER 25-YEAR/AGE 50 RETIREMENT PLAN (6AU-25)

### SERVICE RETIREMENT

- ◆ Participants may retire for service with 25 or more years of Credited Service at age 50 or older
- ◆ The Service Retirement Benefit is:
  - ◆ 50% of Final Average Salary (FAS) for the first 25 years of Credited Service, plus
  - ◆ 2% of FAS for each additional year of Credited Service, up to a maximum of 30 years of such service

### VESTED RETIREMENT

- ◆ Must have at least five, but less than 25 years of Credited Service
- ◆ Payability Date: age 63
- ◆ 2% x FAS x the number of years of Credited Service

### DISABILITY RETIREMENT

- ◆ Eligibility: Must have 10 or more years of Credited Service unless disability resulted from an accident sustained on the job
- ◆ Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x FAS x years of service
- ◆ If eligible for Service Retirement, the benefit equals the Service Retirement if greater than above

### DEATH BENEFITS

- ◆ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ◆ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum; plus a return of Accumulated Deductions -- basic and additional (if less than five years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ◆ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than five years of service)
- ◆ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation plus return of Accumulated Deductions -- basic and additional (if less than five years of service)

## SPECIAL PEACE OFFICER 25-YEAR RETIREMENT PLAN (6SO-25)

### SERVICE RETIREMENT

- ◆ Participants may retire for service with 25 or more years of Allowable Service as a Special Peace Officer regardless of age
- ◆ The Service Retirement Benefit is:
  - ◆ 50% of Final Average Salary (FAS) for the first 25 years of Allowable Service, plus
  - ◆ 2% of FAS for each additional year of Allowable Service, up to a maximum of 30 years of such service

### VESTED RETIREMENT

- ◆ Must have at least five, but less than 25 years of Allowable Service
- ◆ Payability Date: age 63
- ◆ 2% x FAS x the number of years of Allowable Service

### DISABILITY RETIREMENT

- ◆ Eligibility: Must have 10 or more years of Credited Service, unless disability resulted from an accident sustained on the job
- ◆ Disability Retirement Benefit: The greater of 1/3 of FAS or 1.67% x FAS x years of service
- ◆ If eligible for Service Retirement, the benefit equals the Service Retirement if greater than above

### DEATH BENEFITS

- ◆ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ◆ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum; plus a return of Accumulated Deductions -- basic and additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ◆ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than 15 years of service)
- ◆ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation plus return of Accumulated Deductions -- basic and additional (if less than 15 years of service)



## POLICE COMMUNICATIONS TECHNICIAN 25-YEAR RETIREMENT PLAN (6PC-25)

### SERVICE RETIREMENT

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- ♦ Participants may retire for service with 25 or more years of Credited Service regardless of age
- ♦ The Service Retirement Benefit is:
  - ♦ 50% of Final Average Salary (FAS) for the first 25 years of Credited Service, plus
  - ♦ 2% of FAS for each additional year (or fraction thereof) of Credited Service, up to a maximum of 30 years of such service

### VESTED RETIREMENT

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- ♦ Must have at least five, but less than 25 years of Credited Service
- ♦ Payability Date: age 63
- ♦  $2\% \times \text{FAS} \times \text{the number of years of Credited Service}$

### DISABILITY RETIREMENT

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- ♦ Eligibility: Must have 10 or more years of Credited Service, unless disability resulted from an accident sustained on the job
- ♦ Disability Retirement Benefit: The greater of  $\frac{1}{3}$  of FAS or  $1.67\% \times \text{FAS} \times \text{years of service}$
- ♦ If eligible for Service Retirement, the benefit equals the Service Retirement if greater than above

### DEATH BENEFITS

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- ♦ An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary/Beneficiaries (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary/Beneficiaries (defined in law)
- ♦ Ordinary Death Benefit (Plan 2): 1-2 years of service = one year's current salary in a lump sum; 2-3 years of service = two times current salary in a lump sum; 3 or more years of service = three times current salary in a lump sum; plus a return of Accumulated Deductions -- basic and additional (if less than five years of service). Retirees are eligible for a Post-Retirement Death Benefit
- ♦ Accidental Death Benefit: A Pension equal to 50% of salary payable, plus a return of Additional Member Contributions (if less than five years of service)
- ♦ Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation plus return of Accumulated Deductions -- basic and additional (if less than five years of service)

## TIER 6 RETIREMENT OPTIONS

### MAXIMUM RETIREMENT ALLOWANCE

If a member, upon retirement, does not elect one of the options listed below, their benefit will be paid as a Maximum Retirement Allowance payable in monthly installments throughout their life, with all payments ceasing at death.

#### OPTION 1: 100% JOINT-AND-SURVIVOR

The retiree receives a reduced monthly lifetime allowance. When the retiree dies, the surviving beneficiary receives the same reduced monthly allowance for life. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect.

#### OPTION 2: OTHER JOINT-AND-SURVIVOR OPTIONS

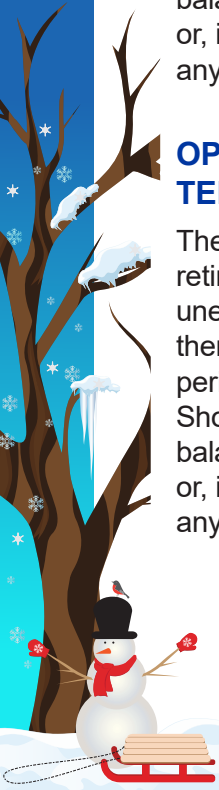
The retiree receives a reduced monthly lifetime allowance. When the retiree dies, the surviving beneficiary receives a lifetime benefit of 25%, 50% or 75% of the retiree's reduced monthly benefit, depending on the retiree's choice. Only one beneficiary may be named, and the beneficiary may not be changed once named and the option is in effect.

#### OPTION 3: FIVE-YEAR CERTAIN

The retiree receives a reduced monthly lifetime benefit. If the retiree dies within five years from the date of retirement, the reduced monthly benefit will be paid to the surviving designated primary beneficiary for the unexpired balance of the five-year period. If the retiree's designated primary beneficiary predeceases the retiree, then upon the death of the retiree the balance of the payments due for the unexpired balance of the five-year period is paid in a lump sum to the retiree's contingent beneficiary or, if none exists, to the estate of the retiree. Should a designated primary beneficiary die after having started to receive payments and before the unexpired balance of the five-year period, the balance will be paid in a lump sum to the designated contingent beneficiary or, if none exists, to the estate of the primary beneficiary. The retiree may change the beneficiary/beneficiaries any time within the five-year period.

#### OPTION 4: TEN-YEAR CERTAIN

The retiree receives a reduced monthly lifetime benefit. If the retiree dies within 10 years from the date of retirement, the reduced monthly benefit will be paid to the surviving designated primary beneficiary for the unexpired balance of the 10-year period. If the retiree's designated primary beneficiary predeceases the retiree, then upon the death of the retiree the balance of the payments due for the unexpired balance of the 10-year period is paid in a lump sum to the retiree's contingent beneficiary or, if none exists, to the estate of the retiree. Should a designated primary beneficiary die after having started to receive payments and before the unexpired balance of the 10-year period, the balance will be paid in a lump sum to the designated contingent beneficiary or, if none exists, to the estate of the primary beneficiary. The retiree may change the beneficiary/beneficiaries any time within the 10-year period.



## **OPTION 5: POP-UP OPTION**

The Pop-Up Option is a variation of a joint-and-survivor option. The retiree receives a reduced monthly lifetime benefit under a 100% or 50% joint-and-survivor option. If the beneficiary dies before the retiree, the retiree's benefit "pops-up," that is, it automatically becomes the Maximum Retirement Allowance, and all payments cease at death. The retiree cannot change the beneficiary/beneficiaries after the option election is in force.







# PART 2 FINANCIAL SECTION

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**REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS**

To the Board of Trustees of  
New York City Employees' Retirement System

**Opinion**

We have audited the combining financial statements of New York City Employees' Retirement System Qualified Pension Plan, Correction Officers' Variable Supplements Fund, Housing Police Officers' Variable Supplements Fund, Housing Police Superior Officers' Variable Supplements Fund, Transit Police Officers' Variable Supplements Fund, and Transit Police Superior Officers' Variable Supplements Fund, which collectively comprise the New York City Employees' Retirement System (the "System"), which comprise the combining statements of fiduciary net position as of June 30, 2022 and 2021 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 System's basic combining financial statements.

In our opinion, the accompanying combining financial statements present fairly, in all material respects, the combining fiduciary net position of the System as of June 30, 2022 and 2021, and the changes in the combining fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

**Basis for opinion**

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

**Responsibilities of management for the financial statements**

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

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Plan's 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.

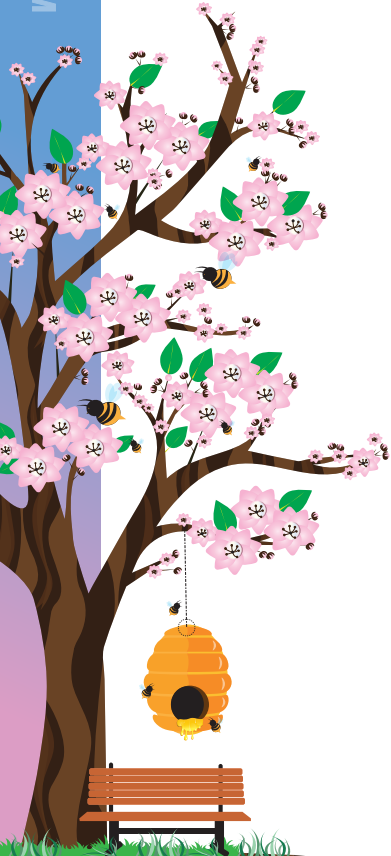
In performing an audit in accordance with US GAAS, we:

- 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 System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the combining financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

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

**Required supplementary information**

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule 1 - schedules of changes in the employer's net pension liability and related ratios for each of the nine years in the period ended June 30, 2022, schedule 2 - schedules of employer contributions for each of the ten years in the period ended June 30, 2022, and schedule 3 - schedule of investment returns for each of the nine years in the period ended June 30, 2022, 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, 2022, 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, 2022

(except for the Additional Supplementary Information and the Other information section of our report, as to which the date is December 16, 2022)

**New York City Employees' Retirement System**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)**

**June 30, 2022 and 2021**

The New York City Employees' Retirement System's ("NYCERS", the "Funds" or the "Plan") discussion and analysis provides an overview of the Funds' combining financial activities for the fiscal years ended June 30, 2022 and 2021. It is designed to assist the reader in understanding NYCERS' combining financial statements by providing a review of financial activities during fiscal years 2022 and 2021, the effects of any significant changes, and a comparison versus prior year activity. The discussion and analysis is intended to be read in conjunction with the Funds' combining financial statements.

NYCERS administers the New York City Employees' Retirement System Qualified Pension Plan (the "QPP"), Correction Officers' Variable Supplements Fund ("COVSF"), Housing Police Officers' Variable Supplements Fund ("HPOVSF"), Housing Police Superior Officers' Variable Supplements Fund ("HPSOVSF"), Transit Police Officers' Variable Supplements Fund ("TPOVSF"), and the Transit Police Superior Officers' Variable Supplements Fund ("TPSOVSF") (collectively, the "Funds" or the "Plan").

### **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 are prepared in accordance with Governmental Accounting Standards Board ("GASB") pronouncements and include the financial statements of each of the Funds, are:

- **The Combining Statements of Fiduciary Net Position** - present 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 expend 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** - present 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)** - as required by the GASB, includes the management discussion and analysis (this section) and information presented after the notes to combining financial statements.

## New York City Employees' Retirement System

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

June 30, 2022 and 2021

## FINANCIAL HIGHLIGHTS

The Funds' combined net position restricted for benefits decreased by \$8.6 billion (-9.8%) from \$87.1 billion at June 30, 2021 to \$78.5 billion at June 30, 2022. The decrease in combined net position was the result of weaker performance in the investment portfolio.

The Funds' combined net position restricted for benefits increased by \$16.9 billion (24.0%) from \$70.2 billion at June 30, 2020 to \$87.1 billion at June 30, 2021. The increase in combined net position was mainly due to favorable performance in the investment portfolio, primarily in equity securities.

Cash and cash equivalents balances totaled \$69 million at June 30, 2022. The Funds' practice is to fully invest its day-end cash balances in a pooled short-term investment fund. A typical benefit payment account would show an overdrawn balance, since funds only deposited as outstanding benefit checks are presented to the banks for payment each day. These overdrawn balances are the main component of accounts payable.

Receivables for investment securities sold amounted to \$1.5 billion as of June 30, 2022, a decrease of \$1.9 billion (-56.4%) from \$3.4 billion as of June 30, 2021, which was an increase of \$1.7 billion (94.4%) from \$1.7 billion as of June 30, 2020. Although trades typically do not settle until a few days after trade dates, sales of investment securities are reflected on trade dates. The resulting receivables are caused by timing differences between trade and settlement dates.

## Fiduciary Net Position

June 30, 2022, 2021, and 2020

(In thousands)

	2022	2021	2020
Cash and cash equivalents	\$ 69,284	\$ 128,748	\$ 85,110
Receivables for investment securities sold	1,461,381	3,353,658	1,725,083
Receivables for member loans	1,082,833	1,079,822	1,120,769
Receivables for accrued earnings	416,648	393,868	359,866
Investments, at fair value	78,005,742	88,091,585	70,449,702
Securities lending collateral	9,415,078	10,208,522	6,007,306
Other assets	268,255	125,193	137,428
Total assets	<u>90,719,221</u>	<u>103,381,396</u>	<u>79,885,264</u>
Accounts payable	142,448	142,625	126,822
Payable for investment securities purchased	2,147,080	5,494,894	3,091,164
Accrued benefits payable	420,039	451,975	413,284
Due to other retirement systems	2,311	1,785	1,052
Payables for securities lending transactions	9,415,078	10,208,522	6,007,306
Other liabilities	62,152	-	-
Total liabilities	<u>12,189,108</u>	<u>16,299,801</u>	<u>9,639,628</u>
Net position restricted for pensions	<u>\$ 78,530,113</u>	<u>\$ 87,081,595</u>	<u>\$ 70,245,636</u>

**New York City Employees' Retirement System****MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED****June 30, 2022 and 2021**

The receivables for member loans remained relatively level at \$1.08 billion for fiscal years 2022 and 2021.

The receivables for member loans decreased by \$41 million (-3.7%) from \$1.12 billion at June 30, 2020 to \$1.08 billion at June 30, 2021. The main reason for the decrease was that the amount of loans issued was lower than that of fiscal year 2020.

Fair value of investments, including securities lending collateral at June 30, 2022 was \$87.4 billion, a decrease of \$10.9 billion (-11.1%) from the June 30, 2021 investment value of \$98.3 billion. The decrease in fair value of investments was the result of weaker performance in the investment portfolio.

Fair value of investments, including securities lending collateral at June 30, 2021 was \$98.3 billion, an increase of \$21.8 billion (28.6%) from the June 30, 2020 investment value of \$76.5 billion. The increase in fair value of investments was driven by strong investment returns in the equity markets.

Other assets increased by \$143 million (114.3%) from \$125 million at June 30, 2021 to \$268 million at June 30, 2022. The increase was mainly due to recognition of right-of-use (ROU) asset upon adoption of GASB 87 in fiscal year 2022.

Other assets decreased by \$12 million (-8.9%) from \$137 million at June 30, 2020 to \$125 million at June 30, 2021. The decrease was mainly due to a reduction in the employer contribution receivables in fiscal year 2021.

Payables for investment securities purchased totaled \$2.1 billion as of June 30, 2022, a decrease of \$3.4 billion (-60.9%) from \$5.5 billion as of June 30, 2021. The decrease was due to timing differences between trade and settlement dates.

Payables for investment securities purchased totaled \$5.5 billion as of June 30, 2021, an increase of \$2.4 billion (77.8%) from \$3.1 billion as of June 30, 2020. The increase was due to the fact that the Board of Trustees approved an increase in the asset allocation for mortgages that was starting to be implemented, as well as timing differences.

Accrued benefits payable decreased by \$32 million (-7.1%) from \$452 million at June 30, 2021 to \$420 million at June 30, 2022. The decrease in payables was primarily due to a decreased number of death claims in fiscal year 2022.

Accrued benefits payable increased by \$39 million (9.4%) from \$413 million at June 30, 2020 to \$452 million at June 30, 2021. The increase in payables was primarily due to an increased number of death claims in fiscal year 2021.

Other liabilities was added as a new line item in the Statement of Fiduciary Net Position to recognize lease liability as a result of implementing GASB 87 in fiscal year 2022.



## New York City Employees' Retirement System

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

June 30, 2022 and 2021

## Changes in Fiduciary Net Position

Years Ended June 30, 2022, 2021, and 2020

(In thousands)

	2022	2021	2020
Additions:			
Member contributions	\$ 595,587	\$ 579,560	\$ 563,893
Employer contributions	3,831,464	3,761,532	3,727,558
Investment earnings:			
Interest and dividend income	1,984,635	1,814,598	1,866,537
Net (depreciation) appreciation in fair value of investments	(8,577,663)	16,741,619	766,682
Net securities lending income	26,903	20,644	22,164
Investment expenses	(349,217)	(313,226)	(245,667)
Net investment (loss) income	(6,915,342)	18,263,635	2,409,716
Other income	3,282	3,365	3,317
Total additions	(2,485,009)	22,608,092	6,704,484
Deductions:			
Benefit payments and withdrawals	5,950,439	5,679,049	5,312,446
Payments to other retirement systems	11,046	5,671	9,087
Administrative expenses	104,988	87,413	77,667
Total deductions	6,066,473	5,772,133	5,399,200
Net (decrease) increase in net position	(8,551,482)	16,835,959	1,305,284
Net position restricted for pensions:			
Beginning of year	87,081,595	70,245,636	68,940,352
End of year	\$ 78,530,113	\$ 87,081,595	\$ 70,245,636

Employer contributions remained relatively level at \$3.8 billion in fiscal year 2022, increasing by \$70 million (1.9%). The increase is due to the net result of gains and losses including the increase in the amortization payment for the initial unfunded liability.

Employer contributions for fiscal year 2021 were \$3.8 billion, a slight increase of \$34 million (0.9%) from \$3.7 billion for fiscal year 2020. The increase is primarily due to the net result of gains and losses including the increase in the amortization payment for the initial unfunded liability and decreases due to changes to the actuarial assumptions and methods.

Net investment loss for fiscal year 2022 totaled \$6.9 billion compared to net investment income of \$18.3 billion in fiscal year 2021. The decrease was the result of weaker performance in the investment portfolio.

Net investment income for fiscal year 2021 totaled \$18.3 billion compared to \$2.4 billion in fiscal year 2020. The increase was mainly due to favorable performance in the investment portfolio, primarily in equity securities.

**New York City Employees' Retirement System****MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED****June 30, 2022 and 2021**

Investment expenses for fiscal year 2022 were \$349 million, increasing by \$36 million (11.5%). The increase in fees was primarily due to growth in the public market sector and increased commitment to alternative investments.

Investment expenses for fiscal year 2021 were \$313 million, increasing by \$68 million (27.5%). The increase in fees was primarily due to an increase in fair value of investments.

Benefit payments and withdrawals for fiscal year 2022 totaled \$6 billion, a \$271 million (4.8%) increase from the \$5.7 billion of fiscal year 2021. The increase is due to the increasing number of retirees and their corresponding higher average retirement allowances.

Benefit payments and withdrawals for fiscal year 2021 totaled \$5.7 billion, a \$367 million (6.9%) increase from the \$5.3 billion of fiscal year 2020. The increase is due to the increasing number of retirees and their corresponding higher average retirement allowances.

Administrative expenses for fiscal year 2022 were \$105 million, an increase of \$18 million (20.1%) from \$87 million in fiscal year 2021. The increase was driven by higher costs associated with software licenses and consultant contractual services associated with the technology modernization efforts.

Administrative expenses for fiscal year 2021 were \$87 million, an increase of \$9 million (12.55%) from \$78 million in fiscal year 2020. The increase was driven by higher costs associated with software licenses and consultant contractual services associated with the technology modernization efforts.

## New York City Employees' Retirement System

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

June 30, 2022 and 2021

**Investments** - The table below summarizes the NYCERS investment allocation.

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

<u>Investments - at fair value:</u>	<u>QPP</u>	<u>COVSF</u>	<u>Combined</u>
Short-term investments:			
Commercial paper	\$ 407,689	\$ -	\$ 407,689
Discount notes	179,281	-	179,281
Short-term investment fund	679,921	1,030,744	1,710,665
U.S. Treasury bills and agencies	398,729	-	398,729
Debt (fixed income) securities:			
Bank loans	106,294	-	106,294
Corporate and other	9,021,309	-	9,021,309
Mortgage debt securities	4,526,662	-	4,526,662
Treasury inflation-protected securities	2,921,007	-	2,921,007
U.S. government and agency	7,139,037	-	7,139,037
Equity securities:			
Domestic equity	21,370,604	-	21,370,604
International equity	11,520,947	-	11,520,947
Collective trust funds:			
Bank loans	1,064	-	1,064
Domestic equity	1,084	-	1,084
Mortgage debt securities	430,725	-	430,725
Opportunistic fixed income	236,247	-	236,247
Alternative investments:			
Infrastructure	1,426,385	-	1,426,385
Opportunistic fixed income	2,949,143	-	2,949,143
Private equity	7,985,627	-	7,985,627
Private real estate	5,672,114	-	5,672,114
Hedge fund	1,129	-	1,129
Collateral from securities lending	9,415,078	-	9,415,078
<b>Total</b>	<b>\$ 86,390,076</b>	<b>\$ 1,030,744</b>	<b>\$ 87,420,820</b>

**INVESTMENT PERFORMANCE**

Total portfolio performance (net of fees) for fiscal year 2022 was -8.39%, more than NYCERS' Policy benchmark, which had a rate of return of -8.70%. Domestic equities returned -13.64%, more than the Russell 3000 benchmark of -13.87%. International equity (non-U.S. equities) holdings returned -25.51%, less than the World EX USA Custom benchmark of -17.73%. International equity (emerging markets) holdings returned -27.39%, less than the NYCERS Custom EM Index benchmark of -25.28%. Fixed income securities returned -8.25%.



## New York City Employees' Retirement System

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

June 30, 2022 and 2021

## Investment Summary

June 30, 2021

(In thousands)

Investments - at fair value:	QPP	COVSF	Combined
Short-term investments:			
Commercial paper	\$ 999,092	\$ -	\$ 999,092
Short-term investment fund	812,966	297,230	1,110,196
U.S. Treasury bills and agencies	1,170,661	-	1,170,661
Debt (fixed income) securities:			
Bank loans	133,414	-	133,414
Corporate and other	10,401,407	-	10,401,407
Mortgage debt securities	5,549,015	-	5,549,015
Treasury inflation-protected securities	3,038,225	-	3,038,225
U.S. government and agency	8,274,897	-	8,274,897
Equity securities:			
Domestic equity	27,082,830	-	27,082,830
International equity	15,206,157	-	15,206,157
Collective trust funds:			
Bank loans	1,104	-	1,104
Domestic equity	1,181	-	1,181
Mortgage debt securities	482,694	-	482,694
Opportunistic fixed income	257,436	-	257,436
Alternative investments:			
Infrastructure	996,689	-	996,689
Opportunistic fixed income	2,603,942	-	2,603,942
Private equity	6,421,827	-	6,421,827
Private real estate	4,359,578	-	4,359,578
Hedge fund	1,240	-	1,240
Collateral from securities lending	10,208,522	-	10,208,522
Total	\$ 98,002,877	\$ 297,230	\$ 98,300,107

## INVESTMENT PERFORMANCE

Total portfolio performance (net of fees) for fiscal year 2021 was 26.63%, more than NYCERS' Policy benchmark, which had a rate of return of 26.34%. Domestic equities returned 45.14%, more than the Russell 3000 benchmark of 44.16%. International equity (non-U.S. equities) holdings returned 39.97%, more than the World EX USA Custom benchmark of 34.82%. International equity (emerging markets) holdings returned 51.24%, more than the NYCERS Custom EM Index benchmark of 49.44%. Fixed income securities returned 5.26%.

## CONTACT INFORMATION

This financial report is designed to provide a general overview of the New York City Employees' Retirement System's finances. Questions concerning any data provided in this report or requests for additional information should be directed to Chun Gong, Acting Director of Finance, New York City Employees' Retirement System, 335 Adams Street, Suite 2300, Brooklyn, New York 11201-3751.

## New York City Employees' Retirement System

## COMBINING STATEMENT OF FIDUCIARY NET POSITION

June 30, 2022  
(In thousands)

	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	Eliminations	Total
<b>ASSETS</b>								
Cash and cash equivalents	\$ 66,460	\$ 1,645	\$ 281	\$ 253	\$ 303	\$ 342	\$ -	\$ 69,284
Receivables:								
Investments securities sold	1,461,381	-	-	-	-	-	-	1,461,381
Member loans (Note 7)	1,082,833	-	-	-	-	-	-	1,082,833
Accrued interest and dividends	415,637	1,011	-	-	-	-	-	416,648
Receivables from QPP to:								
VSFs (HPO, HPSO, TPO, TPSO)	-	-	517	889	1,297	957	(3,660)	-
COVSF	-	93,000	-	-	-	-	(93,000)	-
Total receivables	2,959,851	94,011	517	889	1,297	957	(96,660)	2,960,862
Investments - at fair value (Notes 2 and 3):								
Short-term investments:								
Commercial paper	407,689	-	-	-	-	-	-	407,689
Discount notes	179,281	-	-	-	-	-	-	179,281
Short-term investment fund	679,921	1,030,744	-	-	-	-	-	1,710,665
U.S. Treasury bills and agencies	398,729	-	-	-	-	-	-	398,729
Debt (fixed income) securities:								
Bank loans	106,294	-	-	-	-	-	-	106,294
Corporate and other	9,021,309	-	-	-	-	-	-	9,021,309
Mortgage debt securities	4,526,662	-	-	-	-	-	-	4,526,662
Treasury inflation-protected securities	2,921,007	-	-	-	-	-	-	2,921,007
U.S. government and agency	7,139,037	-	-	-	-	-	-	7,139,037
Equity securities:								
Domestic equity	21,370,604	-	-	-	-	-	-	21,370,604
International equity	11,520,947	-	-	-	-	-	-	11,520,947
Collective trust funds:								
Bank loans	1,064	-	-	-	-	-	-	1,064
Domestic equity	1,084	-	-	-	-	-	-	1,084
Mortgage debt securities	430,725	-	-	-	-	-	-	430,725
Opportunistic fixed income	236,247	-	-	-	-	-	-	236,247
Alternative investments:								
Infrastructure	1,426,385	-	-	-	-	-	-	1,426,385
Opportunistic fixed income	2,949,143	-	-	-	-	-	-	2,949,143
Private equity	7,985,627	-	-	-	-	-	-	7,985,627
Private real estate	5,672,114	-	-	-	-	-	-	5,672,114
Hedge fund	1,129	-	-	-	-	-	-	1,129
Collateral from securities lending	9,415,078	-	-	-	-	-	-	9,415,078
Total investments	86,390,076	1,030,744	-	-	-	-	-	87,420,820
Other assets	268,255	-	-	-	-	-	-	268,255
Total assets	89,684,642	1,126,400	798	1,142	1,600	1,299	(96,660)	90,719,221
<b>LIABILITIES</b>								
Accounts payable	142,426	-	-	-	22	-	-	142,448
Payable for investment securities purchased	2,147,080	-	-	-	-	-	-	2,147,080
Accrued benefits payable	361,633	53,589	798	1,142	1,578	1,299	-	420,039
Payable from QPP to:								
VSFs (HPO, HPSO, TPO, TPSO)	3,660	-	-	-	-	-	(3,660)	-
COVSF	93,000	-	-	-	-	-	(93,000)	-
Due to other retirement systems	2,311	-	-	-	-	-	-	2,311
Securities lending (Note 2)	9,415,078	-	-	-	-	-	-	9,415,078
Other Liabilities (Note 2)	62,152	-	-	-	-	-	-	62,152
Total liabilities	12,227,340	53,589	798	1,142	1,600	1,299	(96,660)	12,189,108
Net position restricted for benefits:								
Benefits to be provided by QPP	77,457,302	-	-	-	-	-	-	77,457,302
Benefits to be provided by VSF	-	1,072,811	-	-	-	-	-	1,072,811
Total net position restricted for benefits	\$ 77,457,302	\$ 1,072,811	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 78,530,113

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

# New York City Employees' Retirement System

## COMBINING STATEMENT OF FIDUCIARY NET POSITION

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

	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	Eliminations	Total
<b>ASSETS</b>								
Cash and cash equivalents	\$ 122,698	\$ 5,411	\$ 161	\$ 175	\$ 139	\$ 164	\$ -	\$ 128,748
Receivables:								
Investments securities sold	3,353,658	-	-	-	-	-	-	3,353,658
Member loans (Note 7)	1,079,822	-	-	-	-	-	-	1,079,822
Accrued interest and dividends	393,851	17	-	-	-	-	-	393,868
Receivables from QPP to:								
VSFs (HPO, HPSO, TPO, TPSO)	-	-	701	1,046	1,561	1,196	(4,504)	-
COVSF	-	925,000	-	-	-	-	(925,000)	-
Total receivables	4,827,331	925,017	701	1,046	1,561	1,196	(929,504)	4,827,348
Investments - at fair value (Notes 2 and 3):								
Short-term investments:								
Commercial paper	999,092	-	-	-	-	-	-	999,092
Short-term investment fund	812,966	297,230	-	-	-	-	-	1,110,196
U.S. Treasury bills and agencies	1,170,661	-	-	-	-	-	-	1,170,661
Debt (fixed income) securities:								
Bank loans	133,414	-	-	-	-	-	-	133,414
Corporate and other	10,401,407	-	-	-	-	-	-	10,401,407
Mortgage debt securities	5,549,015	-	-	-	-	-	-	5,549,015
Treasury inflation-protected securities	3,038,225	-	-	-	-	-	-	3,038,225
U.S. government and agency	8,274,897	-	-	-	-	-	-	8,274,897
Equity securities:								
Domestic equity	27,082,830	-	-	-	-	-	-	27,082,830
International equity	15,206,157	-	-	-	-	-	-	15,206,157
Collective trust funds:								
Bank loans	1,104	-	-	-	-	-	-	1,104
Domestic equity	1,181	-	-	-	-	-	-	1,181
Mortgage debt securities	482,694	-	-	-	-	-	-	482,694
Opportunistic fixed income	257,436	-	-	-	-	-	-	257,436
Alternative investments:								
Infrastructure	996,689	-	-	-	-	-	-	996,689
Opportunistic fixed income	2,603,942	-	-	-	-	-	-	2,603,942
Private equity	6,421,827	-	-	-	-	-	-	6,421,827
Private real estate	4,359,578	-	-	-	-	-	-	4,359,578
Hedge fund	1,240	-	-	-	-	-	-	1,240
Collateral from securities lending	10,208,522	-	-	-	-	-	-	10,208,522
Total investments	98,002,877	297,230	-	-	-	-	-	98,300,107
Other assets	125,193	-	-	-	-	-	-	125,193
Total assets	103,078,099	1,227,658	862	1,221	1,700	1,360	(929,504)	103,381,396
<b>LIABILITIES</b>								
Accounts payable	142,603	-	-	-	22	-	-	142,625
Payable for investment securities purchased	5,494,894	-	-	-	-	-	-	5,494,894
Accrued benefits payable	394,583	52,271	862	1,221	1,678	1,360	-	451,975
Payable from QPP to:								
VSFs (HPO, HPSO, TPO, TPSO)	4,504	-	-	-	-	-	(4,504)	-
COVSF	925,000	-	-	-	-	-	(925,000)	-
Due to other retirement systems	1,785	-	-	-	-	-	-	1,785
Securities lending (Note 2)	10,208,522	-	-	-	-	-	-	10,208,522
Total liabilities	17,171,891	52,271	862	1,221	1,700	1,360	(929,504)	16,299,801
Net position restricted for benefits:								
Benefits to be provided by QPP	85,906,208	-	-	-	-	-	-	85,906,208
Benefits to be provided by VSF	-	1,175,387	-	-	-	-	-	1,175,387
Total net position restricted for benefits	\$ 85,906,208	\$ 1,175,387	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 87,081,595

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

## New York City Employees' Retirement System

## COMBINING STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

Year ended June 30, 2022  
(In thousands)

	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	ELIM	Total
<b>Additions</b>								
Contributions:								
Member contributions	\$ 595,587	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 595,587
Employer contributions	3,831,464	-	-	-	-	-	-	3,831,464
Total contributions	4,427,051	-	-	-	-	-	-	4,427,051
Investment income (Note 2):								
Interest income	943,322	2,507	-	-	-	-	-	945,829
Dividend income	1,038,806	-	-	-	-	-	-	1,038,806
Net depreciation in fair value of investments	(8,577,663)	-	-	-	-	-	-	(8,577,663)
Total investment (loss) income	(6,595,535)	2,507	-	-	-	-	-	(6,593,028)
Less:								
Investment expenses	349,217	-	-	-	-	-	-	349,217
Net (loss) income	(6,944,752)	2,507	-	-	-	-	-	(6,942,245)
Securities lending transactions:								
Gross securities lending income	29,768	-	-	-	-	-	-	29,768
Less - securities lending fees	2,865	-	-	-	-	-	-	2,865
Net securities lending income	26,903	-	-	-	-	-	-	26,903
Net investment (loss) income	(6,917,849)	2,507	-	-	-	-	-	(6,915,342)
Other - other income	3,282	-	-	-	-	-	-	3,282
Transfer from QPP to:								
VSFs (HPO, HPSO, TPO, TPSO)	-	-	1,433	2,232	3,002	2,497	(9,164)	-
COVSF	-	-	-	-	-	-	-	-
Total additions	(2,487,516)	2,507	1,433	2,232	3,002	2,497	(9,164)	(2,485,009)
<b>Deductions</b>								
Benefit payments and withdrawals (Note 1)	5,836,192	105,083	1,433	2,232	3,002	2,497	-	5,950,439
Payments to other retirement systems	11,046	-	-	-	-	-	-	11,046
Transfer from QPP to:								
VSFs (HPO, HPSO, TPO, TPSO)	9,164	-	-	-	-	-	(9,164)	-
COVSF	-	-	-	-	-	-	-	-
Administrative expenses	104,988	-	-	-	-	-	-	104,988
Total deductions	5,961,390	105,083	1,433	2,232	3,002	2,497	(9,164)	6,066,473
Net (decrease) increase in net position	(8,448,906)	(102,576)	-	-	-	-	-	(8,551,482)
Net position restricted for benefits								
Beginning of year	85,906,208	1,175,387	-	-	-	-	-	87,081,595
End of year	\$ 77,457,302	\$ 1,072,811	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 78,530,113

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

# New York City Employees' Retirement System

## COMBINING STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

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

	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	ELIM	Total
<b>additions</b>								
Contributions:								
Member contributions	\$ 579,560	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 579,560
Employer contributions	3,761,532	-	-	-	-	-	-	3,761,532
Total contributions	<u>4,341,092</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>4,341,092</u>
Investment income (Note 2):								
Interest income	913,882	434	-	-	-	-	-	914,316
Dividend income	900,282	-	-	-	-	-	-	900,282
Net appreciation in fair value of investments	16,741,619	-	-	-	-	-	-	16,741,619
Total investment income	<u>18,555,783</u>	<u>434</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>18,556,217</u>
Less:								
Investment expenses	313,226	-	-	-	-	-	-	313,226
Net income	<u>18,242,557</u>	<u>434</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>18,242,991</u>
Securities lending transactions:								
Gross securities lending income	22,793	-	-	-	-	-	-	22,793
Less - securities lending fees	2,149	-	-	-	-	-	-	2,149
Net securities lending income	<u>20,644</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>20,644</u>
Net investment income	<u>18,263,201</u>	<u>434</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>18,263,635</u>
Other - other income	3,365	-	-	-	-	-	-	3,365
Transfer from QPP to:								
VSFs (HPO, HPSO, TPO, TPSO)	-	-	1,572	2,363	3,208	2,674	(9,817)	-
COVSF	-	924,562	-	-	-	-	(924,562)	-
Total additions	<u>22,607,658</u>	<u>924,996</u>	<u>1,572</u>	<u>2,363</u>	<u>3,208</u>	<u>2,674</u>	<u>(934,379)</u>	<u>22,608,092</u>
<b>deductions</b>								
Benefit payments and withdrawals (Note 1)	5,566,375	102,857	1,572	2,363	3,208	2,674	-	5,679,049
Payments to other retirement systems	5,671	-	-	-	-	-	-	5,671
Transfer from QPP to:								
VSFs (HPO, HPSO, TPO, TPSO)	9,817	-	-	-	-	-	(9,817)	-
COVSF	924,562	-	-	-	-	-	(924,562)	-
Administrative expenses	87,413	-	-	-	-	-	-	87,413
Total deductions	<u>6,593,838</u>	<u>102,857</u>	<u>1,572</u>	<u>2,363</u>	<u>3,208</u>	<u>2,674</u>	<u>(934,379)</u>	<u>5,772,133</u>
Net increase in net position	<u>16,013,820</u>	<u>822,139</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>16,835,959</u>
Net position restricted for benefits								
Beginning of year	69,892,388	353,248	-	-	-	-	-	70,245,636
End of year	<u>\$ 85,906,208</u>	<u>\$ 1,175,387</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 87,081,595</u>

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



**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS**

**June 30, 2022 and 2021**

**NOTE 1 - PLAN DESCRIPTION**

The City of New York ("The City" or "City") maintains a number of pension systems providing benefits for employees of its various agencies (as defined within New York State ("State") statutes). The City's five major actuarially funded pension systems are 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"), the New York City Police Pension Funds ("POLICE"), and the New York City Fire Pension Funds ("FIRE"). Each pension system is a separate public employee retirement system ("PERS") with a separate oversight body and is financially independent of the others.

NYCERS administers the New York City Employees' Retirement System Qualified Pension Plan (the "QPP"), Correction Officers' Variable Supplements Fund ("COVSF"), Housing Police Officers' Variable Supplements Fund ("HPOVSF"), Housing Police Superior Officers' Variable Supplements Fund ("HPSOVSF"), Transit Police Officers' Variable Supplements Fund ("TPOVSF"), and the Transit Police Superior Officers' Variable Supplements Fund ("TPSOVSF") (collectively the "Funds" or the "Plan"), which are included in the combining financial statements.

The QPP is a cost-sharing, multiple-employer PERS. The QPP provides a pension benefit for employees of The City and various related employers not covered by The City's four other main pension systems. The employers (collectively, the "Employer"), in addition to The City, principally include five authorities, two public benefit corporations, The City University of New York ("CUNY"), and the State Judiciary. Substantially all employees of The City not covered by one of the other four pension systems are covered by the QPP. Permanent Civil Service Employees become QPP members within six months of their employment and may elect to become members earlier. All other employees may become members at their option.

The QPP functions in accordance with existing State statutes, 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 COVSF, HPOVSF, HPSOVSF, TPOVSF, and TPSOVSF (collectively, the "VSFs") operate pursuant to the provisions of Title 13, Chapter 1 of the New York City Administrative Code ("ACNY") and provide supplemental benefits as follows:

**COVSF:** Retired members of the Uniformed Correction Force ("UCF"). To be eligible to receive benefits, members of the UCF must retire on or after July 1, 1999 with at least 20 or 25 years of service, depending on the underlying plan, and be receiving a service retirement benefit from the QPP.

**HPOVSF:** QPP retirees who retired for service with 20 or more years of service as Housing Police Officers, and who retired on or after July 1, 1987.

**HPSOVSF:** QPP retirees who retired for service with 20 or more years of service as Housing Police Superior Officers, and who retired on or after July 1, 1987.

**TPOVSF:** QPP retirees who retired for service with 20 or more years of service as Transit Police Officers, and who retired on or after July 1, 1987.

**TPSOVSF:** QPP retirees who retired for service with 20 or more years of service as Housing Police Superior Officers, and who retired on or after July 1, 1987.

TPOVSF, TPSOVSF, HPOVSF, and HPSOVSF are closed to new entrants, and all members are retired.



**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2022 and 2021**

In accordance with ACNY, VSFs are not pension funds or retirement systems. Instead, they provide scheduled supplemental payments, in accordance with applicable statutory provisions. While a portion of these payments are guaranteed by The City, the State Legislature has the right to amend, modify, or repeal VSFs and the payments they provide. However, any assets transferred to the VSFs are held in trust solely for the benefit of its members.

NYCERS 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.

**Boards of Trustees**

The QPP's Board of Trustees consists of 11 members: the Mayor's representative, who is the Chairperson of the Board of Trustees; the Borough Presidents of Manhattan, the Bronx, Brooklyn, Queens, and Staten Island; the Comptroller of The City of New York (the "Comptroller"); the Public Advocate; and Presidents of the three unions with the largest number of participating employees, which are District Council 37 - American Federation of State, County and Municipal Employees ("AFSCME"), International Brotherhood of Teamsters, Local 237, and the Transport Workers Union Local 100.

The Board of Trustees for the VSFs consist of the Mayor's representative, the Comptroller, and the Commissioner of Finance. Each of these three City Officials have one vote. Additional trustees include: for the COVSF, an officer of the New York City Correction Officers' Benevolent Association (1½ vote) and a representative appointed by the Correction Captains employee organization recognized for collective bargaining purposes (½ vote). For the HPOVSF, two members of the New York City Housing Police Patrolmen's Benevolent Association are entitled to cast one vote each. For the HPSOVSF, two representatives of the employee organizations representing the superior officers, each of whom are entitled to cast one vote. For the TPOVSF, two members of the New York City Transit Police Patrolmen's Benevolent Association are entitled to cast one vote each. For TPSOVSF, two representatives of the employee organizations representing the superior officers, each of whom are entitled to cast one vote.

At June 30, 2022 (preliminary), June 30, 2021 (preliminary), and June 30, 2020, the QPP's membership consisted of:

	2022	2021	2020
Retirees and beneficiaries receiving benefits	172,593	162,149	159,906
Terminated vested members not yet receiving benefits	27,363	26,383	23,034
Terminated non-vested members <sup>1</sup>	42,694	32,058	32,027
Active members receiving salary	180,981	185,732	191,237
Total	<u>423,631</u>	<u>406,322</u>	<u>406,204</u>

<sup>1</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.

Note that 2020 data is final and supports the most recent actuarial valuation. 2021 and 2022 data are preliminary and may be subject to future adjustments as the data is refined.

**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**  
**June 30, 2022 and 2021**

At June 30, 2021 and 2020, the dates of the VSF's most recent actuarial valuations, membership consisted of:

	COVSF		HPOVSF		HPSOVSF		TPOVSF		TPSOVSF	
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Retirees currently receiving payments	8,544	8,312	127	138	194	201	263	267	219	227
Active members	8,054	8,988	-	-	-	-	-	-	-	-
Total	16,598	17,300	127	138	194	201	263	267	219	227

The QPP provides three main types of retirement benefits: Service Retirements, Ordinary Disability Retirements (non-job-related disabilities), and Accident Disability Retirements (job-related disabilities) to members who are in different Tiers. The members' Tiers are generally determined by the date of membership in the Plan.

The Service Retirement benefits provided by the QPP for employees who joined before July 1, 1973 (Tier 1), fall into four categories according to the level of benefits provided and the years of service required. Three of the four categories provide annual benefits of 50% to 55% of Final Salary (as defined within State statutes) after 20 or 25 years of service, with additional benefits equal to a specified percentage per year of service (currently 1.2% to 1.7%) of "final salary" payable for years in excess of the 20-year or 25-year minimum. These benefits are reduced on an actuarial basis for any loans with unpaid balances outstanding at the date of retirement. These benefits are increased, where applicable, by an annuity attributable to member contributions in excess of the required amount and by any benefits attributable to the Increased-Take-Home-Pay ("ITHP") contributions accumulated after the 25th year of member's qualifying service. ITHP represents amounts contributed by The City in lieu of members' own contributions. These amounts reduce the contributions that members would have to make to the QPP during their service and thereby increase their take-home pay. Members have the choice of waiving their ITHP reduction, which would reduce their take-home pay but provide them with additional benefits upon retirement.

The fourth category has no minimum service requirement and instead provides an annual benefit for each year of service equal to a specified percentage (currently 0.7% to 1.53%) of Final Salary.

The New York State Constitution provides that the pension rights of public employees are contractual and shall not be diminished or impaired. In 1973, 1976, 1983, and 2012, significant amendments made to the New York State Retirement and Social Security Law ("RSSL") modified certain benefits for employees joining the Plan on or after the effective date of such amendments.

Members who joined on or after July 1, 1973 and before July 27, 1976 (Tier 2), have provisions similar to Tier 1, except that the eligibility for retirement and the salary base for benefits are different and there is a limitation on the maximum benefit. This maximum benefit limitation was subsequently eliminated under Chapter 574 of the Laws of 2000 for all Tier 2 members who retired after December 8, 2000.

Members who joined the QPP on or after July 27, 1976 and prior to September 1, 1983 (Tier 3), were later mandated into Tier 4, but could retain their Tier 3 rights. Tier 3 requires member contributions on salary for a period not to exceed 30 years, has benefits reduced by one half of the primary Social Security benefit attributable to service with the Employer, and provides for an automatic annual cost-of-living escalator in pension benefits of not more than 3.0%. UCF members in Tier 3 are not subject to the Social Security offset. Effective October 1, 2000, these members are not required to make contributions after the 10th anniversary of their membership date or completion of 10 years of credited service, whichever is earlier.

Members who joined the QPP on or after September 1, 1983 and prior to April 1, 2012 (Tier 4), must make basic contributions of 3.0% of salary until termination of service. Effective October 1, 2000, these members,

## New York City Employees' Retirement System

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

except for certain Transit Authority employees, are not required to make contributions after the 10th anniversary of their membership date or completion of 10 years of credited service, whichever is earlier. Effective December 2000, certain Transit Authority members make basic contributions of 2.0% of salary in accordance with Chapter 10 of the Laws of 2000. Members of specific plans within Tier 4 also make Additional Membership Contributions. The annual benefit is 1.67% of Final Average Salary ("FAS") per year of service for members with less than 20 years of service, 2% of Final Average Salary per year of service for members with 20 to 30 years, plus 1.5% of Final Average Salary per year of service for service in excess of 30 years. The QPP also provides death benefits; and certain retirees also receive supplemental benefits.

Subject to certain conditions, members generally become fully vested as to benefits upon the completion of five years of service.

During the Spring 2000 session, the State Legislature approved and the State Governor ("Governor") signed laws that provide automatic Cost-of-Living Adjustments ("COLA") for certain retirees and beneficiaries (Chapter 125 of the Laws of 2000), additional service credits for certain Tier 1 and Tier 2 members, and reduced member contributions for certain Tier 3 and Tier 4 members (Chapter 126 of the Laws of 2000).

Subsequent legislation, affecting members of Tiers 2, 3, and 4, has created various improved early retirement benefit programs under which eligible employees may be required to pay additional contributions. Members first employed after the effective date of such legislation are generally mandated into these programs.

Tier 6 - During March 2012, the Governor signed Chapter 18 of the Laws of 2012 ("Chapter 18/12") that placed certain limitations on the Tier 3 and Tier 4 benefits available to participants in most New York State PERS who join any New York City system, on and after April 1, 2012. In general, these changes, commonly referred to as Tier 6, increase the retirement age requirement to 63. These members can retire with a pension reduction as early as age 55. The Tier requires member contributions for all years of service for non-uniformed employees, institutes progressive member contributions for non-uniformed employees, lengthens the FAS period from three to five years, caps FAS for non-uniformed employees to an amount equal to the Governor's salary, establishes an overtime cap when calculating pension benefits, and offers an optional defined-contribution plan to certain non-represented employees. Chapter 18 of 2012 also extends and harmonizes the Tier 3 benefits for POLICE and FIRE to uniformed New York City Department of Sanitation and New York City Correction members and to District Attorney ("DA") Investigators. These changes are known as the Modified Tier 3 22-Year Plans and are not considered Tier 6 plans. Under Chapter 56 of the Laws of 2022, Part TT, effective April 9, 2022, the minimum service necessary for a Tier 6 member to vest in their plan has been reduced from 10 to five years. Therefore, the required service for a Tier 6 vested benefit or service retirement benefit is five years.

Certain members of Tier 1 and Tier 2 have the right to make voluntary member contributions ("Voluntary Contributions") in excess of their required member contributions ("Required Contributions"). 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, including statutory interest, less the outstanding balance of any member loans ("Net Actual Contributions"), may exceed ("Excess of Contributions") or fall short of ("Deficiency of Contributions") the member's Expected Balance. The Expected Balance is the sum of the Required Contributions which a member should have made during their credited service, plus statutory earnings thereon. The amount of the member's retirement annuity or the refund of contributions that they are entitled to, increased by any Excess of Contributions or reduced by any Deficiency of Contributions, has not been determined for the years ended June 30, 2022 and 2021, respectively. Actuarial estimates of the impacts of Excesses and Deficiencies are incorporated into calculation of the QPP's net pension liability (see Note 6).

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

VSFs**COVSF**

The COVSF provides supplemental benefits, varying by calendar year according to a schedule and available COVSF assets, for those NYCERS members who retire for service as UCF members with at least 20 or 25 years of service on or after July 1, 1999 depending on the underlying plan. The annual scheduled amount was \$8,500 for Calendar Year 2000. The annual scheduled amount increases \$500 each year thereafter to a maximum of \$12,000 for Calendar Year 2007 and thereafter. In the calendar year of retirement or death, the annual scheduled amount is prorated.

Chapter 255/00 provides that prior to Calendar Year 2020, when COVSF provides for a guaranteed schedule of defined supplemental benefits, benefits are payable in a calendar year only if there are sufficient COVSF assets to pay that year's scheduled amounts to all who are entitled to it unless The City guarantee becomes effective. The City guarantee of benefits payable prior to Calendar Year 2019 comes into effect if the fair value of assets of the COVSF exceeds the actuarial present value of the defined schedule of benefits payable through Calendar Year 2019.

The City's Chief Actuary (the "Actuary") has determined that benefits were payable for Calendar Years 2000 through 2005 and for Calendar Years 2014 and 2015. However, the Actuary determined that no benefits were payable for Calendar Years 2006 through 2013 and 2016. Benefits were payable for Calendar Years 2017 and 2018 due to the application of The City guarantee of benefits payable prior to Calendar Year 2019, and will continue to be guaranteed each year in the future.

In the past, the New York State Legislature, in recognition of inflation, has increased retirement benefits to retirees of its public pension systems. Any increase in the amount of ad-hoc cost-of-living increases (Supplementation) or automatic COLA payable from NYCERS to a retiree of the COVSF under legislation enacted on or after December 29, 1999 will reduce benefits payable from the COVSF to the retiree by an amount equal to such increase until the later of: (a) the first day of the month following the month the retiree attains age 62; or (b) January 1, 2007.

Chapter 125 of the Laws of 2000 (Chapter 125/00), effective September 2000, provided Supplementation benefits from NYCERS for certain retirees who retired before Calendar Year 1997. In addition, Chapter 125/00 provided future COLA increases from NYCERS beginning September 2001 and on each subsequent September to eligible retirees.

**HPOVSF**

For those Housing Police Officers who became members of NYCERS prior to July 1, 1988, and who retired between July 1, 1987 and December 31, 1991, the annual supplemental benefit was \$4,500 for Calendar Year 1992. For those who retired during 1992, the benefit was a proportion of \$4,500. The benefit increases \$500 each year thereafter to a maximum of \$12,000 in Calendar Year 2007 and thereafter.

For those who were members of NYCERS prior to July 1, 1988, and who retire after Calendar Year 1992, the benefit for the first year of retirement is a proportion of the annual scheduled amount as described above for the calendar year of retirement, and the full amount thereafter.

For those Housing Police Officers who became members of NYCERS on or after July 1, 1988, the annual supplemental benefit is \$2,500 for the first 12 months of retirement, increasing 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 719 of the Laws of 1994 as discussed on the next page.

**New York City Employees' Retirement System****NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED****June 30, 2022 and 2021**

Chapter 375 of the Laws of 1993 (Chapter 375/93) provided that prior to Calendar Year 2007, the defined schedules of benefits are payable only if there are sufficient assets available in the HPOVSF, or if the City guarantee comes into effect. The City guarantee of benefits comes into effect prior to Calendar Year 2007 if the fair value of assets of the HPOVSF exceeds the actuarial present value of the defined schedules of benefits payable through Calendar Year 2006 plus 15% of the assets of the HPOVSF at that time.

Chapter 719 of the Laws of 1994 (Chapter 719/94), signed on August 2, 1994, made further changes to the HPOVSF. Supplemental benefit payments became guaranteed. In addition, Housing Police Officers who became members on or after July 1, 1988, will receive the maximum \$12,000 benefit beginning in Calendar Year 2008.

Based on the calculations of the Actuary, The City guarantee of the defined schedules of benefits prior to Calendar Year 2007 had not yet come into effect as discussed more fully below.

Also, in conjunction with the April 30, 1995 merger of the Housing Police force into the New York City Police Department, The City signed a letter of agreement with affected unions to ensure that the payment of benefits provided under the defined schedules prior to Calendar Year 2007 will be made. Thus, there will be no suspension of benefits prior to Calendar Year 2007 even if assets of the HPOVSF become insufficient to pay these benefits.

Chapter 255 of the Laws of 2000 (Chapter 255/00) provided that if, for any calendar year covered by a payment guarantee, the assets of the HPOVSF are not sufficient to pay benefits, an amount sufficient to pay such benefits shall be appropriated from the Contingent Reserve Fund of NYCERS and transferred to the HPOVSF. The law also provided that transfers to the HPOVSF for supplemental benefits could begin as early as Calendar Year 2001, if needed.

In the past, the New York State Legislature, in recognition of inflation, has increased retirement benefits to retirees of its public pension systems. Any increase in the amount of ad-hoc cost-of-living increases (Supplementation) or automatic COLA payable from NYCERS to a retiree of the HPOVSF under legislation enacted on or after January 1, 1993 will reduce benefits payable from the HPOVSF to the 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 the retiree attains age 62; or (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 the retiree attains age 62; or (b) the earlier of the first day of the month following the 19th anniversary of the retiree's date of retirement and January 1, 2008.

Chapter 119 of the Laws of 1995 (Chapter 119/95) provided additional benefits for Supplementation payable from NYCERS on and after December 1, 1996, for certain retirees of the HPOVSF, effective as enacted by The City Council on October 25, 1995.

Chapter 390 of the Laws of 1998 (Chapter 390/98) provided additional benefits for Supplementation payable from NYCERS on and after September 1, 1998 (with a second benefit increase commencing September 1, 1999).

Chapter 125 of the Laws of 2000 (Chapter 125/00), effective September 2000, provided Supplementation benefits from NYCERS for certain retirees who retired before Calendar Year 1997. In addition, Chapter 125/00 provided future COLA increases from NYCERS beginning September 2001 and on each subsequent September to eligible retirees.

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

**HPSOVSF**

For those Housing Police Superior Officers who became members of NYCERS prior to July 1, 1988 and who retired between July 1, 1987 and December 31, 1992, the annual supplemental benefit was \$5,000 in Calendar Year 1993. For those who retired during 1993, the benefit was a proportion of \$5,000. The benefit increases \$500 each year thereafter to a maximum of \$12,000 in Calendar Year 2007 and thereafter.

For those who were members of NYCERS prior to July 1, 1988 and who retired after Calendar Year 1993, the benefit for the first year of retirement is a proportion of the annual scheduled amount as described above for the calendar year of retirement, and the full amount thereafter.

For those Housing Police Superior Officers who became members of NYCERS on or after July 1, 1988, the annual supplemental benefit is \$2,500 for the first 12 months of retirement, increasing by \$500 each year until a maximum of \$12,000 is payable in the 20th and later years of retirement.

Chapter 719 of the Laws of 1994 (Chapter 719/94) provided that after Calendar Year 2006 payments are guaranteed, while prior to Calendar Year 2007, the defined schedules of benefits are payable only if there are sufficient assets available in the HPSOVSF, or if The City guarantee comes into effect. The City guarantee of benefits comes into effect prior to Calendar Year 2007 if the fair value of assets of the HPSOVSF exceeds the actuarial present value of the defined schedules of benefits payable through Calendar Year 2006, plus 15% of the assets of the HPSOVSF at that time.

Chapter 719/94 also provided that, whenever the guarantee of the defined schedules of benefits comes into effect, the HPSOVSF will then transfer 15% of the fair value of its assets to The City's General Fund.

Based on the calculations of the Actuary, The City guarantee of the defined schedules of benefits prior to Calendar Year 2007 had not yet come into effect as discussed more fully below and on the next page.

Also, in conjunction with the April 30, 1995 merger of the Housing Police force into the New York City Police Department, The City signed a letter of agreement with affected unions to ensure that the payment of benefits provided under the defined schedules prior to Calendar Year 2007 will be made. Thus, there will be no suspension of benefits prior to Calendar Year 2007, even if assets of the HPSOVSF become insufficient to pay these benefits.

Chapter 255 of the Laws of 2000 (Chapter 255/00) provided that in the event that, for any calendar year covered by a payment guarantee, the assets of the HPSOVSF are not sufficient to pay benefits, an amount sufficient to pay such benefits shall be appropriated from the Contingent Reserve Fund of NYCERS and transferred to the HPSOVSF. The law also provided that supplemental benefits become guaranteed, beginning with Calendar Year 2001.

In the past, the New York State Legislature, in recognition of inflation, has increased retirement benefits to retirees of its public pension systems. Any increase in the amount of ad-hoc cost-of-living increases (Supplementation) or automatic COLAs payable from NYCERS to a retiree of the HPSOVSF under legislation enacted on or after January 1, 1994 will reduce benefits payable from the HPSOVSF to the 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 the retiree attains age 62; or (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 the retiree attains age 62; or (b) the first day of the month following the 19th anniversary of the retiree's date of retirement.

**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2022 and 2021**

Chapter 119 of the Laws of 1995 (Chapter 119/95) provided additional benefits for Supplementation from NYCERS payable on and after December 1, 1996 for certain retirees of the HPSOVSF, effective as enacted by The City Council on October 25, 1995.

Chapter 390 of the Laws of 1998 (Chapter 390/98) provided additional benefits for Supplementation payable from NYCERS on and after September 1, 1998 (with a second benefit increase commencing September 1, 1999).

Chapter 125 of the Laws of 2000 (Chapter 125/00), effective September 2000, provided Supplementation benefits from NYCERS for certain retirees who retired before Calendar Year 1997. In addition, Chapter 125/00 provided future COLA increases from NYCERS beginning September 2001 and on each subsequent September to eligible retirees.

**TPOVSF**

For those Transit Police Officers who became members of NYCERS prior to July 1, 1988 and who retired between July 1, 1987 and December 31, 1991, the annual supplemental benefit was \$4,500 in Calendar Year 1992. For those who retired during 1992, the benefit was a proportion of \$4,500. The benefit increases \$500 each year thereafter to a maximum of \$12,000 in Calendar Year 2007 and thereafter.

For those who were members of NYCERS prior to July 1, 1988, and who retired after Calendar Year 1992, the benefit for the first year of retirement is a proportion of the annual scheduled amount as described above for the calendar year of retirement, and the full amount thereafter.

For those Transit Police Officers who became members of NYCERS on or after July 1, 1988, the annual supplemental benefit is \$2,500 for the first 12 months of retirement, increasing by \$500 each year until a maximum of \$12,000 is payable in the 20th and later years of retirement.

Chapter 577 of the Laws of 1992 (Chapter 577/92) also provided that prior to Calendar Year 2007, the defined schedules of benefits are payable only if there are sufficient assets available in the TPOVSF, or if The City guarantee comes into effect. The City guarantee of benefits comes into effect prior to Calendar Year 2007 if the fair value of assets of the TPOVSF exceeds the actuarial present value of the defined schedules of benefits payable through Calendar Year 2006, plus 15% of the assets of the TPOVSF at that time.

Chapter 577/92 also provided that, whenever the guarantee of the defined schedules of benefits comes into effect, the TPOVSF will then transfer 15% of the fair value of its assets to The City's General Fund.

As a result of calculations performed by the Actuary during November 1993, The City guarantee became effective.

Based on the calculations of the Actuary, The City guarantee of the defined schedules of benefits prior to Calendar Year 2007 had not yet come into effect as discussed more fully below and on the next page.

Also, in conjunction with the April 2, 1995 merger of the Transit Police force into the New York City Police Department, The City signed a letter of agreement with the affected unions to ensure that the payment of benefits provided under the defined schedules prior to Calendar Year 2007 will be made. Thus, there will be no suspension of benefits prior to Calendar Year 2007, even if assets of the TPOVSF become insufficient to pay these benefits.

Chapter 255 of the Laws of 2000 (Chapter 255/00) provided that if, for any calendar year covered by a payment guarantee, the assets of the TPOVSF are not sufficient to pay benefits, an amount sufficient to pay such benefits shall be appropriated from the Contingent Reserve Fund of NYCERS and transferred to



## New York City Employees' Retirement System

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

the TPOVSF. The law also provides that transfers to the TPOVSF for supplemental benefits can begin as early as Calendar Year 2001, if needed.

In the past, the New York State Legislature, in recognition of inflation, has increased retirement benefits to retirees of its public pension systems. Any increase in the amount of ad-hoc cost-of-living increases (Supplementation) or automatic COLAs payable from NYCERS to a retiree of the TPOVSF under legislation enacted on or after January 1, 1992 will reduce benefits payable from the TPOVSF to the 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 the retiree attains age 62; or (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 the retiree attains age 62; or (b) the first day of the month following the 19th anniversary of the retiree's date of retirement.

Chapter 119 of the Laws of 1995 (Chapter 119/95) provided additional benefits for Supplementation payable from NYCERS on and after December 1, 1996 for certain retirees of the TPOVSF, effective as enacted by the City Council on October 25, 1995.

Chapter 390 of the Laws of 1998 (Chapter 390/98) provided additional benefits for Supplementation payable from NYCERS on and after September 1, 1998 (with a second benefit increase commencing September 1, 1999).

Chapter 125 of the Laws of 2000 (Chapter 125/00), effective September 2000, provided Supplementation benefits from NYCERS for certain retirees who retired before Calendar Year 1997. In addition, Chapter 125/00 provided future COLA increases from NYCERS beginning September 2001 and on each subsequent September to eligible retirees.

#### ***TPSOVSF***

For those Transit Police Superior Officers who became members of NYCERS prior to July 1, 1988, and who retired between July 1, 1987 and December 31, 1992, the annual supplemental benefit was \$5,000 in Calendar Year 1993. For those who retired during 1993, the benefit was a proportion of \$5,000. The benefit increases \$500 each year thereafter to a maximum of \$12,000 in Calendar Year 2007 and thereafter.

For those who were members of NYCERS prior to July 1, 1988, and who retired after Calendar Year 1993, the benefit for the first year of retirement is a proportion of the annual scheduled amount as described above for the calendar year of retirement, and the full amount thereafter.

For those Transit Police Superior Officers who became members of NYCERS on or after July 1, 1988, the annual supplemental benefit is \$2,500 for the first 12 months of retirement, increasing by \$500 each year until a maximum of \$12,000 is payable in the 20th and later years of retirement.

Chapter 720 of the Laws of 1994 (Chapter 720/94) also provided that after Calendar Year 2006 payments are guaranteed, while prior to Calendar Year 2007, the defined schedules of benefits are payable only if there are sufficient assets available in the TPSOVSF, or if The City guarantee comes into effect. The City guarantee of benefits comes into effect prior to Calendar Year 2007 if the fair value of assets of the TPSOVSF exceeds the actuarial present value of the defined schedules of benefits payable through Calendar Year 2006 plus 15% of the assets of the TPSOVSF at that time.

Chapter 720/94 also provided that whenever the guarantee of the defined schedules of benefits comes into effect, the TPSOVSF will then transfer 15% of the fair value of its assets to The City's General Fund.

**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2022 and 2021**

Based on the calculations of the Actuary, The City guarantee of the defined schedules of benefits prior to Calendar Year 2007 had not yet come into effect as discussed more fully below.

Also, in conjunction with the April 2, 1995 merger of the Transit Police force into the New York City Police Department, The City signed a letter of agreement with the affected unions to ensure that the payment of benefits provided under the defined schedules prior to Calendar Year 2007 will be made. Thus, there will be no suspension of benefits prior to Calendar Year 2007, even if assets of the TPSOVSF become insufficient to pay these benefits.

Chapter 255 of the Laws of 2000 (Chapter 255/00) provided that if, for any calendar year covered by a payment guarantee, the assets of the TPSOVSF are not sufficient to pay benefits, an amount sufficient to pay such benefits shall be appropriated from the Contingent Reserve Fund of NYCERS and transferred to the TPSOVSF. The law also provided that supplemental benefits become guaranteed, beginning with Calendar Year 2001.

In the past, the New York State Legislature, in recognition of inflation, has increased retirement benefits to retirees of its public pension systems. Any increase in the amount of ad-hoc cost-of-living increases (Supplementation) or automatic COLAs payable from NYCERS to a retiree of the TPSOVSF under legislation enacted on or after January 1, 1994 will reduce benefits payable from the TPSOVSF to the 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 the retiree attains age 62; or (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 the retiree attains age 62; or (b) the first day of the month following the 19th anniversary of the retiree's date of retirement.

Chapter 119 of the Laws of 1995 (Chapter 119/95) provided additional benefits for Supplementation from NYCERS payable on and after December 1, 1996 for certain retirees of the TPSOVSF, effective as enacted by The City Council on October 25, 1995.

Chapter 390 of the Laws of 1998 (Chapter 390/98) provided additional benefits for Supplementation payable from NYCERS on and after September 1, 1998 (with a second benefit increase commencing September 1, 1999).

Chapter 125 of the Laws of 2000 (Chapter 125/00), effective September 2000, provided Supplementation benefits from NYCERS for certain retirees who retired before Calendar Year 1997. In addition, Chapter 125/00 provided future COLA increases from NYCERS beginning September 2001 and on each subsequent September to eligible retirees.

## **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 when the employers make payroll deductions from Plan 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

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

and liabilities at the date of the combining financial statements and revenues and expenses during the reporting period. Actual results could differ from those estimates.

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

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

**Accounts Payable** - Accounts payable is principally comprised of amounts owed to the QPP's banks for overdrawn bank balances. The QPP's practice is to fully invest the cash balances of most bank accounts on a daily basis. Overdrawn balances result primarily from outstanding benefit checks that are presented to the banks for payment on a daily basis. 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' securities lending 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, 2022 and 2021, management believes that the Funds had no credit risk exposure to borrowers 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' custodian require the Securities Lending Agent (the "Agent") to indemnify the Funds in case of counterparty default. In the situation when a borrower goes into default, the securities lending agent will liquidate the collateral to purchase replacement securities. Any shortfall before the replacement securities cost and the collateral value is covered by the securities lending 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 60 days. The securities lending program in which the Funds participate only allows pledging or selling securities in the case of borrower default.



## New York City Employees' Retirement System

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

GASB Statement No. 28, *Accounting and Financial Reporting for Securities Lending Transactions*, requires that securities loaned as assets and related liabilities be reported in the statements of fiduciary net position. Cash received as collateral on securities lending transactions and investments made with that cash are reported as assets. Securities received as collateral are also reported as assets if the government entity has the ability to pledge or sell them without a borrower default. Accordingly, NYCERS recorded the investments purchased with the cash collateral as collateral from securities lending with a corresponding liability for securities lending.

Securities on loan are carried at fair value and the value as of June 30, 2022 and 2021 was \$9.2 billion and \$10.1 billion, respectively. Cash collateral received related to securities lending as of June 30, 2022 and 2021 was \$9.4 billion and \$10.2 billion, respectively. As of the date of the combining statements of fiduciary net position, the maturities of the investments made by the QPP with cash collateral, on average, exceed the maturities of the securities on loans by approximately 53 days.

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 an 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 were used for the fair value measurements.

**New Accounting Standards** - NYCERS adopted the following GASB Statements for the year ended June 30, 2022.

GASB Statement No. 87, *Leases*, requires lessees to recognize the following for all leases with a term of 12 months or greater at the commencement date: (a) a lease liability, which is a lessee's obligation to make lease payments arising from a lease and (b) a right-of-use ("ROU") asset, representing the lessee's right to use, or control the use of, a specified asset for the lease term. NYCERS adopted GASB 87 for fiscal year 2022. Upon adoption, NYCERS recognized ROU lease assets of \$60 million and lease liabilities related to ROU of \$62 million in the statement of fiduciary net position.

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

### NOTE 3 - INVESTMENTS AND DEPOSITS

The Comptroller acts as an investment advisor to the Funds administered by NYCERS that have investments (the "QPP and COVSF"). In addition, the QPP employs an independent investment consultant as an investment advisor. The QPP utilizes several investment managers to manage the long-term debt and equity portfolios. The managers are regularly reviewed, with regard to both their investment performance and their adherence to investment guidelines. The COVSF investments are held in a short-term investment fund. The other VSFs do not hold investments. The investment policy is approved by the Board of Trustees of the Funds within NYCERS. The Boards of Trustees of the respective Funds create the overall investment policy under which the system's funds are invested and, in defining the investment

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

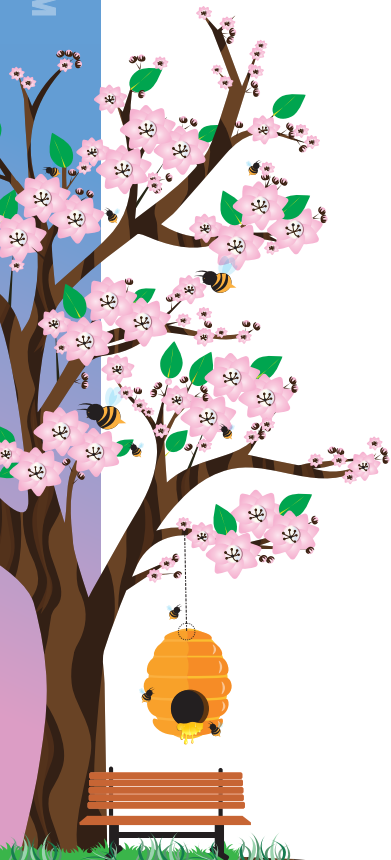
objectives, develop a framework under which specific objectives are established with regard to allocating the assets of the Funds among various investment types.

The Funds do not possess an investment risk policy statement, nor do they actively manage QPP assets to specified risk targets. Rather, investment risk management is an inherent function of the Plan's 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 Years 2022 and 2021 included the securities in the following categories:

	2022	2021
Domestic equities	27.0%	27.0%
International equity fund	17.0	17.0
Debt/fixed income	36.5	36.5
Alternative investments	19.5	19.5
	<u>100.0%</u>	<u>100.0%</u>
Total		

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



New York City Employees' Retirement System

NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

**Credit Risk** - The possibility of 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 Baa2 and above, except that they are also permitted a 10% maximum exposure to Ba2 and B2 rated securities. While high yield non-investment grade managers primarily invest in Ba2 and B2 rated securities, they can also invest up to 10% of their portfolio in securities rated Caa2. The quality ratings of the Funds' investments, by percentage of the rated portfolio, as described by nationally recognized rating organizations, at June 30, 2022 and 2021, are as follows:

Investment Type June 30, 2022 (In percent)	Moody's Quality Ratings													Caa & Below Caa1	Not Rated	Total			
	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3				B1	B2	B3
Corporate bonds	16.49%	0.02%	0.12%	0.19%	1.57%	2.65%	2.36%	3.19%	3.94%	3.85%	1.30%	1.89%	2.04%	2.04%	1.95%	1.30%	1.47%	7.93%	54.30%
U.S. government	37.80%	-	-	-	0.01%	-	-	-	-	0.01%	-	-	-	-	-	-	-	1.34%	39.16%
Discount notes and U.S. Treasury bills	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.20%
Pooled fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.75%
Commercial paper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.59%
Percent of rated portfolio	54.29%	0.02%	0.12%	0.19%	1.58%	2.65%	2.36%	3.19%	3.94%	3.86%	1.30%	1.89%	2.04%	2.04%	1.95%	1.30%	1.47%	15.81%	100.00%

Investment Type June 30, 2021 (In percent)	Moody's Quality Ratings													Caa & Below Caa1	Not Rated	Total			
	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3				B1	B2	B3
Corporate bonds	25.91%	0.19%	0.23%	0.14%	0.95%	2.94%	2.25%	3.19%	4.26%	3.56%	1.55%	1.69%	1.99%	2.04%	1.81%	1.46%	1.76%	6.72%	62.66%
U.S. government	25.22%	0.03%	0.01%	0.01%	0.02%	0.01%	-	0.01%	0.07%	0.01%	-	-	-	-	-	-	-	1.21%	26.60%
Discount notes and U.S. Treasury bills	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.76%
Pooled fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.88%
Commercial paper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.10%
Percent of rated portfolio	51.13%	0.22%	0.24%	0.15%	0.97%	2.95%	2.25%	3.20%	4.33%	3.59%	1.55%	1.69%	1.99%	2.04%	1.81%	1.46%	1.76%	18.67%	100.00%

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

The quality ratings of the COVSF investments, by percentage of the rated portfolio, as described by nationally recognized statistical rating organizations, at June 30, 2022 and 2021, are as follows:

COVSF June 30, 2022	Moody's Quality Ratings								
	Aaa	Aa1	Ba3	B1	B2	B3	Caa & Below Caa 1	Not Rated	Total
Investment Type (In percent)									
Pooled funds	-%	-%	-%	-%	-%	-%	-%	100.00%	100.00%
Percent of rated portfolio	-%	-%	-%	-%	-%	-%	-%	100.00%	100.00%
COVSF June 30, 2021	Moody's Quality Ratings								
Investment Type (In percent)	Aaa	Aa1	Ba3	B1	B2	B3	Caa & Below Caa 1	Not Rated	Total
Pooled funds	-%	-%	-%	-%	-%	-%	-%	100.00%	100.00%
Percent of rated portfolio	-%	-%	-%	-%	-%	-%	-%	100.00%	100.00%

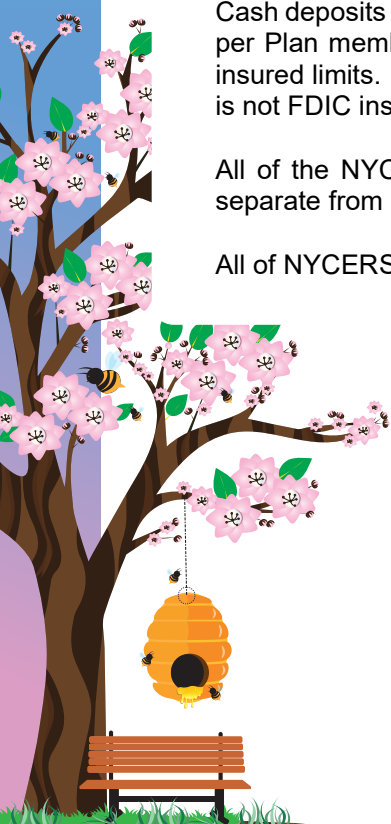
**Custodial Credit Risk** - Deposits are exposed to custodial credit risk if they are uninsured and uncollateralized. Custodial credit risk is the risk that, in the event of a failure of the counterparty, NYCERS will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the QPP or respective VSF, and are held by either the counterparty or the counterparty's trust department or agent but not in the QPP or respective VSF's name.

Consistent with NYCERS' investment policy, the investments are held by the NYCERS custodian and registered in the name of NYCERS or its Funds.

Cash deposits are insured by the Federal Deposit Insurance Corporation ("FDIC") for a maximum of \$250,000 per Plan member and are, therefore, fully insured. 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.

All of the NYCERS deposits are insured and/or collateralized by securities held by a financial institution separate from NYCERS' depository financial institution.

All of NYCERS' securities are held by NYCERS' custodial bank.



## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

**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) for QPP, as shown by the percent of the rated portfolio, are as follows:

Years to Maturity Investment Type June 30, 2022 (In percent)	Investment Maturities (in Years)				
	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
Corporate bonds	54.30%	0.68%	17.09%	10.75%	25.78%
U.S. government Discount notes and U.S. Treasury bills	39.16	0.08	23.19	8.70	7.19
Pooled fund	2.20	2.20	-	-	-
Commercial paper	2.75	2.75	-	-	-
	1.59	1.59	-	-	-
Percent of rated portfolio	<u>100.00%</u>	<u>7.30%</u>	<u>40.28%</u>	<u>19.45%</u>	<u>32.97%</u>
Years to Maturity Investment Type June 30, 2021 (In percent)	Investment Maturities (in Years)				
	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
Corporate bonds	62.66%	0.56%	19.67%	14.48%	27.95%
U.S. government Discount notes and U.S. Treasury bills	26.60	0.02	14.53	5.88	6.17
Pooled fund	3.76	3.76	-	-	-
Commercial paper	3.88	3.88	-	-	-
	3.10	3.10	-	-	-
Percent of rated portfolio	<u>100.00%</u>	<u>11.32%</u>	<u>34.20%</u>	<u>20.36%</u>	<u>34.12%</u>

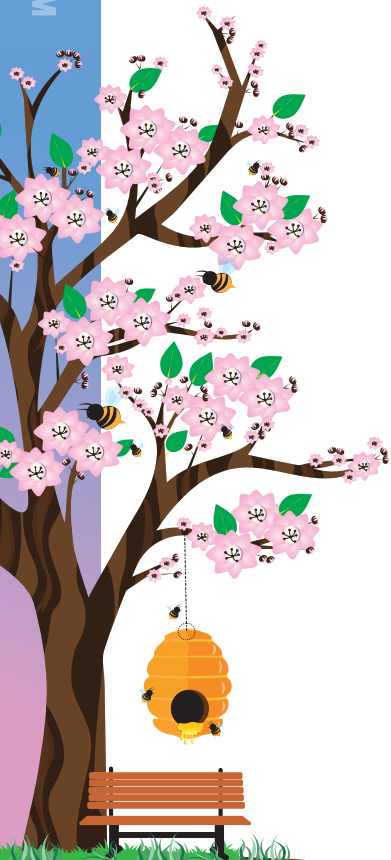


**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**  
**June 30, 2022 and 2021**

The length of investment maturities (in years) of the COVSF investments, as shown, by the percent of the rated portfolio, at June 30, 2022 and 2021, are as follows:

Years to Maturity Investment Type June 30, 2022 (In percent)	Investment Maturities (in Years)				
	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
Short-term pooled funds	100.00%	100.00%	-%	-%	-%
Percent of rated portfolio	100.00%	100.00%	-%	-%	-%
Years to Maturity Investment Type June 30, 2021 (In percent)	Investment Maturities (in Years)				
	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
Short-term pooled funds	100.00%	100.00%	-%	-%	-%
Percent of rated portfolio	100.00%	100.00%	-%	-%	-%

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



## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

In addition, the QPP has investments in foreign stocks and/or bonds denominated in foreign currencies. QPP's foreign currency exposures as of June 30, 2022 and 2021, are as follows (amounts in thousands of U.S. dollars):

Trade Currency	2022	2021
Euro Currency	\$ 3,990,109	\$ 5,072,081
Japanese Yen	1,430,532	1,896,299
Hong Kong Dollar	1,271,326	1,533,666
Pound Sterling	1,198,637	1,516,684
Swiss Franc	729,014	979,757
New Taiwan Dollar	571,480	752,851
Canadian Dollar	558,226	548,016
Indian Rupee	554,943	692,919
South Korean Won	539,341	915,570
Australian Dollar	351,925	478,009
Danish Krone	317,527	419,619
Brazilian Real	222,937	256,528
Singapore Dollar	189,611	167,275
Swedish Krona	179,226	284,905
Chinese Yuan Renminbi	114,614	106,095
South African Rand	103,336	170,265
Thailand Baht	94,237	67,368
Indonesian Rupiah	90,471	71,803
Yuan Renminbi	63,874	104,090
Norwegian Krone	60,835	118,564
Mexican Peso	60,481	71,379
New Israeli Shekel	41,212	26,560
Malaysian Ringgit	37,277	56,014
Polish Zloty	36,460	76,164
Qatari Riyal	31,213	13,095
UAE Dirham	30,312	21,377
Turkish Lira	19,570	22,265
Hungarian Forint	16,785	38,372
Philippine Peso	16,132	19,089
New Zealand Dollar	12,120	13,169
Chilean Peso	10,140	17,988
Kuwaiti Dinar	8,162	7,722
Romanian Leu	2,869	3,434
Czech Koruna	2,592	11,686
Russian Ruble	2,001	26,205
Colombian Peso	1,996	3,851
Egyptian Pound	489	623
Moroccan Dirham	1	1
Pakistan Rupee	-	413
Total	\$ 12,962,013	\$ 16,581,771

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

**Securities Lending Transactions**

**Credit Risk** - The quality ratings of investments held as collateral for Securities Lending of the QPP at June 30, 2022 and 2021, are as follows:

Investment Type and  
Fair Value of Securities  
Lending Transactions  
June 30, 2022  
(In thousands)

	Aa & Below	A1	A2	A3	Moody's Quality Ratings					Total	
					Baa2 & Below	Ba & Below	B & Below	Caa & Below	Ca & Below		Not Rated
Reverse repurchase agreements	\$ -	\$ -	\$ 564,804	\$ 3,482,083	\$ 41,492	\$ -	\$ -	\$ -	\$ -	\$ 3,505,896	\$ 7,594,275
Money market	486,044	-	-	-	-	-	-	-	-	394,887	880,931
Cash or cash equivalent	-	941,690	-	-	-	-	-	-	-	-	941,690
Uninvested	-	-	-	-	-	-	-	-	-	(1,818)	(1,818)
<b>Total</b>	<b>\$ 486,044</b>	<b>\$ 941,690</b>	<b>\$ 564,804</b>	<b>\$ 3,482,083</b>	<b>\$ 41,492</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,898,965</b>	<b>\$ 9,415,078</b>

Short term:

Reverse repurchase agreements

Money market

Cash or cash equivalent

Uninvested

Total

Percent of securities lending portfolio

Reverse repurchase agreements	5.16%	10.00%	6.00%	36.98%	0.44%	-%	-%	-%	-%	41.42%	100.00%
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Investment Type and  
Fair Value of Securities  
Lending Transactions  
June 30, 2021  
(In thousands)

	Aa & Below	A1	A2	A3	Moody's Quality Ratings					Total	
					Baa2 & Below	Ba & Below	B & Below	Caa & Below	Ca & Below		Not Rated
Reverse repurchase agreements	\$ -	\$ -	\$ 1,380,415	\$ 2,935,380	\$ 43,096	\$ -	\$ -	\$ -	\$ -	\$ 3,990,777	\$ 8,349,668
Money market	688,769	-	-	-	-	-	-	-	-	150,964	839,733
Cash or cash equivalent	-	1,021,239	-	-	-	-	-	-	-	-	1,021,239
Uninvested	-	-	-	-	-	-	-	-	-	(2,119)	(2,119)
<b>Total</b>	<b>\$ 688,769</b>	<b>\$ 1,021,239</b>	<b>\$ 1,380,415</b>	<b>\$ 2,935,380</b>	<b>\$ 43,096</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,139,622</b>	<b>\$ 10,208,521</b>

Short term:

Reverse repurchase agreements

Money market

Cash or cash equivalent

Uninvested

Total

Percent of securities lending portfolio

Reverse repurchase agreements	6.75%	10.00%	13.52%	28.75%	0.42%	-%	-%	-%	-%	40.55%	100.00%
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**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**  
**June 30, 2022 and 2021**

**Interest Rate Risk** - The lengths of investment maturities (in years) of the collateral for Securities Lending of the QPP, are as follows:

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
Short term:					
Reverse repurchase agreement	\$ 7,594,275	\$ 7,594,275	\$ -	\$ -	\$ -
Money market	880,931	880,931	-	-	-
Cash or cash equivalents	941,690	941,690	-	-	-
Uninvested	(1,818)	(1,818)	-	-	-
<b>Total</b>	<b>\$ 9,415,078</b>	<b>\$ 9,415,078</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Percent of securities lending portfolio	100.00%	100.00%	-%	-%	-%
Years to Maturity Investment Type June 30, 2021 (In thousands)	Investment Maturities (in Years)				
	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
Short term:					
Reverse repurchase agreement	\$ 8,349,668	\$ 8,349,668	\$ -	\$ -	\$ -
Money market	839,734	839,734	-	-	-
Cash or cash equivalents	1,021,239	1,021,239	-	-	-
Uninvested	(2,119)	(2,119)	-	-	-
<b>Total</b>	<b>\$ 10,208,522</b>	<b>\$ 10,208,522</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Percent of securities lending portfolio	100.00%	100.00%	-%	-%	-%

**Rate of Return** - For the years ended June 30, 2022 and 2021, the annual money-weighted rate of return on investments, net of investment expense, for the Plan was as follows:

	2022	2021
QPP	-8.24%	26.65%
COVSF	0.43%	0.09%

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

In fiscal year 2015, the Plan adopted GASB 72, *Fair Value Measurement and Application*. GASB 72 was issued to address accounting and financial reporting issues related to fair value measurements.

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

The Funds categorize their 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, 2022 and June 30, 2021:

## GASB 72 - Disclosure

Investments - at fair value

(In thousands)

	2022			Total
	Level 1	Level 2	Level 3	
Short-term investments:				
Commercial paper	\$ -	\$ 407,689	\$ -	\$ 407,689
Discount notes	-	179,281	-	179,281
Short-term investment fund	-	1,710,665	-	1,710,665
U.S. Treasury bills and agencies	-	398,729	-	398,729
Debt (fixed income) securities:				
Bank loans	-	106,294	-	106,294
Corporate and other	-	9,010,470	10,839	9,021,309
Mortgage debt securities	-	4,125,160	401,502	4,526,662
Treasury inflation-protected securities	-	2,921,007	-	2,921,007
U.S. government and agency	-	7,139,037	-	7,139,037
Equity securities:				
Domestic equity	21,370,400	-	204	21,370,604
International equity	11,520,947	-	-	11,520,947
Collective trust funds:				
Bank loans	-	1,064	-	1,064
Domestic equity	-	-	1,084	1,084
Mortgage debt securities	-	154,190	276,535	430,725
Opportunistic fixed income	721	232,787	2,739	236,247
Alternative investments:				
Infrastructure	-	-	1,426,385	1,426,385
Opportunistic fixed income	-	-	2,949,143	2,949,143
Private equity	-	-	7,985,627	7,985,627
Private real estate	-	-	5,672,114	5,672,114
Hedge fund investment measured at NAV	-	-	-	1,129
<b>Total investments</b>	<b>\$ 32,892,068</b>	<b>\$ 26,386,373</b>	<b>\$ 18,726,172</b>	<b>\$ 78,005,742</b>



## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

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

	2021			
	Level 1	Level 2	Level 3	Total
Short-term investments:				
Commercial paper	\$ -	\$ 999,092	\$ -	\$ 999,092
Short-term investment fund	-	1,110,196	-	1,110,196
U.S. Treasury bills and agencies	-	1,170,661	-	1,170,661
Debt (fixed income) securities:				
Bank loans	-	132,034	1,380	133,414
Corporate and other	-	10,293,433	107,974	10,401,407
Mortgage debt securities	-	5,548,567	448	5,549,015
Treasury inflation-protected securities	-	3,038,225	-	3,038,225
U.S. government and agency	-	8,274,897	-	8,274,897
Equity securities:				
Domestic equity	27,073,291	5,245	4,294	27,082,830
International equity	15,066,958	-	139,199	15,206,157
Collective trust funds:				
Bank loans	-	1,104	-	1,104
Domestic equity	-	-	1,181	1,181
Mortgage debt securities	-	170,238	312,456	482,694
Opportunistic fixed income	11,745	238,126	7,565	257,436
Alternative investments:				
Infrastructure	-	-	996,689	996,689
Opportunistic fixed income	-	-	2,603,942	2,603,942
Private equity	10,985	-	6,410,842	6,421,827
Private real estate	-	-	4,359,578	4,359,578
Hedge fund investment measured at NAV	-	-	-	1,240
Total investments	<u>\$ 42,162,979</u>	<u>\$ 30,981,818</u>	<u>\$ 14,945,548</u>	<u>\$ 88,091,585</u>

**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 and equity securities 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 are securities whose stated market price is unobservable by the marketplace, many of which are priced by the issuers or industry groups. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by the custodian bank. Debt and equity securities held in collective trust funds are held in those funds on behalf of the pension system and there is no restriction on the use and/or liquidation of those assets for the exclusive benefit of the Funds' participants.

**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.

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

**Alternative Investments**

Alternative investments include private equity, real estate, opportunistic fixed income, and infrastructure investments. 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 are valued by the GP 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, 2022 and 2021 amounted to \$10.4 billion and \$10 billion, respectively.

**NOTE 4 - TRANSFER TO VARIABLE SUPPLEMENTS FUNDS**

ACNY provides that the QPP transfer 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 the 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 or HFISE), less any cumulative deficiencies of prior years' excess earnings that fell below the yield of fixed income investments. The VSFs also receive credit for investment earnings on VSF assets.

The calculation of the HFISE requires the determination of the Hypothetical Interest Rate ("HIR"), which is computed by the Comptroller.

Due to the merging of Housing Police and Transit Police into The City's Police Department, there are no active members of the Housing Police and Transit Police; therefore, excess earnings on equity investments from the QPP, if any, do not produce any transfers to the HPOVSF, HPSOVSF, TPOVSF and TPSOVSF (collectively, the "Housing and Transit Police VSFs").

However, with the passage of Chapter 255/00, the QPP is required to transfer assets to the Housing and Transit Police VSFs whenever the assets of these VSFs are not sufficient to pay benefits. Such funding is provided through The City's annual required contributions to the QPP, which serves as the initial source of funding of VSF benefits. With respect to the benefits payable from HPSOVSF for fiscal years 2022 and 2021, the QPP was required to transfer approximately \$2.4 million and \$2.5 million, respectively. With respect to the benefits payable from TPSOVSF for fiscal years 2022 and 2021, the QPP was required to transfer approximately \$2.7 million and \$2.8 million, respectively. With respect to the benefits payable from

**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**  
**June 30, 2022 and 2021**

HPOVSF for fiscal years 2022 and 2021, the QPP was required to transfer approximately \$1.6 million and \$1.7 million, respectively. With respect to the benefits payable from TPOVSF for fiscal years 2022 and 2021, the QPP was required to transfer approximately \$3.3 million and \$3.3 million, respectively.

With respect to the COVSF, for fiscal year 2022, the excess earnings of the QPP, inclusive of prior years' cumulative deficiencies, was estimated to be equal to zero and therefore no transfer was due from the QPP to COVSF as of, and for the year end June 30, 2022. For fiscal year 2021, the excess earnings of the QPP, inclusive of prior years' cumulative deficiencies, exceeded zero and a liability and transfer of \$925 million is due from the QPP to COVSF as of, and for the year end June 30, 2021.

The amounts shown on the next page for the APV of Accumulated Plan Benefits are the measures of the present value of scheduled supplemental benefits estimated to be payable in the future as a result of employee service to date. They are calculated as the actuarial present value of credited projected benefits, prorated on service, and are intended to help users assess the funded status of the Plan on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make a comparison among VSFs.

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





## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

A comparison of the APB as calculated by the Actuary, with the net position restricted for pensions for the COVSF, HPOVSF, HPSOVSF, TPOVSF, TPOVSF and TPOVSF as of June 30, 2021 and June 30, 2020, follows (in millions):

	COVSF		HPOVSF		HPSOVSF		TPOVSF		TPOVSF		Total	
	2021 <sup>1</sup>	2020	2021 <sup>1</sup>	2020	2021 <sup>1</sup>	2020	2021 <sup>1</sup>	2020	2021 <sup>1</sup>	2020	2021 <sup>1</sup>	2020
Actuarial present value of accumulated plan benefits	\$ 1,079.7	\$ 1,058.1	\$ 10.2	\$ 11.3	\$ 16.0	\$ 17.0	\$ 21.6	\$ 22.7	\$ 17.8	\$ 18.9	\$ 1,145.3	\$ 1,128.0
Retirees currently receiving benefits	264.5	271.9	-	-	-	-	-	-	-	-	264.5	271.9
Active members	1,344.2	1,330.0	10.2	11.3	16.0	17.0	21.6	22.7	17.8	18.9	1,409.8	1,399.9
Total actuarial present value of accumulated plan benefits	1,175.4	353.2	-	-	-	-	-	-	-	-	1,175.4	353.2
Net position held in trust for benefits	\$ 168.8	\$ 976.8	\$ 10.2	\$ 11.3	\$ 16.0	\$ 17.0	\$ 21.6	\$ 22.7	\$ 17.8	\$ 18.9	\$ 234.4	\$ 1,046.7
Unfunded actuarial present value of accumulated plan benefits												

<sup>1</sup> Preliminary.

For purposes of the June 30, 2021 and June 30, 2020 actuarial valuations of the Funds, Chapter 125/00 has been taken into account in the determination of the unfunded APV of Accumulated Plan Benefits relative to the Supplemental benefit increases that began fiscal year 2001, and the automatic COLA that began fiscal year 2002 (see Note 1).

Section 13-194 of the ACNY provides that the Board of Trustees of NYCERS shall adopt, upon the recommendation of the Actuary, actuarial assumptions as to interest rate, mortality of retirees, and estimated number of active UCF members of NYCERS as of each June 30 who are expected to retire for service with at least 20 or 25 years of service as UCF members, depending on the Plan for use in making annual valuations of liabilities.

**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2022 and 2021**

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, 2021 and June 30, 2020:

	June 30, 2021 <sup>1</sup>	June 30, 2020
Investment rate of return	7.00% per annum. <sup>2</sup>	7.00% per annum. <sup>2</sup>
Post-retirement mortality	Tables adopted by NYCERS during Fiscal Year 2019 based on recent experience of UCF members of NYCERS for COVSF and on recent experience of POLICE for HPOVSF, HPSOVSF, TPOVSF and TPSOVSF. Applies mortality improvement scale MP-2020 published by the Society of Actuaries.	Tables adopted by NYCERS during Fiscal Year 2019 based on recent experience of UCF members of NYCERS for COVSF and on recent experience of POLICE for HPOVSF, HPSOVSF, TPOVSF and TPSOVSF. Applies mortality improvement scale MP-2020 published by the Society of Actuaries.
Active service: withdrawal, death, and disability	Tables adopted by NYCERS during Fiscal Year 2019 based on recent experience of UCF members of NYCERS for COVSF. NA for HPOVSF, HPSOVSF, TPOVSF and TPSOVSF. Applies mortality improvement scale MP-2020 published by the Society of Actuaries to active ordinary death mortality rates and pre-commencement mortality rates for deferred vesteds.	Tables adopted by NYCERS during Fiscal Year 2019 based on recent experience of UCF members of NYCERS for COVSF. NA for HPOVSF, HPSOVSF, TPOVSF and TPSOVSF. Applies mortality improvement scale MP-2020 published by the Society of Actuaries to active ordinary death mortality rates and pre-commencement mortality rates for deferred vesteds.
Service retirement	Tables adopted by NYCERS during Fiscal Year 2019 based on recent experience of UCF members of NYCERS for COVSF. Varies from earliest age member is eligible to retire (age at completion of 20 years (25 years) of service) until age 63. Not applicable for HPOVSF, HPSOVSF, TPOVSF and TPSOVSF.	Tables adopted by NYCERS during Fiscal Year 2019 based on recent experience of UCF members of NYCERS for COVSF. Varies from earliest age member is eligible to retire (age at completion of 20 years (25 years) of service) until age 63. Not applicable for HPOVSF, HPSOVSF, TPOVSF and TPSOVSF.
COLA adjustments for future NYCERS' COLA benefits <sup>1</sup>	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.	1.5% per annum for Auto COLA. 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.

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

**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 sufficient to accumulate assets to pay benefits when due.

**Member Contributions** - Members who joined prior to July 27, 1976 contribute by salary deductions based on a normal rate of contribution that is assigned by the Plan at membership. The member normal rate, which is dependent upon age and actuarial tables in effect at the time of membership, is determined to provide approximately one-fourth of the service retirement allowance at the earliest age for service retirement. For age at membership equal to 20, the member normal rate ranges between 5.80% and 9.10%. For age at membership equal to 40, the member normal rate ranges between 4.30% and 4.80%.

Members who joined on or after July 27, 1976 and before April 1, 2012, are mandated to contribute 3.0% of salary during all years of coverage except for Department of Correction members who contribute 3.0% for not more than 30 years. Effective October 1, 2000, certain members are not required to make contributions after the 10th anniversary of their membership date or completion of 10 years of credited service, whichever is earlier. In addition, certain Tier 2, 3 and 4 members contribute additional amounts ranging from 1.85% to 7.46% for improved early retirement benefits.

Members who join on and after April 1, 2012 (Tier 6) are mandated to contribute Basic Member Contributions ("BMCs") until they separate from City service or until they retire. The BMC rate is dependent on annual wages earned during a plan year and ranges from 3.0% for salaries up to \$45,000 and as much as 6.0% for salaries greater than \$100,000.

In addition to the BMC, Tier 6 Special Plan members must contribute Additional Member Contributions ("AMCs"). The AMC rate is plan-specific. Tier 6 Special Plan members must contribute AMCs until they attain 30 years of service or retire, whichever comes first, except for TBTA 20/50 Plan members, who must contribute AMCs for 20 years.

Uniformed members of the Department of Correction, uniformed members of the Department of Sanitation, and DA Investigator members employed in a District Attorney office, who became employed in one of these titles on or after April 1, 2012, participate in a 22-Year Plan. These members are required to contribute 3% of gross wages until the earlier of 25 years of service or until they retire.

**Employer Contributions** - Statutorily required 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, 2022, based on an actuarial valuation as of June 30, 2020, was \$3.831 billion, and the Statutory Contribution for the year ended June 30, 2021, based on an actuarial valuation as of June 30, 2019, was \$3.763 billion. The Statutory Contributions for fiscal year 2022 was equal to the Actuarial Contributions. The Statutory Contributions for fiscal year 2021 was not 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.

New York City Employees' Retirement System

NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

**NOTE 6 - NET PENSION LIABILITY**

The components of the net pension liability of the Employer at June 30, 2022 and 2021, for the Funds, were as follows:

	(In thousands)						
	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	Total
<b>June 30, 2022</b>							
Total pension liability	\$ 95,209,212	\$ 1,417,618	\$ 10,457	\$ 16,158	\$ 21,961	\$ 18,051	\$ 96,693,457
Fiduciary net position <sup>1</sup>	77,460,962	1,126,400	281	253	303	342	78,588,541
Employers' net pension liability	\$ 17,748,250	\$ 291,218	\$ 10,176	\$ 15,905	\$ 21,658	\$ 17,709	\$ 18,104,916
Fiduciary net position as a percentage of the total pension liability	81.36%	79.46%	2.69%	1.57%	1.38%	1.89%	81.28%

	(In thousands)						
	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	Total
<b>June 30, 2021</b>							
Total pension liability	\$ 92,078,292	\$ 1,403,674	\$ 11,541	\$ 17,180	\$ 22,847	\$ 19,108	\$ 93,552,642
Fiduciary net position <sup>1</sup>	85,910,712	1,227,658	161	175	139	164	87,139,009
Employers' net pension liability	\$ 6,167,580	\$ 176,016	\$ 11,380	\$ 17,005	\$ 22,708	\$ 18,944	\$ 6,413,633
Fiduciary net position as a percentage of the total pension liability	93.30%	87.46%	1.40%	1.02%	0.61%	0.86%	93.14%

<sup>1</sup> Such amounts represent the preliminary Funds' fiduciary net position and may differ from the final Funds' fiduciary net position.

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

**Actuarial Methods and Assumptions**

The total pension liability as of June 30, 2022 and 2021 were determined by actuarial valuations as of June 30, 2021 (Preliminary) and June 30, 2020 (Updated 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 increases 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 Auto COLA. 2.5% per annum for Escalation.

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

The fiscal year 2021 results reflect changes in the actuarial assumptions and methods from the prior year. These changes reflect refinements and improvements to the actuarial assumptions and methods under the judgment of the Chief Actuary.

The fiscal year 2022 results reflect change in the plan provisions from the prior year. This change reflects the enactment of Chapter 56 of the Laws of 2022.

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 December 31, 2018, 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 Police Pension Fund." The actuarial assumptions and methods described in that report are referred to as the "2019 A&M."

On July 27, 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, 2021 total pension liability was calculated from the Updated Preliminary June 30, 2020 actuarial valuation, which was based on the Revised 2021 A&M.

The June 30, 2022 total pension liability was calculated from the Preliminary June 30, 2021 actuarial valuation (adjusted for Chapter 56 of the Laws of 2022 and certain other post-valuation refinements), which was based on the Revised 2021 A&M.

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

**New York City Employees' Retirement System****NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED****June 30, 2022 and 2021**

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

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

Under this method, actuarial gains and losses, as they occur, reduce and increase the UAL and are explicitly identified and amortized. Increases or decreases in obligations due to benefit changes, actuarial assumption changes, and actuarial method changes are also explicitly identified and amortized.

The fiscal year 2022 and fiscal year 2021 Employer Contributions do not reflect any potential impact related to the bankruptcy filing on December 3, 2009 by the New York City Off-Track Betting Corporation ("OTB") and to its shutdown on December 7, 2010. The results were developed herein assuming OTB is a going concern. Beginning with fiscal year 2019, there was a change in the allocation of pension contributions attributable to OTB. OTB's prior unpaid contributions with interest have been amortized over 15 years (14 payments) beginning in fiscal year 2019. The Actuary has split this amount evenly between the State of New York, based upon a determination by the NYCERS Board of Trustees that the State is the successor to OTB under Administrative Code Section 13-130, and The City, based upon The City's offer to advance half this amount, subject to appropriations, pending payment by the State. Beginning with fiscal year 2021, The City has agreed to pay the full amount attributable to OTB, subject to appropriations, pending payment by the State.

The PV of projected benefits includes the obligations of the Plan to the HPOVSF, the HPSOVSF, the TPOVSF, the TPSOVSF, and the COVSF (referred to collectively as the "NYCERS VSFs"), which are recognized through a methodology where the PV of future VSF transfers from NYCERS to the NYCERS VSFs is included directly as an actuarial liability of NYCERS. This amount is computed as the excess, if any, of the PV of benefits of each individual NYCERS VSF over the AVA of the respective, individual NYCERS VSF. 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 Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

**Expected Rate of Return on Investments**

The long-term expected rate of return on QPP investments was determined using a building-block method in which best-estimate ranges of expected real rates of return (i.e., expected returns, net of QPP investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset 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, 2022 and 2021:

Asset Class	As of June 30, 2022		As of June 30, 2021	
	Target Asset Allocation	Long-Term Expected Real Rate of Return	Target Asset Allocation	Long-Term Expected Real Rate of Return
<b>Public Markets</b>				
U.S. public market equities	27.0%	7.0%	27.0%	7.1%
Developed public market equities	12.0%	7.2%	12.0%	7.2%
Emerging public market equities	5.0%	9.0%	5.0%	9.0%
Fixed income	30.5%	2.5%	30.5%	1.8%
<b>Private Markets (Alternative Investments)</b>				
Private equity	8.0%	11.3%	8.0%	11.3%
Private real estate	7.5%	6.7%	7.5%	6.9%
Infrastructure	4.0%	6.0%	4.0%	6.0%
Opportunistic fixed income	6.0%	7.4%	6.0%	7.1%
<b>Total</b>	<b>100.0%</b>		<b>100.0%</b>	

**Discount Rate**

The discount rate used to measure the total pension liability as of both June 30, 2021 and 2020 was 7.0% per annum. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the current contribution rate and that The City's contributions will be made in accordance with the Statutory Contributions 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 members. Therefore, the long-term expected rate of return on Funds' investments was applied to all periods of projected benefit payments to determine the total pension liability.

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

The following presents the net pension liability of the Employer for the Plan, 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 one percentage point lower (6.0%) or one percentage point higher (8.0%) than the current rate as of June 30, 2022 and 2021.

(In thousands) Employer Net Pension Liability - June 30, 2022	1% Decrease (6.00%)	Discount Rate (7.00%)	1% Increase (8.00%)
QPP	\$ 28,298,702	\$ 17,748,250	\$ 8,836,749
COVSF	443,066	291,218	163,220
HPOVSF	10,753	10,176	9,655
HPSOVSF	16,846	15,905	15,059
TPOVSF	22,904	21,658	20,536
TPSOVSF	18,725	17,709	16,794
Total	\$ 28,810,996	\$ 18,104,916	\$ 9,062,013

(In thousands) Employer Net Pension Liability - June 30, 2021	1% Decrease (6.00%)	Discount Rate (7.00%)	1% Increase (8.00%)
QPP	\$ 16,426,655	\$ 6,167,579	\$ (2,537,351)
COVSF	327,780	176,015	48,228
HPOVSF	12,041	11,379	10,785
HPSOVSF	18,033	17,004	16,082
TPOVSF	24,060	22,708	21,492
TPSOVSF	20,067	18,945	17,935
Total	\$ 16,828,636	\$ 6,413,630	\$ (2,422,829)

**NOTE 7 - MEMBER LOANS**

In general, most members are permitted to borrow up to 75% of their own contributions, including accumulated interest. The balance of member loans receivable at June 30, 2022 and 2021 was \$1.08 billion and \$1.08 billion, respectively.

**NOTE 8 - RELATED PARTIES**

The Comptroller has been appointed by law as custodian for the assets of NYCERS. Securities are held by certain banks under custodial agreements with the Comptroller. The Comptroller, the Financial Information Services Agency ("FISA"), and the Office of Payroll Administration ("OPA") also provide cash receipt and cash disbursement services to NYCERS. Actuarial services are provided to NYCERS by the Office of the Actuary employed by the Boards of Trustees of The City's main pension systems. The City's Corporation Counsel provides legal services to NYCERS. Other administrative services are also provided by The City. The aforementioned services are provided by employees or officers of The City who may also be participants in NYCERS.



## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

**NOTE 9 - ADMINISTRATIVE AND INVESTMENT EXPENSES**

Chapter 593 of the Laws of 1996, effective July 1, 1997, authorized the Board of Trustees to draw upon QPP assets to pay the administrative expenses incurred by the QPP. Prior to that year, The City had directly paid all QPP administrative expenses. Under Chapter 593/96, both the administrative and investment expenses were billed to the participating employers in the following year. Under Chapter 152 of the Laws of 2006, those expenses are billed in the second following fiscal year.

In fiscal year 2022, total non-investment expenses attributable to the QPP were approximately \$114.4 million, of which \$105 million was paid from the assets of the QPP and \$9.4 million was incurred on behalf of the QPP by other City agencies. In fiscal year 2021, total non-investment expenses attributable to the QPP were approximately \$98 million, of which \$87.4 million was paid from the assets of the QPP and \$10.6 million was incurred on behalf of the QPP by other City agencies

In fiscal year 2022, investment expenses, exclusive of fees related to securities lending transactions, were \$351.4 million, of which \$349.2 million was charged to the investment earnings of the QPP, and \$2.2 million was incurred by the Comptroller's Office. For fiscal year 2021, investment expenses, exclusive of fees related to securities lending transactions, were \$314.5 million, of which \$313.2 million was charged to the investment earnings of the QPP, and \$1.3 million was incurred by the Comptroller's Office.

In fiscal year 2000, the Plan entered into a new lease agreement to rent office space for its headquarters. The original agreement expired in 2020, with options to renew through 2030. In fiscal year 2020, the headquarters office space lease was amended and renewed. The amended lease agreement expires in 2035 and incorporates one option to renew for five additional years into 2040.

In fiscal year 2006, the Plan entered into a new lease agreement to rent office space for a business recovery site in case its headquarters was not operational. The previous agreement expired in November 2021 and the Plan exercised the option to renew the agreement through November 2026.

NYCERS is the lessee of two office spaces under right-of-use leases. The present value of lease obligations at June 30, 2022 is \$62 million. Rent expenses under the lease agreements for fiscal years 2022 and 2021 were approximately \$5 million and \$5.5 million, respectively. Future minimum rental payments under right-of-use leases are shown in the table below:

	<u>Right-of-Use</u>
Future minimum rental payments:	
2023	\$ 5,293,168
2024	5,699,507
2025	5,853,332
2026	6,369,767
2027	5,596,412
Thereafter	<u>42,035,750</u>
Total lease payments	70,847,936
Less: Imputed Interest	<u>(8,696,035)</u>
Present value of lease obligations at June 30, 2022	<u>\$ 62,151,901</u>

**New York City Employees' Retirement System****NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED****June 30, 2022 and 2021****NOTE 10 - CONTINGENT LIABILITIES AND OTHER MATTERS**

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

**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 a discussion of the most recent actuarial studies for NYCERS.

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

The most recently completed study was published by Bolton, Inc. dated June 2019. Bolton analyzed experience for the four- and 10-year periods ended June 30, 2017 and made recommendations with respect to the actuarial assumptions and methods based on their analysis. Based, in part, on these recommendations, the Actuary proposed new assumptions and methods for use in determining Employer Contributions for fiscal years beginning on and after July 1, 2018. These assumptions and methods have been adopted by the Board of Trustees during fiscal year 2019. Previously, Gabriel, Roeder, Smith & Company (GRS) published their study in October 2015.

**OTB Bankruptcy** - During December 2009, the New York City OTB filed a petition with the United States Bankruptcy Court of the Southern District of New York under Chapter 9 of the Bankruptcy Code.

The fiscal year 2021 and fiscal year 2020 Employer contributions do not take into account OTB's filing. The fiscal year 2021 and fiscal year 2020 Employer contributions, and the allocation to OTB, assumed that OTB was a going concern. Any amounts due but unpaid by OTB for fiscal year 2021 and fiscal year 2020 are treated as a receivable that is expected to be paid in full.

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

Chapter 18 of the Laws of 2012 placed certain limitations on Tier 3 and Tier 4 benefits available to participants hired on and after April 1, 2012 in most New York State PERS, including NYCERS. Some of the provisions in this law are commonly referred to as Tier 6.

Chapter 3 of the Laws of 2013 amends various sections of law relating to actuarial assumptions and methods. These changes include: the Actuarial Interest Rate (AIR) used for the calculation of employer contributions lowered to 7%; the interest rate for Tier 3, 4 and 6 loans lowered to 6%; the Funding Method for calculating employer contributions changed from the Frozen Initial Liability Method to the Entry Age Cost Method; the Tier 1 and 2 interest rate remains at 8.25% until June 30, 2016; and the interest on late Employer contributions became permitted.

Chapter 489 of the Laws of 2013 allows certain vested members to apply for a three-quarters disability benefit pursuant to the WTC Law; allows the eligible beneficiaries of deceased vested members (who die prior to payability of a retirement allowance) to apply for accidental death benefits; and for vested members and certain eligible beneficiaries, it extends the Notice of Participation filing deadline to September 11, 2014.

**New York City Employees' Retirement System****NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED****June 30, 2022 and 2021**

Chapter 522 of the Laws of 2013 authorizes refunds of the employee portion of Additional Member Contributions (AMCs) made by certain eligible former participants of a Chapter 96 Plan (55/25 or 57/5).

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

Chapter 472 of the Laws of 2014 amends Retirement and Social Security Law, Section 2, to modify qualifications and extended the deadline for filing a WTC Notice of Participation to September 11, 2015 for members that were not vestees.

Chapter 510 of the Laws of 2015 clarifies for Tier 6, the definition of multiple employers for the purpose of exclusion of wages, and changes the Plan year for contributions from April 1 through March 31, to January 1 through December 31.

Chapter 41 of the Laws of 2016 removes the specified periods of time, medal requirements, and theaters of operation in which military service would have 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.

Petition for Retirement Benefit Enhancement, dated August 15, 2016 and signed by the Mayor on August 30, 2016, provides enhanced disability benefits for Accidental Disability Retirement and Ordinary Disability Retirement benefits for Sanitation Workers. Sanitation Workers who become 22-Year Plan members before January 1, 2017 have the option to elect participation in the Enhanced Disability Benefits. Sanitation Workers who become 22-Year Plan members on and after January 1, 2017 are mandated into the Enhanced Disability Benefits. Members electing or mandated into this benefit will pay an extra 1.3% of wages.

Petition for Retirement Benefit Enhancement, dated November 2, 2016 and signed by the Mayor on November 29, 2016, provides enhanced disability benefits for Accidental Disability Retirement and Ordinary Disability Retirement benefits for Correction Officers. Correction Officers who become 22-Year Plan members before January 1, 2017 have the option to elect participation in the Enhanced Disability Benefits. Correction Officers who become 22-Year Plan members on and after January 1, 2017 are mandated into the Enhanced Disability Benefits. Members electing or mandated into this benefit will pay an extra 0.8% of wages.

Petition for Retirement Benefit Enhancement, dated November 21, 2016 and signed by the Mayor on November 29, 2016, provides enhanced disability benefits for Accidental Disability Retirement and Ordinary Disability Retirement benefits for Wardens, including Assistant Deputy Wardens, Deputy Wardens and Deputy Wardens in Command (collectively, "ADW/DWs"). ADW/DWs who become 22-Year Plan members before January 1, 2017 have the option to elect participation in the Enhanced Disability Benefits. ADW/DWs who become 22-Year Plan members on and after January 1, 2017 are mandated into the Enhanced Disability Benefits. Members electing or mandated into this benefit will pay an extra 0.8% of wages.

Petition for Retirement Benefit Enhancement, dated November 25, 2016 and signed by the Mayor on November 29, 2016, provides enhanced disability benefits for Accidental Disability Retirement and Ordinary Disability Retirement benefits for Correction Captains. Correction Captains who become 22-Year Plan members before January 1, 2017 have the option to elect participation in the Enhanced Disability Benefits. Correction Captains who become 22-Year Plan members on and after January 1, 2017 are mandated into



**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**  
**June 30, 2022 and 2021**

the Enhanced Disability Benefits. Members electing or mandated into this benefit will pay an extra 0.8% of wages.

Chapter 326 of the Laws of 2016 extends the deadline to file a World Trade Center Notice of Participation to September 11, 2018.

Chapter 428 of 2016 provides certain NYC Transit Authority NYCERS members who were employed as Transit Managers as of October 1, 2006 a refund of the employee portion of Additional Member Contributions.

Chapter 438 of the Laws of 2016 eliminates restrictions upon transferring between public retirement systems.

Chapter 61 of the Laws of 2017 permits NYCERS Uniformed Correction/Sanitation revised plan members and Investigator revised plan members ("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, making that process more difficult.

The following outlines the changes for the New York City Uniformed Correction/Sanitation revised plan members ("22-Year Plan Members").

**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 1.3% for Sanitation Workers and 0.8% for Correction Officers, ADW/DWs, and Correction Captains, which 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 Sanitation Workers appointed September 1, 2016 and later, and for Correction Officers, ADW/DWs, and Correction Captains appointed January 1, 2017 and later (i.e., the dates the respective 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.

**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).

## New York City Employees' Retirement System

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

#### 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 Tier 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 are subject to a FAS5 calculation for ODR, ADR, Service and Vested Retirement.

The following changes apply to Eligible Members:

##### 1. Eligibility for ADR

- Eligibility for ADR was extended beyond 22 years; members can apply at any time as long as they are active.

##### 2. Safeguards

- RSSL § 507(d) no longer applies to ADR retirees. The safeguards in effect prior to April 1, 2012 apply to Uniformed Correction/Sanitation revised plan members, and those in effect prior to July 1, 2009 apply to retired Investigator revised plan Members. The safeguards include 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.

Chapter 457 of the Laws of 2017 amends the New York State General Municipal Law to provide pension benefits to widows or widowers of sanitation workers; defines eligible beneficiary of a NYC uniformed sanitation revised plan member; provides the Special Accidental Death Benefits to eligible beneficiaries of NYCERS Sanitation members; expands the definition of a Tier 4 and modified Tier 3 Uniformed Sanitation Workers' eligible beneficiaries for Accidental Death Benefits.

Chapter 467 of the Laws of 2017 allows certain Special Plan members to use a surplus in their Additional Member Contributions (AMCs) to offset any deficit in their Basic Member Contribution account (MCAF), or to use a surplus in Basic Member Contributions (BMCs) to offset a deficit in the Additional Member Contribution account (RRF).

**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**

**June 30, 2022 and 2021**

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

Chapter 89 of the Laws of 2020 provides death benefits to statutory beneficiaries of certain members and retirees whose death was a result of or was contributed to by COVID-19.

**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. While the Governor ended the state of emergency in New York State on September 12, 2022, the state of emergency in The City remains in effect. The ultimate impact of the COVID-19 pandemic on the Plan cannot be determined at this time.

The CARES Act, signed into law on March 27, 2020, is a major piece of federal legislation providing relief to individuals, as well as state and local governments, in connection with the impact of the COVID-19 outbreak. The CARES Act impacted the operations of NYCERS during fiscal year 2022 and 2021 in the following ways:

- a) qualified individuals who were entitled to receive a QPP refund (other than a refund of a deduction in error) were permitted to classify such a refund as a coronavirus-related distribution, not subject to the 10% penalty for individuals younger than 59½ years of age (subject to the limitation that the sum of all coronavirus-related distributions cannot exceed \$100,000), until December 30, 2020;
- b) qualified individuals were permitted to apply for coronavirus-related loans, with a higher aggregate maximum amount than ordinary loans (for QPP/AMC loans, the expanded limit was the lesser of \$100,000 or 75% of the account balance), until September 23, 2020;
- c) qualified individuals with outstanding loans of any type were permitted to apply for extension of any loan payments due between March 27, 2020 and December 31, 2020 by up to one year.

For the purposes of the above provisions, the CARES Act defined a "qualified individual" as an individual who:

1. is diagnosed with COVID-19 by a test approved by the Centers for Disease Control and Prevention; or
2. has a spouse or dependent diagnosed with COVID-19 by a test approved by the Centers for Disease Control and Prevention; or
3. experiences adverse financial consequences as a result of (i) being quarantined, furloughed or laid off or having work hours reduced due to COVID-19, (ii) being unable to work due to lack of childcare due to COVID-19, (iii) being unable to work due to closing or reducing hours of a business owned or operated by the individual due to COVID-19, or (iv) other factors as determined by the Secretary of the Treasury.

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

Chapter 424 of the Laws of 2021 expands eligibility to New York City public employees that were not NYCERS members during the World Trade Center (WTC) qualifying period and participated in Rescue, Recovery or Cleanup Operations. If these members later join NYCERS and purchase some or all of the WTC pre-membership service, they may be considered for a disability retirement under the WTC Law.

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2022 and 2021

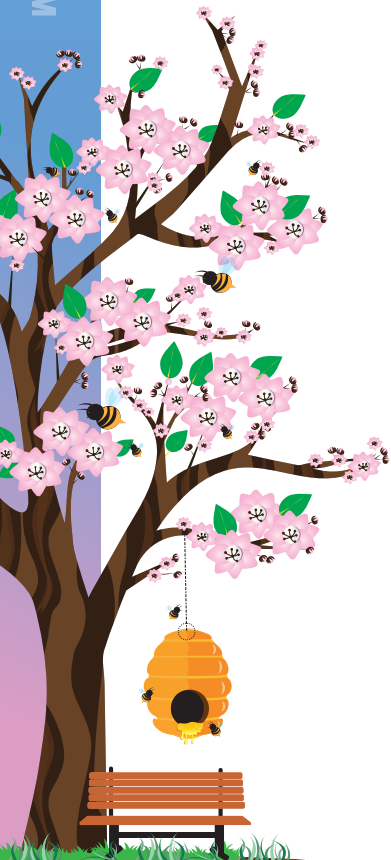
Chapter 425 of the Laws of 2021 allows for the electronic submission of a Notice of Participation in World Trade Center Rescue, Recovery, or Cleanup Operations.

Chapter 56 of the Laws of 2022, signed on April 9, 2022, was passed as part of the budget and provided for the following three relevant parts:

**Part HH** waives RSSL § 211 and § 212 approval and income limitations on retirees as a result of earnings from employment in public schools in the State. It is deemed repealed June 30, 2023.

**Part SS** excludes certain forms of overtime and extracurricular compensation from the salary used to determine Tier 6 BMC Contribution Rates during the specified period of 2022 through 2024.

**Part TT** reduces the Tier 6 vesting requirement from 10 years to 5 years and allows for retirement with five years of service.



New York City Employees' Retirement System

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

June 30, 2022  
(In thousands)

	QPP*	COVSF	HPOVSF	HPSVSF	TPOVSF	TPSOVSF	TOTAL
Total pension liability:							
Service cost	\$ 2,017,264	\$ 18,162	\$ -	\$ -	\$ -	\$ -	\$ 2,035,426
Interest	6,385,837	95,958	763	1,128	1,502	1,258	6,486,446
Differences between expected and actual experience	481,068	3,589	(534)	4	450	4	484,581
Changes of assumptions	-	-	-	-	-	-	-
Changes of benefit terms	83,787	-	-	-	-	-	83,787
Benefit payments and withdrawals	(5,837,036)	(103,765)	(1,313)	(2,154)	(2,838)	(2,319)	(5,949,425)
Net change in total pension liability	3,130,920	13,944	(1,084)	(1,022)	(886)	(1,057)	3,140,815
Total pension liability - beginning	92,078,292	1,403,674	11,541	17,180	22,847	19,108	93,552,642
Total pension liability - ending (a)	95,209,212	1,417,618	10,457	16,158	21,961	18,051	96,693,457
Plan fiduciary net position:							
Employer contributions	3,831,464	-	-	-	-	-	3,831,464
Member contributions	595,587	-	-	-	-	-	595,587
Net investment income	(6,917,849)	2,507	-	-	-	-	(6,915,342)
Benefit payments and withdrawals	(5,837,036)	(103,765)	(1,313)	(2,154)	(2,838)	(2,319)	(5,949,425)
Payments to other retirement systems	(11,046)	-	-	-	-	-	(11,046)
Transfers to VSFs	(9,164)	-	1,433	2,232	3,002	2,497	-
Administrative expenses	(104,988)	-	-	-	-	-	(104,988)
Other	3,282	-	-	-	-	-	3,282
Net change in plan fiduciary net position	(8,449,750)	(101,258)	120	78	164	178	(8,550,468)
Accrued transfers to/from VSFs	-	-	-	-	-	-	-
Plan fiduciary net position - beginning	85,910,712	1,227,658	161	175	139	164	87,139,009
Plan fiduciary net position - ending (b) *	77,460,962	1,126,400	281	253	303	342	78,588,541
Employer's net pension liability - ending (a)-(b)	\$ 17,748,250	\$ 291,218	\$ 10,176	\$ 15,905	\$ 21,658	\$ 17,709	\$ 18,104,916
Plan fiduciary net position as a percentage of the total pension liability	81.36%	79.46%	2.69%	1.57%	1.38%	1.89%	81.28%
Covered payroll	\$ 15,294,726	N/A	N/A	N/A	N/A	N/A	\$ 15,294,726
Employer's net pension liability as a percentage of covered payroll	116.04%	N/A	N/A	N/A	N/A	N/A	118.37%

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

Note: In accordance with paragraph 50 of GASB No. 67, this schedule should present information for 10 years, if available. The information presented here pertains to periods beginning with the June 30, 2014 fiscal year, the Plan's adoption year of GASB No. 67. Additional years will be added until the 10-year requirement is met.

See Report of Independent Certified Public Accountants.



## SCHEDULE 1 - CONTINUED

## New York City Employees' Retirement System

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOSJune 30, 2021  
(in thousands)

	QPP*	COVSF	HPOVSF	HPSVSF	TPOVSF	TPSOVSF	TOTAL
Total pension liability:							
Service cost	\$ 2,025,553	\$ 19,347	\$ -	\$ -	\$ -	\$ -	\$ 2,044,900
Interest	6,242,176	97,268	799	1,221	1,645	1,315	6,344,424
Differences between expected and actual experience	(125,634)	(26,709)	213	(129)	(400)	561	(152,098)
Changes of assumptions	(381,827)	(5,042)	(152)	(213)	(293)	(249)	(387,776)
Changes of benefit terms	-	-	-	-	-	-	-
Benefit payments and withdrawals	(5,566,922)	(101,048)	(1,448)	(2,251)	(3,153)	(2,562)	(5,677,384)
Net change in total pension liability	2,193,346	(16,184)	(588)	(1,372)	(2,201)	(935)	2,172,066
Total pension liability - beginning	89,884,946	1,419,858	12,129	18,552	25,048	20,043	91,380,576
Total pension liability - ending (a)	92,078,292	1,403,674	11,541	17,180	22,847	19,108	93,552,642
Plan fiduciary net position:							
Employer contributions	3,761,532	-	-	-	-	-	3,761,532
Member contributions	579,560	-	-	-	-	-	579,560
Net investment income	18,263,201	434	-	-	-	-	18,263,635
Benefit payments and withdrawals	(5,566,922)	(101,048)	(1,448)	(2,251)	(3,153)	(2,562)	(5,677,384)
Payments to other retirement systems	(5,671)	-	-	-	-	-	(5,671)
Transfers to VSFs	(9,817)	-	1,572	2,363	3,208	2,674	-
Administrative expenses	(87,413)	-	-	-	-	-	(87,413)
Other	3,365	-	-	-	-	-	3,365
Net change in plan fiduciary net position	16,937,835	(100,614)	124	112	55	112	16,837,624
Accrued transfers to/from VSFs	(924,562)	924,562	-	-	-	-	-
Plan fiduciary net position - beginning	69,897,439	403,710	37	63	84	52	70,301,385
Plan fiduciary net position - ending (b) *	85,910,712	1,227,658	161	175	139	164	87,139,009
Employer's net pension liability - ending (a)-(b)	\$ 6,167,580	\$ 176,016	\$ 11,380	\$ 17,005	\$ 22,708	\$ 18,944	\$ 6,413,633
Plan fiduciary net position as a percentage of the total pension liability	93.30%	87.46%	1.40%	1.02%	0.61%	0.86%	93.14%
Covered payroll	\$ 15,289,347	N/A	N/A	N/A	N/A	N/A	\$ 15,289,347
Employer's net pension liability as a percentage of covered payroll	40.34%	N/A	N/A	N/A	N/A	N/A	41.95%

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

Note: In accordance with paragraph 50 of GASB No. 67, this schedule should present information for 10 years, if available. The information presented here pertains to periods beginning with the June 30, 2014 fiscal year, the Plan's adoption year of GASB No. 67. Additional years will be added until the 10-year requirement is met.

See Report of Independent Certified Public Accountants.

New York City Employees' Retirement System  
 REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
 SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

June 30, 2020  
 (In thousands)

	QPP*	COVSF	HPOVSF	HPSOVFSF	TPOVSF	TPSOVSF	TOTAL
Total pension liability:							
Service cost	\$ 2,017,384	\$ 20,315	\$ -	\$ -	\$ -	\$ -	\$ 2,037,699
Interest	5,994,643	96,043	886	1,278	1,776	1,418	6,086,044
Differences between expected and actual experience	1,050,131	1,822	(471)	312	(346)	(177)	1,051,271
Changes of assumptions	-	-	-	-	-	-	-
Changes of benefit terms	-	-	-	-	-	-	-
Benefit payments and withdrawals	(5,201,781)	(98,421)	(1,840)	(2,543)	(3,459)	(2,869)	(5,310,913)
Net change in total pension liability	3,850,377	19,759	(1,425)	(953)	(2,029)	(1,628)	3,864,101
Total pension liability - beginning	86,034,569	1,400,099	13,554	19,505	27,077	21,671	87,516,475
Total pension liability - ending (a)	89,884,946	1,419,858	12,129	18,552	25,048	20,043	91,380,576
Plan fiduciary net position:							
Employer contributions	3,727,558	-	-	-	-	-	3,727,558
Member contributions	563,893	-	-	-	-	-	563,893
Net investment income	2,404,316	5,400	-	-	-	-	2,409,716
Benefit payments and withdrawals	(5,201,781)	(98,421)	(1,840)	(2,543)	(3,459)	(2,869)	(5,310,913)
Payments to other retirement systems	(9,087)	-	-	-	-	-	(9,087)
Transfers to VSFs	(10,111)	-	1,662	2,428	3,290	2,731	-
Administrative expenses	(77,667)	-	-	-	-	-	(77,667)
Other	3,317	-	-	-	-	-	3,317
Net change in plan fiduciary net position	1,400,438	(93,021)	(178)	(115)	(169)	(138)	1,306,817
Accrued transfers to/from VSFs	(31,704)	31,704	-	-	-	-	-
Plan fiduciary net position - beginning	68,528,705	465,027	215	178	253	190	68,994,568
Plan fiduciary net position - ending (b) *	69,897,439	403,710	37	63	84	52	70,301,385
Employer's net pension liability - ending (a)-(b)	\$ 19,987,507	\$ 1,016,148	\$ 12,092	\$ 18,489	\$ 24,964	\$ 19,991	\$ 21,079,191
Plan fiduciary net position as a percentage of the total pension liability	77.76%	28.43%	0.31%	0.34%	0.34%	0.26%	76.93%
Covered payroll	\$ 14,981,461	N/A	N/A	N/A	N/A	N/A	\$ 14,981,461
Employer's net pension liability as a percentage of covered payroll	133.41%	N/A	N/A	N/A	N/A	N/A	140.70%

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

Note: In accordance with paragraph 50 of GASB No. 67, this schedule should present information for 10 years, if available. The information presented here pertains to periods beginning with the June 30, 2014 fiscal year, the Plan's adoption year of GASB No. 67. Additional years will be added until the 10-year requirement is met.

See Report of Independent Certified Public Accountants.

## SCHEDULE 1 - CONTINUED

## New York City Employees' Retirement System

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOSJune 30, 2019  
(In thousands)

	QPP*	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	TOTAL
Total pension liability:							
Service cost	\$ 2,009,186	\$ 21,807	\$ -	\$ -	\$ -	\$ -	\$ 2,030,993
Interest	5,737,834	96,304	956	1,321	1,956	1,466	5,839,837
Differences between expected and actual experience	1,880,980	(27,412)	(388)	344	(1,441)	392	1,852,475
Changes of assumptions	(933,377)	3,457	170	227	328	266	(928,929)
Changes of benefit terms	-	-	-	-	-	-	-
Benefit payments and withdrawals	(5,153,002)	(94,459)	(1,641)	(2,465)	(3,364)	(2,748)	(5,257,679)
Net change in total pension liability	3,541,621	(303)	(903)	(573)	(2,521)	(624)	3,536,697
Total pension liability - beginning	82,492,948	1,400,402	14,457	20,078	29,598	22,295	83,979,778
Total pension liability - ending (a)	86,034,569	1,400,099	13,554	19,505	27,077	21,671	87,516,475
Plan fiduciary net position:							
Employer contributions	3,692,711	-	-	-	-	-	3,692,711
Member contributions	547,807	-	-	-	-	-	547,807
Net investment income	4,431,926	6,304	-	-	-	-	4,438,230
Benefit payments and withdrawals	(5,153,002)	(94,459)	(1,641)	(2,465)	(3,364)	(2,748)	(5,257,679)
Payments to other retirement systems	(9,769)	-	-	-	-	-	(9,769)
Transfers to VSFs	(10,489)	-	1,722	2,522	3,446	2,799	-
Administrative expenses	(82,073)	-	-	-	-	-	(82,073)
Other	3,258	-	-	-	-	-	3,258
Net change in plan fiduciary net position	3,420,369	(88,155)	81	57	82	51	3,332,485
Accrued transfers to/from VSFs	(103,411)	103,411	-	-	-	-	-
Plan fiduciary net position - beginning	65,211,747	449,771	134	121	171	139	65,662,083
Plan fiduciary net position - ending (b) *	68,528,705	465,027	215	178	253	190	68,994,568
Employer's net pension liability - ending (a)-(b)	\$ 17,505,864	\$ 935,072	\$ 13,339	\$ 19,327	\$ 26,824	\$ 21,481	\$ 18,521,907
Plan fiduciary net position as a percentage of the total pension liability	79.65%	33.21%	1.59%	0.91%	0.93%	0.88%	78.84%
Covered payroll	\$ 14,459,118	N/A	N/A	N/A	N/A	N/A	\$ 14,459,118
Employer's net pension liability as a percentage of covered payroll	121.07%	N/A	N/A	N/A	N/A	N/A	128.10%

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

The June 30, 2019 beginning pension liability does not agree to the June 30, 2018 ending total pension liability due to a census data correction.

Note: In accordance with paragraph 50 of GASB No. 67, this schedule should present information for 10 years, if available. The information presented here pertains to periods beginning with the June 30, 2014 fiscal year, the Plan's adoption year of GASB No. 67. Additional years will be added until the 10-year requirement is met.

See Report of Independent Certified Public Accountants.

New York City Employees' Retirement System

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

June 30, 2018  
(In thousands)

	QPP*	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	TOTAL
Total pension liability:							
Service cost	\$ 1,923,683	\$ 24,029	\$ -	\$ -	\$ -	\$ -	\$ 1,947,712
Interest	5,514,669	94,615	1,004	1,397	2,052	1,552	5,615,289
Differences between expected and actual experience	(1,700,346)	(61,728)	(472)	131	83	(216)	(1,762,548)
Changes of assumptions	17,939	(206)	-	-	-	-	17,733
Changes of benefit terms	42,501	1,498	-	-	-	-	43,999
Benefit payments and withdrawals	(4,883,110)	(90,190)	(1,760)	(2,510)	(3,486)	(2,818)	(4,983,874)
Net change in total pension liability	915,336	(31,982)	(1,228)	(982)	(1,351)	(1,482)	878,311
Total pension liability - beginning	80,897,611	1,432,384	15,685	21,061	30,950	23,777	82,421,468
Total pension liability - ending (a)	81,812,947	1,400,402	14,457	20,079	29,599	22,295	83,299,779
Plan fiduciary net position:							
Employer contributions	3,377,024	-	-	-	-	-	3,377,024
Member contributions	523,535	-	-	-	-	-	523,535
Net investment income	5,153,254	2,265	-	-	-	-	5,155,519
Benefit payments and withdrawals	(4,883,110)	(90,190)	(1,760)	(2,510)	(3,486)	(2,818)	(4,983,874)
Payments to other retirement systems	(9,055)	-	-	-	-	-	(9,055)
Transfers to VSFs	(10,897)	-	1,825	2,573	3,612	2,887	-
Administrative expenses	(59,689)	-	-	-	-	-	(59,689)
Other	3,410	12	-	-	-	-	3,422
Net change in plan fiduciary net position	4,094,472	(87,913)	65	63	126	69	4,006,882
Accrued transfers to/from VSFs	(205,000)	205,000	-	-	-	-	-
Plan fiduciary net position - beginning	61,322,275	332,684	69	58	45	70	61,655,201
Plan fiduciary net position - ending (b) *	65,211,747	449,771	134	121	171	139	65,662,083
Employer's net pension liability - ending (a)-(b)	\$ 16,601,200	\$ 950,631	\$ 14,323	\$ 19,958	\$ 29,428	\$ 22,156	\$ 17,637,696
Plan fiduciary net position as a percentage of the total pension liability	79.71%	32.12%	0.93%	0.60%	0.58%	0.62%	78.83%
Covered payroll	\$ 12,834,130	N/A	N/A	N/A	N/A	N/A	\$ 12,834,130
Employer's net pension liability as a percentage of covered payroll	129.35%	N/A	N/A	N/A	N/A	N/A	137.43%

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

Note: In accordance with paragraph 50 of GASB No. 67, this schedule should present information for 10 years, if available. The information presented here pertains to periods beginning with the June 30, 2014 fiscal year, the Plan's adoption year of GASB No. 67. Additional years will be added until the 10-year requirement is met.

See Report of Independent Certified Public Accountants.

## SCHEDULE 1 - CONTINUED

## New York City Employees' Retirement System

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOSJune 30, 2017  
(In thousands)

	QPP*	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	TOTAL
Total pension liability:							
Service cost	\$ 1,897,067	\$ 23,391	\$ -	\$ -	\$ -	\$ -	\$ 1,920,458
Interest	5,446,543	93,708	1,088	1,464	2,151	1,654	5,546,608
Changes of benefit terms	-	-	-	-	-	-	-
Differences between expected and actual experience	(221,856)	(16,615)	(51)	(216)	198	286	(238,254)
Changes of assumptions	-	-	-	-	-	-	-
Benefit payments and withdrawals	(4,635,251)	(30)	(1,850)	(2,581)	(3,814)	(2,953)	(4,646,479)
Net change in total pension liability	2,486,503	100,454	(813)	(1,333)	(1,465)	(1,013)	2,582,333
Total pension liability - beginning	78,411,108	1,331,930	16,498	22,394	32,415	24,790	79,839,135
Total pension liability - ending (a)	80,897,611	1,432,384	15,685	21,061	30,950	23,777	82,421,468
Plan fiduciary net position:							
Employer contributions	3,328,193	-	-	-	-	-	3,328,193
Member contributions	513,514	-	-	-	-	-	513,514
Net investment income	6,982,304	(152)	-	-	-	-	6,982,152
Benefit payments and withdrawals	(4,635,251)	(30)	(1,850)	(2,581)	(3,814)	(2,953)	(4,646,479)
Payments to other retirement systems	(8,087)	-	-	-	-	-	(8,087)
Transfers to VSFs	(11,297)	-	1,889	2,595	3,830	2,983	-
Administrative expenses	(59,671)	-	-	-	-	-	(59,671)
Other	3,266	-	-	-	-	-	3,266
Net change in plan fiduciary net position	6,112,971	(182)	39	14	16	30	6,112,888
Accrued transfers to/from VSFs	(285,924)	285,924	-	-	-	-	-
Plan fiduciary net position - beginning	55,495,228	46,942	30	44	29	40	55,542,313
Plan fiduciary net position - ending (b) *	61,322,275	332,684	69	58	45	70	61,655,201
Employer's net pension liability - ending (a)-(b)	\$ 19,575,336	\$ 1,099,700	\$ 15,616	\$ 21,003	\$ 30,905	\$ 23,707	\$ 20,766,267
Plan fiduciary net position as a percentage of the total pension liability	75.80%	23.23%	0.44%	0.28%	0.15%	0.29%	74.80%
Covered payroll	\$ 12,555,242	N/A	N/A	N/A	N/A	N/A	\$ 12,555,242
Employer's net pension liability as a percentage of covered payroll	155.91%	N/A	N/A	N/A	N/A	N/A	165.40%

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

Note: In accordance with paragraph 50 of GASB No. 67, this schedule should present information for 10 years, if available. The information presented here pertains to periods beginning with the June 30, 2014 fiscal year, the Plan's adoption year of GASB No. 67. Additional years will be added until the 10-year requirement is met.

See Report of Independent Certified Public Accountants.

New York City Employees' Retirement System

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

June 30, 2016  
(In thousands)

	QPP*	COVSF	HPOVSF	HPSVSF	TPOVSF	TPSOVSF	TOTAL
Total pension liability:							
Service cost	\$ 1,875,969	\$ 24,025	\$ -	\$ -	\$ -	\$ -	\$ 1,899,994
Interest	5,276,141	89,794	1,145	1,553	2,251	1,720	5,372,604
Differences between expected and actual experience	(793,016)	(25,259)	(195)	(57)	273	283	(817,971)
Changes of assumptions	2,539,112	21,269	479	625	915	692	2,563,092
Benefit payments and withdrawals	(4,402,729)	(79,917)	(1,968)	(2,643)	(3,932)	(2,957)	(4,494,146)
Net change in total pension liability	4,495,477	29,912	(539)	(522)	(493)	(262)	4,523,573
Total pension liability - beginning	73,915,631	1,302,018	17,037	22,916	32,908	25,052	75,315,562
Total pension liability - ending (a)	78,411,108	1,331,930	16,498	22,394	32,415	24,790	79,839,135
Plan fiduciary net position:							
Employer contributions	3,365,454	-	-	-	-	-	3,365,454
Member contributions	485,508	-	-	-	-	-	485,508
Net investment income	1,171,720	184	-	-	-	-	1,171,904
Benefit payments and withdrawals	(4,402,729)	(79,917)	(1,968)	(2,643)	(3,932)	(2,957)	(4,494,146)
Payments to other retirement systems	(7,440)	-	-	-	-	-	(7,440)
Transfers to VSFs	(11,525)	-	1,968	2,648	3,945	2,964	-
Administrative expenses	(56,683)	-	-	-	-	-	(56,683)
Other	2,928	-	-	-	-	-	2,928
Net change in plan fiduciary net position	547,233	(79,733)	-	5	13	7	467,525
Accrued transfers to/from VSFs	52,724	(52,724)	-	-	-	-	-
Plan fiduciary net position - beginning	54,895,271	179,399	30	39	16	33	55,074,788
Plan fiduciary net position - ending (b) *	55,495,228	46,942	30	44	29	40	55,542,313
Employer's net pension liability - ending (a)-(b)	\$ 22,915,880	\$ 1,284,988	\$ 16,468	\$ 22,350	\$ 32,386	\$ 24,750	\$ 24,296,822
Plan fiduciary net position as a percentage of the total pension liability	70.77%	3.52%	0.18%	0.20%	0.09%	0.16%	69.57%
Covered payroll	\$ 12,336,979	N/A	N/A	N/A	N/A	N/A	\$ 12,336,979
Employer's net pension liability as a percentage of covered payroll	185.75%	N/A	N/A	N/A	N/A	N/A	196.94%

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

Note: In accordance with paragraph 50 of GASB No. 67, this schedule should present information for 10 years, if available. The information presented here pertains to periods beginning with the June 30, 2014 fiscal year, the Plan's adoption year of GASB No. 67. Additional years will be added until the 10-year requirement is met.

See Report of Independent Certified Public Accountants.

## SCHEDULE 1 - CONTINUED

## New York City Employees' Retirement System

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
SCHEDULES OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOSJune 30, 2015  
(In thousands)

	QPP*	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	TOTAL
Total pension liability:							
Service cost	\$ 1,808,955	\$ 23,532	\$ -	\$ -	\$ -	\$ -	\$ 1,832,487
Interest	4,976,487	87,727	1,184	1,588	2,288	1,741	5,071,015
Differences between expected and actual experience	(372,645)	84,301	(312)	131	(203)	129	(288,599)
Changes of assumptions	-	-	-	-	-	-	-
Benefit payments and withdrawals	(4,235,644)	(76,606)	(2,083)	(2,682)	(4,047)	(3,073)	(4,324,135)
Net change in total pension liability	2,177,153	118,954	(1,211)	(963)	(1,962)	(1,203)	2,290,768
Total pension liability - beginning	71,738,478	1,183,064	18,248	23,879	34,870	26,255	73,024,794
Total pension liability - ending (a)	73,915,631	1,302,018	17,037	22,916	32,908	25,052	75,315,562
Plan fiduciary net position:							
Employer contributions	3,160,258	-	-	-	-	-	3,160,258
Member contributions	467,129	-	-	-	-	-	467,129
Net investment income	1,175,099	10	-	-	-	-	1,175,109
Benefit payments and withdrawals	(4,235,644)	(76,606)	(2,083)	(2,682)	(4,047)	(3,073)	(4,324,135)
Payments to other retirement systems	(7,142)	-	-	-	-	-	(7,142)
Transfers to VSFs	(11,918)	12	2,100	2,686	4,040	3,080	-
Administrative expenses	(54,635)	-	-	-	-	-	(54,635)
Other	4,140	-	-	-	-	-	4,140
Net change in plan fiduciary net position	497,287	(76,584)	17	4	(7)	7	420,724
Accrued transfers to/from VSFs	(30,000)	30,000	-	-	-	-	-
Plan fiduciary net position - beginning *	54,427,984	225,983	13	35	23	26	54,654,064
Plan fiduciary net position - ending (b) **	54,895,271	179,399	30	39	16	33	55,074,788
Employer's net pension liability - ending (a)-(b)	\$ 19,020,360	\$ 1,122,619	\$ 17,007	\$ 22,877	\$ 32,892	\$ 25,019	\$ 20,240,774
Plan fiduciary net position as a percentage of the total pension liability	74.27%	13.78%	0.18%	0.17%	0.05%	0.13%	73.13%
Covered payroll	\$ 12,314,958	N/A	N/A	N/A	N/A	N/A	\$ 12,314,958
Employer's net pension liability as a percentage of covered payroll	154.45%	N/A	N/A	N/A	N/A	N/A	164.36%

\* Includes an adjustment of \$(351,463).

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

Note: In accordance with paragraph 50 of GASB No. 67, this schedule should present information for 10 years, if available. The information presented here pertains to periods beginning with the June 30, 2014 fiscal year, the Plan's adoption year of GASB No. 67. Additional years will be added until the 10-year requirement is met.

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SCHEDULE 1 - CONTINUED

New York City Employees' Retirement System

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

June 30, 2014  
(in thousands)

	QPP*	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	TOTAL
Total pension liability:							
Service cost	\$ 1,783,734	\$ 23,329	\$ -	\$ -	\$ -	\$ -	\$ 1,807,063
Interest	4,825,904	77,397	1,267	1,655	2,416	1,820	4,910,459
Changes of benefit terms	-	-	-	-	-	-	-
Differences between expected and actual experience	-	-	-	-	-	-	-
Changes of assumptions	-	-	-	-	-	-	-
Benefit payments and withdrawals	(3,990,569)	-	(2,187)	(2,782)	(4,054)	(3,089)	(4,002,681)
Net change in total pension liability	2,619,069	100,726	(920)	(1,127)	(1,638)	(1,269)	2,714,841
Total pension liability - beginning	69,119,408	1,082,338	19,169	25,006	36,508	27,524	70,309,953
Total pension liability - ending (a)	71,738,477	1,183,064	18,249	23,879	34,870	26,255	73,024,794
Plan fiduciary net position:							
Employer contributions	3,114,068	-	-	-	-	-	3,114,068
Member contributions	447,689	-	-	-	-	-	447,689
Net investment income	8,262,467	20	-	-	-	-	8,262,487
Benefit payments and withdrawals	(3,990,569)	-	(2,187)	(2,782)	(4,054)	(3,089)	(4,002,681)
Payments to other retirement systems	(7,228)	-	-	-	-	-	(7,228)
Transfers to VSFs	(12,125)	-	2,168	2,797	4,070	3,090	-
Administrative expenses	(50,431)	-	-	-	-	-	(50,431)
Other	4,881	-	-	-	-	-	4,881
Net change in plan fiduciary net position	7,768,752	20	(19)	15	16	1	7,768,785
Accrued transfers to/from VSFs	(190,000)	190,000	-	-	-	-	-
Plan fiduciary net position - beginning	47,200,695	35,963	32	20	7	25	47,236,742
Plan fiduciary net position - ending (b) *	54,779,447	225,983	13	35	23	26	55,005,527
Employer's net pension liability - ending (a)-(b)	\$ 16,959,030	\$ 957,081	\$ 18,236	\$ 23,844	\$ 34,847	\$ 26,229	\$ 18,019,267
Plan fiduciary net position as a percentage of the total pension liability	76.36%	19.10%	0.07%	0.15%	0.07%	0.10%	75.32%
Covered payroll	\$ 12,183,011	N/A	N/A	N/A	N/A	N/A	\$ 12,183,011
Employer's net pension liability as a percentage of covered payroll	139.20%	N/A	N/A	N/A	N/A	N/A	147.90%

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

Note: In accordance with paragraph 50 of GASB No. 67, this schedule should present information for 10 years, if available. The information presented here pertains to periods beginning with the June 30, 2014 fiscal year, the Plan's adoption year of GASB No. 67. Additional years will be added until the 10-year requirement is met.

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## SCHEDULE 2

## New York City Employees' Retirement System

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

Years ended June 30, 2013-2022  
(In thousands)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
1. Actuarially determined contribution	\$ 3,831,464	\$ 3,762,898	\$ 3,726,701	\$ 3,694,365	\$ 3,377,024	\$ 3,328,193	\$ 3,365,454	\$ 3,160,258	\$ 3,114,068	\$ 3,046,845
2. Actual/funding contributions made	3,831,464	3,762,898	3,713,825	3,681,747	3,377,024	3,328,193	3,365,454	3,160,258	3,114,068	3,046,845
3. Contribution deficiency (excess) Actual/funding contributions made basis (1.- 2.)	-	-	12,876	12,618	-	-	-	-	-	-
4. Contributions as a percentage of Covered payroll <sup>1</sup> Actual/funding contributions made basis	25.051%	24.611%	24.789%	25.463%	26.313%	26.508%	27.279%	25.662%	25.561%	25.486%
5. Receivable contributions	0	(1,366)	13,733	10,964	-	-	-	-	-	-
6. Accounting contributions (2. + 5.)	\$ 3,831,464	\$ 3,761,532	\$ 3,727,568	\$ 3,692,711	\$ 3,377,024	\$ 3,328,193	\$ 3,365,454	\$ 3,160,258	\$ 3,114,068	\$ 3,046,845
7. Contribution deficiency (excess) Accounting contributions basis (1. - 6.)	-	1,366	(857)	1,654	-	-	-	-	-	-
8. Covered payroll <sup>1</sup>	\$ 15,294,726	\$ 15,289,347	\$ 14,981,461	\$ 14,459,118	\$ 12,834,130	\$ 12,555,242	\$ 12,336,979	\$ 12,314,958	\$ 12,183,011	\$ 11,955,093
9. Contributions as a percentage of Covered payroll <sup>1</sup> Accounting contributions basis	25.051%	24.602%	24.881%	25.539%	26.313%	26.508%	27.279%	25.662%	25.561%	25.486%

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

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New York City Employees' Retirement System

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

Note 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 2019 contributions were determined using an actuarial valuation as of June 30, 2017). The methods and assumptions used to determine the actuarially determined contributions are as follows:

	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016
<b>Valuation Dates</b>	Entry age	Entry age	Entry age	Entry age	Entry age
Actuarial cost method	Increasing dollar Level dollar	Increasing dollar Level dollar	Increasing dollar Level dollar	Increasing dollar Level dollar	Increasing dollar Level dollar
Amortization method for unfunded actuarial accrued liabilities:					
Initial unfunded	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	16 years (closed)
Post-2010 unfunded	NA	NA	NA	NA	NA
Remaining amortization period:					
Initial unfunded	6 years (closed)	7 years (closed)	8 years (closed)	9 years (closed)	10 years (closed)
2010 ERI	7 years (closed)	8 years (closed)	9 years (closed)	10 years (closed)	11 years (closed)
2011 actuarial gain/loss	8 years (closed)	9 years (closed)	10 years (closed)	11 years (closed)	12 years (closed)
2012 actuarial gain/loss	9 years (closed)	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)
2013 actuarial gain/loss	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)
2014 actuarial gain/loss	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)
2015 actuarial gain/loss	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	NA
2016 actuarial gain/loss	13 years (closed)	14 years (closed)	15 years (closed)	20 years (closed)	NA
2017 actuarial gain/loss	17 years (closed)	18 years (closed)	19 years (closed)	20 years (closed)	NA
2017 method change	2 years (closed)	3 years (closed)	4 years (closed)	5 years (closed)	NA
2017 assumption change	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	NA
2017 census data update	13 years (closed)	14 years (closed)	15 years (closed)	15 years (closed)	NA
2017 OTB payments	14 years (closed)	15 years (closed)	15 years (closed)	NA	NA
2018 actuarial gain/loss	19 years (closed)	20 years (closed)	NA	NA	NA
2019 actuarial gain/loss	19 years (closed)	20 years (closed)	NA	NA	NA
2019 method change	19 years (closed)	20 years (closed)	NA	NA	NA
2019 assumption change	15 years (closed)	20 years (closed)	NA	NA	NA
2020 actuarial gain/loss	8 years (closed)	NA	NA	NA	NA
2020 OWBPA					
Actuarial asset valuation method <sup>1</sup>	Five-year moving average of market values with a "Market Value Restart" as of June 30, 2019.	Five-year moving average of market values with a "Market Value Restart" as of June 30, 2019.	Modified six-year moving average of market 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 market 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 market 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 (Lag) valuation, the AVA is constrained to be no more than 20% of Market Value.

See Report of Independent Certified Public Accountants.



SCHEDULE 2 - CONTINUED

New York City Employees' Retirement System

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

Note 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 2019 contributions were determined using an actuarial valuation as of June 30, 2017). The methods and assumptions used to determine the actuarially determined contributions are as follows:

Valuation Dates	June 30, 2015		June 30, 2014		June 30, 2013		June 30, 2012		June 30, 2011	
	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										
Remaining amortization period:										
Initial unfunded										
2010 ERI	17 years (closed)		18 years (closed)		19 years (closed)		20 years (closed)		21 years (closed)	
2011 Actuarial gain/loss	1 year (closed)		2 years (closed)		3 years (closed)		4 years (closed)		5 years (closed)	
2012 Actuarial gain/loss	11 years (closed)		12 years (closed)		13 years (closed)		14 years (closed)		15 years (closed)	
2013 Actuarial gain/loss	12 years (closed)		13 years (closed)		14 years (closed)		15 years (closed)		NA	
2014 Actuarial gain/loss	13 years (closed)		14 years (closed)		15 years (closed)		NA		NA	
2015 Actuarial gain/loss	14 years (closed)		15 years (closed)		NA		NA		NA	
2016 Actuarial gain/loss	15 years (closed)		NA		NA		NA		NA	
2017 Actuarial gain/loss	NA		NA		NA		NA		NA	
2017 method change	NA		NA		NA		NA		NA	
2017 assumption change	NA		NA		NA		NA		NA	
2017 census data update	NA		NA		NA		NA		NA	
2017 OTB Payments	NA		NA		NA		NA		NA	
2018 Actuarial gain/loss	NA		NA		NA		NA		NA	
2019 Actuarial gain/loss	NA		NA		NA		NA		NA	
2019 method change	NA		NA		NA		NA		NA	
2019 assumption change	NA		NA		NA		NA		NA	
2020 actuarial gain/loss	NA		NA		NA		NA		NA	
2020 OWBPA	NA		NA		NA		NA		NA	
Actuarial asset valuation method <sup>1</sup>	Modified six-year moving average of market 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 market 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 market 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 market 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 market 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 market 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 market 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 market 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 market 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 market 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 (Lag) valuation, the AVA is constrained to be no more than 20% of Market Value.

New York City Employees' Retirement System

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

Valuation Dates	June 30, 2020	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016
Actuarial assumptions:	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.
Assumed rate of return <sup>1</sup>					
Post-retirement mortality <sup>2</sup>	Tables adopted by Board of Trustees during Fiscal Year 2019. Applies mortality improvement scale MP-2020 published by the Society of Actuaries	Tables adopted by Board of Trustees during Fiscal Year 2019. Applies mortality improvement scale MP-2020 published by the Society of Actuaries	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 2016
Active service: withdrawal, death, disability, service retirement <sup>2</sup>	Tables adopted by Board of Trustees during Fiscal Year 2019. Applies mortality improvement scale MP-2020 published by the Society of Actuaries to active ordinary death mortality rates and pre-commencement mortality rates for deferred vested	Tables adopted by Board of Trustees during Fiscal Year 2019. Applies mortality improvement scale MP-2020 published by the Society of Actuaries to active ordinary death mortality rates and pre-commencement mortality rates for deferred vested	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 2012
Salary increases <sup>1</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>1</sup>	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.

<sup>1</sup>Developed using a long-term Consumer Price Inflation assumption of 2.5% per year.

<sup>2</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.

SCHEDULE 2 - CONTINUED

New York City Employees' Retirement System

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

Valuation Dates	June 30, 2015	June 30, 2014	June 30, 2013	June 30, 2012	June 30, 2011
Actuarial assumptions: Assumed rate of return <sup>1</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>2</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 2012	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>2</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>1</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>1</sup>	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.

<sup>1</sup> Developed using a long-term Consumer Price Inflation assumption of 2.5% per year.

<sup>2</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 vested. 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.



**New York City Employees' Retirement System**  
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**QUALIFIED PENSION PLAN**  
**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 nine fiscal years:

<u>Fiscal Years Ended</u>	<u>QPP</u>	<u>COVSF</u>
June 30, 2022	-8.24%	0.43%
June 30, 2021	26.65%	0.09%
June 30, 2020	3.64%	1.56%
June 30, 2019	7.07%	2.41%
June 30, 2018	8.61%	1.63%
June 30, 2017	12.99%	0.64%
June 30, 2016	1.45%	0.19%
June 30, 2015	3.10%	0.03%
June 30, 2014	17.01%	0.06%

Note: In accordance with paragraph 50 of GASB Statement No. 67, *Financial Reporting for Pension Plans* ("GASB 67"), this schedule should present information for 10 years, if available. The information presented here pertains to periods beginning with the June 30, 2014 fiscal year, the Plan's adoption year of GASB 67. Additional years will be added until the 10-year requirement is met.

See Report of Independent Certified Public Accountants.

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**Additional Supplementary Information**  
**SCHEDULE OF INVESTMENT EXPENSES**  
Year Ended June 30, 2022

**Investment Expenses Paid from the Investment Earnings of the Plan**

Fees Paid to Investment Managers for FY 2022 Services <sup>1</sup>	\$ 255,570,768
Fees Paid to Investment Consultants <sup>1</sup>	2,448,767
Investment-related Legal Fees <sup>1</sup>	704,755
<b>Fees Paid to Investment Managers and Consultants</b>	<b>258,724,290</b>
Private Equity Organizational Costs	19,824,325
Real Estate Partnership & Infrastructure Organizational Costs	20,205,689
Alternative Opportunity & Global Fixed Organizational Costs	1,672,024
Foreign Taxes Withheld	39,704,943
Reimbursement to NYC Comptroller's Office for Investment Expenses Paid	3,938,614
Miscellaneous Investment Expenses	5,147,571
<b>Total Investment Expenses Paid Directly by the Plan</b>	<b>349,217,456</b>
Fees Related to Securities Lending Transactions	2,865,112
<b>Total Investment Expenses and Fees Paid Directly by the Plan</b>	<b>352,082,568</b>
Total Paid by the NYC Comptroller's Office	2,217,935
<b>Total Investment Expenses and Fees</b>	<b>\$ 354,300,503</b>

Note:

1) For details, see Schedule of Fees Paid to Investment Managers and Consultants beginning on Page 157.



**Additional Supplementary Information**  
**SCHEDULE OF ADMINISTRATIVE EXPENSES**  
 Year Ended June 30, 2022

<b>Personal Services</b>	Employee Compensation	<b>\$ 52,303,943</b>
<b>Professional Services</b>	Consultants <sup>1</sup>	25,911,457
	Medical Board and Medical Consultants	1,435,669
	Steno for Medical and Trustees Boards	71,402
		<b>27,418,528</b>
<b>Communication</b>	Postage	575,581
	Telephone	274,754
	Printing	179,089
		<b>1,029,424</b>
<b>Rentals</b>	Office Space	4,940,434
	Real Estate Taxes & Operating Expenses	2,607,510
	GASB 87 Adjustment <sup>2</sup>	1,781,757
		<b>9,329,701</b>
<b>Other</b>	Software, Licenses, and Support	8,460,283
	Office Supplies and Services	2,501,681
	Office and Data Processing Equipment	2,236,080
	Facilities Services	506,516
	Equipment Maintenance	1,201,837
		<b>14,906,397</b>
<b>Total Administrative Expenses<sup>3</sup></b>		<b>104,987,993</b>

Note:

- 1) For details, see Schedule of Payments to Consultants on next page.
- 2) GASB 87 adjustment includes amortization of fixed assets offset by GASB 87 right-of-use leases.
- 3) The schedule shows total expenses paid by NYCERS. Other administrative expenses of \$9,374,795 were paid on NYCERS' behalf by other City agencies.

Additional Supplementary Information  
**SCHEDULE OF PAYMENTS TO CONSULTANTS**  
Year Ended June 30, 2022

Nature of Service	Firm	Fees
<b>Consultant Services</b>	Gartner Inc.	\$ 2,400,000
	Nagarro Inc.	1,518,244
	Linea Solutions Inc.	656,928
	CDW Government Inc.	283,937
	CWI Coaching and Consulting	243,201
	Genesys Cloud Services Inc.	140,874
	Mourad Ibrahim	95,344
	Groom Law Group Chartered	57,579
	Frink-Hamlett Legal Solutions Inc.	56,760
	Mary Ann Espinoza	54,230
	BCT Partners LLC	27,800
	Planview Inc.	19,350
	Alyssa McDonald	8,861
	Jean North Brewer	6,625
	Ice Miller LLP	6,279
	Q-Matic Corporation	6,265
	Regina Kahney	3,100
	Michael J Park Organization Consulting	1,625
	Arlette E Belgrave	1,530
	Thomas Lowman	1,067
Rutter Associates LLC	(7,352)	
CEM Benchmarking	(60,000)	
<b>Computer Services</b>	Accenture LLP	9,790,585
	InfoPeople Corporation	2,212,720
	Universal Technologies LLC	1,505,444
	Rangam Consultants Inc.	1,217,043
	Spruce Technology Inc.	1,070,686
	Experis US Inc.	689,825
	Computer Management Resources Corp	407,135
	CMA Consulting Services	315,430
	ZebraEdge Inc.	281,111
	Diaspark Inc.	250,425
	P&L Consulting Services Corp	232,320
	QED National	223,452
	Data Pro Group Inc.	210,651
	Elegant Enterprise Wide Solutions Inc.	199,668
	GCOM Software LLC	195,809
	Innovec Consulting LLC	179,167
	Msquare Systems Inc.	178,095
	Infojini Inc.	161,658
	Integrated Technology Solutions & Services Inc.	159,468
	CNC Consulting Inc.	159,444
Zolon Tech Inc.	148,743	
22nd Century Technologies Inc.	136,011	
Software Information Resource Corp	94,442	
Optima Global Solutions Inc.	69,776	
Cogent Infotech Corporation	50,102	
<b>Architectural Services</b>	Mancini Duffy	250,000
<b>Total Payment to Consultants</b>		<b>\$ 25,911,457</b>





**PART 3**  
**INVESTMENT SECTION**

## REPORT ON INVESTMENT ACTIVITY AND POLICIES

### Investment Policies and Objectives

The purpose of the New York City Employees' Retirement System (NYCERS) is to provide its members the benefits to which they are legally entitled. The funds necessary to finance these benefits are accumulated through the contributions of the members and participating employers and the investment earnings of the Plan.

The Plan's Board of Trustees (Board) adopts investment policies. The Board is composed of 11 members: the Mayor's representative, who is the chairperson; the City Comptroller; the Public Advocate; the heads of the three unions with the largest number of participating employees, which are District Council 37 - American Federation of State, County and Municipal Employees, Transport Workers Union Local 100, and the International Brotherhood of Teamsters; and the five Borough Presidents. The Board creates the overall investment philosophy under which the Plan's funds are invested and, in defining the investment objectives, develops a framework under which specific objectives are established with regard to allocating the assets of the Plan among the various investment types. The following is a brief outline of the Plan's philosophy and objectives:

- In order for the Plan to meet its responsibility of providing its members with their legally entitled retirement and other benefits, the level of investment risk should be prudent and not jeopardize the Plan's financial stability. The Plan's assets must be protected from severe adverse market conditions and wide fluctuations in investment results.
- Since higher investment returns are generally associated with a certain amount of risk, it is reasonable and justified to assume a moderate level of risk in order to strengthen long-term results.
- Diversification fundamentally reduces the overall portfolio risk. This is achieved by allocating funds among different asset categories and then, within each category, having a broad representation of industries and companies. A majority of the portfolio is invested in a wide variety of domestic stocks and bonds. The policy mix consists of 27% in U.S. equities, 17% in an International Equity Fund involving only New York City (NYC) pension plans, 36.5% in U.S. fixed income, and 19.5% in alternative investments, which includes private equity, real estate, and infrastructure investments. Public equity investments are allocated among actively and passively managed components, market sectors, and approaches that focus on companies of various size capitalizations. Fixed-income securities are primarily allocated among government, government guaranteed mortgage-backed, and corporate securities. The Plan also invests a portion of its fixed-income allocation in inflation-linked treasury securities.
- Since retirement benefits are paid on a monthly basis, and other payments such as loans, refunds, and death benefits are made weekly, the liquidity of the portfolio must be considered. The cash flow from employer contributions, dividends, and interest must be managed so that benefits can be paid in a timely manner. A portion of the portfolio is kept in short-term investments to ensure that this is so.
- Achieving long-term results is a chief objective for an institution such as a retirement system that is accumulating resources for liabilities that are primarily due in the distant future.
- As has been the case for several years, the Plan is continuing to increase its holdings of economically targeted investments (ETIs). ETIs are investments that provide risk-adjusted market rates of return, while providing additional benefits to the geographic target area, which includes the five boroughs and the six New York State counties where City employees are permitted to live (Nassau, Orange, Putnam, Rockland, Suffolk, and Westchester). With the Plan financing the underlying mortgages of low-, moderate-, and middle-income housing, residents have benefited from the increased access to affordable housing, as



well as from the economic effect of the construction industry jobs that have been created. During Fiscal Year 2022, the ETI Plan issued additional investments and commitments for new loans to finance the rehabilitation or new construction of individual multi-family projects through its Public/Private Apartment Rehabilitation program. The Plan maintained its separately managed account with Royal Bank of Canada Global Asset Management, which invests in mortgage-backed securities comprised of loans screened for anti-predatory lending compliance. The loans can be issued to single-family homeowners making below 200% of the Area Median Income and includes a veterans housing target. In addition, the Plan maintained its investment with the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) Housing Investment Trust to invest in union-constructed, affordable multi-family mortgages and bonds. The Plan increased its investment in the Community Preservation Corporation construction loan facility. The construction loans are for low- and moderate-income housing.

- Investments are only made in accordance with the governing statutes of the New York City Administrative Code and the New York State Retirement and Social Security Law (RSSL).
- The Board also determines the criteria used in evaluating the investment advisors. While the Board utilizes an investment consultant to provide technical support in evaluating asset mix and its investment advisors, Board members take a very active role in determining the direction that the Plan is taking toward achieving its objectives. The City Comptroller is the custodian of the funds of the Plan, oversees all of the City's pension trust funds, is responsible for cash management related to the Plan, and provides cash receipt and cash disbursement services to the Plan. The Comptroller's Office is responsible for implementing the Board's directives. It manages the actual flow of funds to the investment advisors, ensuring that the investments recommended by the advisors meet the legal restrictions for plan investments.

## Investment Accounting

Most 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 as determined in good faith by the General Partner (GP). These investments are initially valued at cost with subsequent adjustments that reflect third party transactions, financial operating results and other factors deemed relevant by the GP. Fair value is determined by Plan management based on information provided by the various GPs after review by an independent consultant and the custodian bank for the fund. They include investments held within private equity, real estate, opportunistic fixed income, and infrastructure.

Purchases and sales of securities are recorded on the trade date.

Dividend income is recorded on the ex-dividend date. Interest income is accrued as earned.

## Investment Criteria

The criteria for non-equity investments are as follows:

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.

Short-term investments may be made only in the following instruments:

- U.S. Government securities or government agencies' securities which are fully guaranteed by the U.S. Government;
- Commercial paper rated A1 or P1 or F1 by Standard & Poor's Corporation or Moody's Investors' Service, or Fitch, respectively;
- Repurchase agreements collateralized in a range of 102% to 105% of matured value, purchased through primary dealers of U.S. Government securities; and
- Investments in bankers' acceptances, certificates of deposit, and time deposits are limited to banks with worldwide assets in excess of \$50 billion that are rated within the highest categories of the leading bank rating services; and selected regional banks which are also rated within the highest categories.

The criterion for equity investments is that they may consist only of those stocks that meet the qualifications of the New York State Retirement and Social Security Law, the New York State Banking Law, and the NYC Administrative Code.

In addition, investments of up to 25% of total pension fund assets may be made in instruments not specifically covered by the New York State Retirement and Social Security Law.

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

Cash deposits are insured by the Federal Deposit Insurance Corporation for a maximum of \$250,000 per plan member and are, therefore, fully insured.

## Investment Returns

Over time, the Plan's returns on investments have generally constituted the most significant component of total Plan income, whether that is positive or negative for a given year. During Fiscal Year 2022 the net investment loss earned by the portfolio, including interest and dividends, contributed \$6.9 billion to the Plan's revenue, which was a decrease from the \$18.3 billion in net investment income that the portfolio earned in Fiscal Year 2021. The Table of Additions on page 228 outlines the contributions to Plan revenue from investment earnings as well as the contributions of employees and employers.

It is important that in the long term the value of the Plan's investment portfolio continues to grow and generate an adequate return, so that the funding of the Plan does not become an undue burden to the participating employers. To the extent that the investment portfolio provides a sufficiently high return for the Plan, the amount necessary to be provided by employer contributions is decreased. The goal is to maintain a strong, diversified investment portfolio that will provide a significant percentage of the long-term funding required to support benefit payments into the future.

The total Plan investments, excluding securities lending collateral as of June 30, 2022 was \$77 billion. The detailed asset allocation is shown in the Investment Summary on page 151. The total return on the investment portfolio during Fiscal Year 2022 was -8.39%, which is higher than the NYCERS' Policy Benchmark of -8.70%.



Domestic equities, which comprise 26.5% of the total portfolio, returned -13.64%, higher than the Russell 3000 Index of -13.87%. The majority of the domestic equity portfolio is passively managed, with the remaining being actively managed by various managers with diverse investment strategies, such as specializations in value, growth, small capitalization stocks, or emerging markets.

Total World ex USA (Non-US Equities/EAFE<sup>1</sup>), which comprises 10.5% of the portfolio, returned -25.51%, less than the World ex USA Custom Benchmark of -17.73%. The emerging markets portion, constituting 4.7% of the portfolio, returned -27.39%, lower than the NYCERS Custom EM Index of -25.28%.

The total fixed-income segment, constituting 37.0% of the portfolio, returned -8.25%. The structured fixed-income segment returned -10.56%, as compared to the NYC Custom Structured Index-ERS of -10.28%. The high-yield fixed-income segment returned -12.19% as compared to the High Yield Custom Benchmark of -12.82%.

The alternative investment segment accounted for 19.9% of the investment portfolio. This segment is comprised primarily of private equity, which returned 25.20%, and private real estate, which returned 29.56%. The corresponding index performance relating to these components is published in the Schedule of Investment Results on page 156.

The asset allocation used above was derived from the Plan's Performance Overview as of June 30, 2022 provided by NYCERS' current custodian, State Street Bank, which reports time-weighted fund performance returns at the fund level. For financial reporting purposes, as presented in the Financial Section, the valuation of investments are in accordance with GASB 72, which reports fair value measurement based on the security level.

The total fund performance reflects time-weighted returns that are reported net of management fees (not inclusive of carried interest paid – alternative investment).

Listings of the Plan's investment securities are available upon request from the NYC Comptroller's Office.

The Finance Division of the Plan has prepared this Report on Investment Activity and Policies. It is based on the investment policies of the Plan's Board of Trustees, New York State regulations governing the Plan, documents provided by the NYC Comptroller as the custodian of the Plan, and the Plan's internal documents.

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<sup>1</sup>Europe, Australasia and the Far East (EAFE) refers to the most developed geographical areas of the world outside the United States and Canada.



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## INVESTMENT SUMMARY (QPP & VSF)

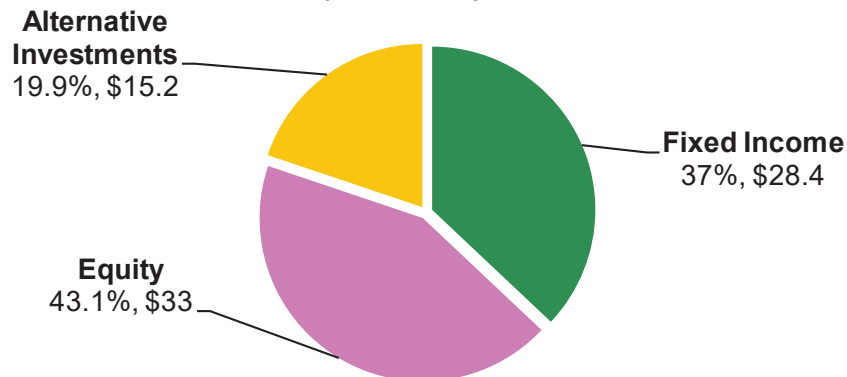
June 30, 2022

Type of Investment	Fair Value (in millions)	Percent of Total Fair Value
<b>Fixed Income</b>	<b>\$ 28,355</b>	<b>37.0%</b>
<b>Equity</b>		
US Equities	20,280	26.5%
Total World ex USA (Non-US Equities/EAFE)	8,064	10.5%
Emerging Markets	3,572	4.7%
Other Equities	1,118	1.4%
<b>Total Equity</b>	<b>33,034</b>	<b>43.1%</b>
<b>Alternative Investments</b>		
Private Equity	8,060	10.5%
Private Real Estate	5,698	7.4%
Other Private Holdings	1,428	2.0%
<b>Total Alternative Investments</b>	<b>15,186</b>	<b>19.9%</b>
<b>Total Investments</b>	<b>76,575</b>	<b>100.0%</b>

Source: Performance Overview report as of June 30, 2022 provided by the NYC Comptroller's Office, which reports time weighted fund performance returns at the fund level.

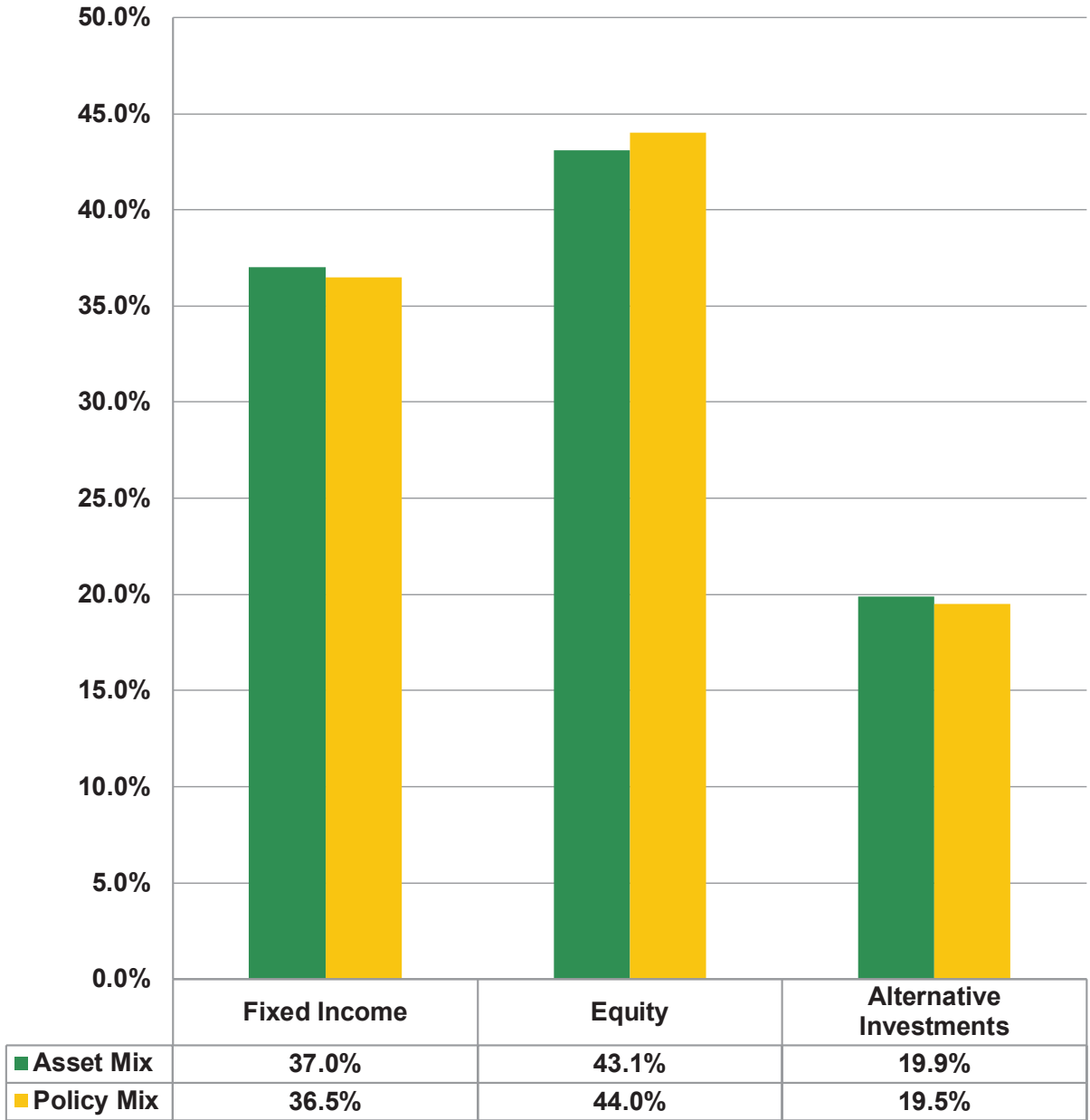
### TOTAL INVESTMENT ASSET ALLOCATION

June 30, 2022  
(in billions)



## COMPARISON OF ASSET ALLOCATION AND POLICY MIX

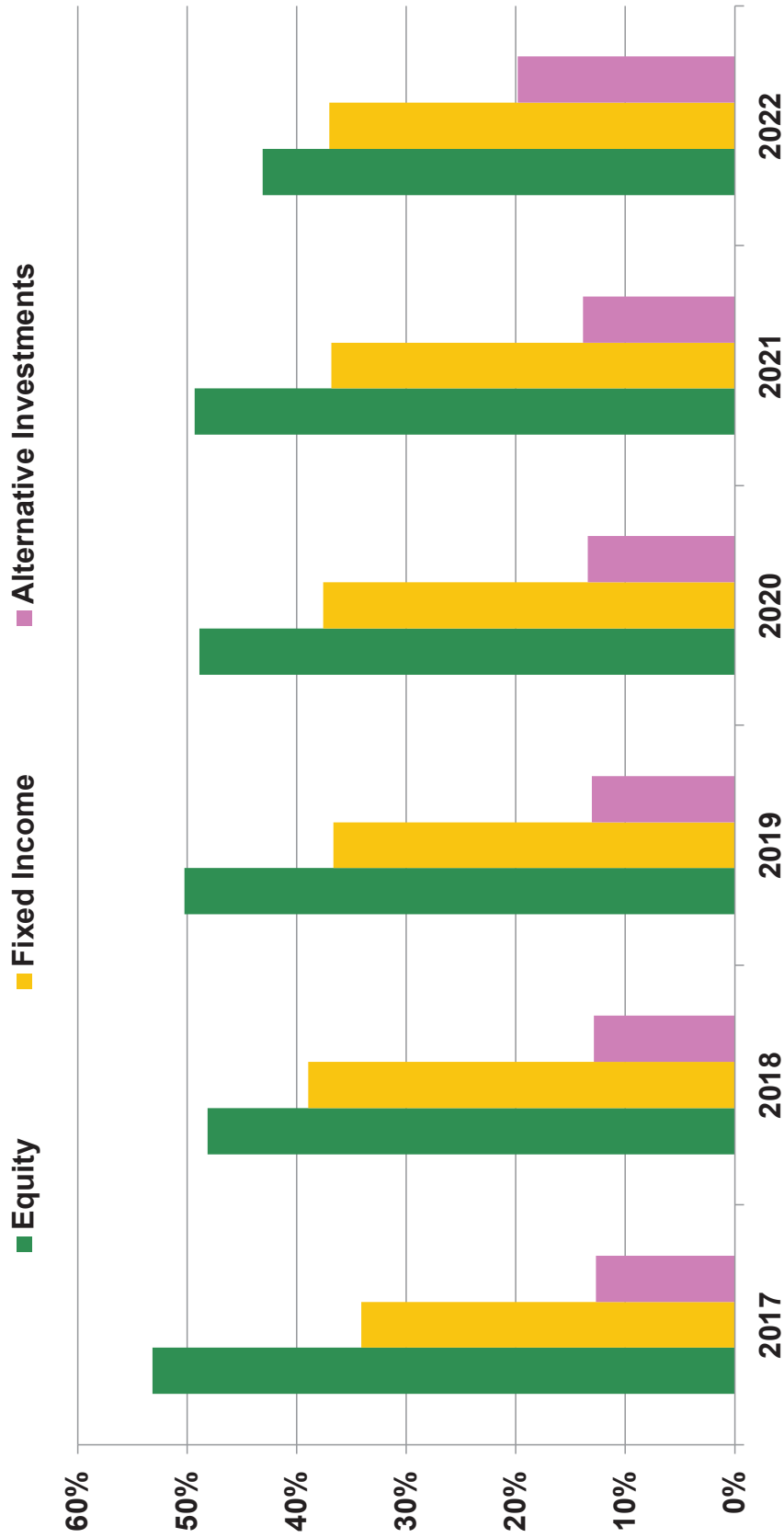
June 30, 2022



Source: NYC Comptroller's Office.

## ASSET ALLOCATION

June 30, 2017 - June 30, 2022



Source: NYC Comptroller's Office.

## LIST OF LARGEST EQUITY HOLDINGS

(at Fair Value)  
June 30, 2022

	Security	Shares	Fair Value	Percent of Domestic Equities
1	Apple Inc.	7,244,048	\$ 990,406,243	4.61%
2	Microsoft Corporation	3,308,604	849,748,765	3.96%
3	Alphabet Inc.	266,525	581,823,610	2.71%
4	Amazon.com Inc.	3,789,240	402,455,180	1.87%
5	Pfizer Inc.	5,032,069	263,831,378	1.23%
6	Johnson & Johnson Company	1,481,245	262,935,800	1.22%
7	Tesla Inc.	358,819	241,635,891	1.13%
8	Berkshire Hathaway Inc.	822,821	224,646,589	1.05%
9	UnitedHealth Group Inc.	421,075	216,276,752	1.01%
10	Wells Fargo & Company	3,897,588	194,559,166	0.91%
11	Merck & Company Inc.	1,904,318	173,616,672	0.81%
12	Facebook Inc.	1,057,389	170,503,976	0.79%
13	Cisco Systems Inc.	3,968,857	169,232,062	0.79%
14	NVIDIA Corporation	1,029,530	156,066,453	0.73%
15	Procter & Gamble Company	1,035,605	148,909,643	0.69%
16	Visa Inc.	729,663	143,663,348	0.67%
17	Mastercard Inc.	451,007	142,283,688	0.66%
18	Valero Energy Corporation	1,315,028	139,761,176	0.65%
19	Bank of America Corporation	3,120,381	139,561,826	0.65%
20	Marathon Petroleum Corporation	1,626,250	133,694,013	0.62%
21	J.P. Morgan Chase & Company	1,185,716	133,523,479	0.62%
22	Amgen Inc.	547,791	133,277,550	0.62%
23	BlackRock Inc.	536,506	132,127,923	0.62%
24	The Home Depot Inc.	472,177	129,503,986	0.60%
25	Eli Lilly & Company	396,561	128,576,973	0.60%
26	PepsiCo Inc.	761,058	126,837,926	0.59%
27	AbbVie Inc.	817,303	125,178,127	0.58%
28	Intel Corporation	3,146,863	117,724,145	0.55%
29	Verizon Communications Inc.	2,306,438	117,051,729	0.55%
30	Qualcomm Inc.	913,953	116,748,356	0.54%
31	The Coca-Cola Company	1,806,497	113,646,726	0.53%
32	Gilead Sciences Inc.	1,821,137	112,564,478	0.52%
33	Walmart Inc.	906,309	110,189,048	0.51%
34	Phillips 66	1,159,533	95,070,111	0.44%
35	Thermo Fisher Scientific Inc.	170,522	92,641,192	0.43%
36	Costco Wholesale Corporation	193,006	92,503,916	0.43%
37	Abbott Laboratories	824,938	89,629,514	0.42%
38	Bristol-Myers Squibb Company	1,142,008	87,934,616	0.41%
39	McKesson Corporation	266,101	86,804,807	0.40%
40	Broadcom Inc.	177,878	86,414,911	0.40%
	Total		\$ 7,973,561,744	37.15%

Note: A full list of the plan's securities is available upon request from the NYC Comptroller's Office.

**LIST OF LARGEST BOND HOLDINGS**  
(at Fair Value)  
June 30, 2022

	Security Description	Fair Value	Percent of Long Term Fixed Income
1	U.S. Treasury Securities	\$ 9,832,673,902	41.46%
2	FNMA Securities	1,999,928,977	8.43%
3	Federal Home Loan Mortgage Corporation	1,098,453,878	4.63%
4	GNMA Securities	931,385,322	3.93%
5	AFL-CIO Housing Investment Trust	315,562,384	1.33%
6	J.P. Morgan Chase & Subsidiaries	231,644,609	0.98%
7	Goldman Sachs Group	175,623,686	0.74%
8	Bank of America Corporation	157,482,697	0.66%
9	Morgan Stanley	139,023,999	0.59%
10	Wells Fargo & Company	134,807,271	0.57%
11	Citigroup & Subsidiaries	124,394,512	0.52%
12	Charter Communications Inc.	106,765,230	0.45%
13	Banco Santander SA	104,791,280	0.44%
14	Ford Motor Company	102,402,834	0.43%
15	Community/Economic Development Bonds	86,768,323	0.37%
16	Barclays PLC	78,669,271	0.33%
17	T-Mobile US Inc.	73,279,267	0.31%
18	AbbVie Inc.	69,525,921	0.29%
19	Verizon Communications Inc.	68,825,711	0.29%
20	HSBC Holdings PLC	64,483,079	0.27%
21	AerCap Holdings NV	60,954,002	0.26%
22	NextEra Energy Inc.	57,158,468	0.24%
23	PG&E Corporation	51,189,625	0.22%
24	Marathon Petroleum Corporation	47,743,095	0.20%
25	Capital One Financial Corporation	47,605,509	0.20%
26	Comcast Corporation	47,406,091	0.20%
27	General Motors Company	47,311,424	0.20%
28	Apple Inc.	46,665,121	0.20%
29	AT&T Inc.	46,644,868	0.20%
30	HCA Healthcare Inc.	45,512,157	0.19%
31	The Tennessee Valley Authority	44,696,185	0.19%
32	Anheuser-Busch InBev SA/NV	44,259,095	0.19%
33	CVS Health Corporation	42,853,589	0.18%
34	Western Digital Corporation	41,935,481	0.18%
35	United Airlines Holdings Inc.	41,149,924	0.17%
36	Federal Home Loan Bank	40,800,483	0.17%
37	Cheniere Energy Inc.	40,479,661	0.17%
38	Next Alt S.à.r.l	40,433,379	0.17%
39	UnitedHealth Group Inc.	37,872,796	0.16%
40	Edison International	37,766,227	0.16%
	Total	\$ 16,806,929,333	70.87%

Note: This table lists the issuers of NYCERS' 40 largest long-term fixed-income securities. For most issuers, the amount shown is comprised of multiple securities with various maturity dates and interest rates. A full list of the Plan's securities is available upon request from the NYC Comptroller's Office.

## SCHEDULE OF INVESTMENT RESULTS

### Time-Weighted Rates of Return

	Year Ended June 30 <sup>1</sup>			Trailing <sup>2</sup>		
	2022	2021	2020	3 Years	5 Years	10 Years
Total Portfolio	-8.39%	26.63%	3.58%	6.32%	6.92%	8.30%
NYCERS' Policy Benchmark	-8.70%	26.34%	3.70%	6.16%	6.80%	8.15%
<b>Managed by Outside Advisors</b>						
US Equity	-13.64%	45.14%	4.25%	9.33%	10.19%	12.33%
Russell 3000 Index	-13.87%	44.16%	6.53%	9.77%	10.60%	12.57%
Total World ex USA (Non-US Equities/EAFE)	-25.51%	39.97%	0.49%	1.57%	3.21%	6.58%
World ex USA Custom BM	-17.73%	34.82%	-5.11%	1.72%	2.60%	5.86%
Emerging Markets	-27.39%	51.24%	-11.51%	-0.95%	0.53%	2.52%
NYCERS Custom EM Index	-25.28%	49.44%	-11.27%	-0.31%	1.07%	2.52%
Total Fixed Income	-8.25%	5.26%	7.61%	1.29%	2.45%	3.25%
Fixed Income - Structured	-10.56%	-0.09%	12.34%	0.13%	1.64%	2.42%
NYC Custom Structured Index - ERS	-10.28%	-0.39%	14.00%	0.62%	2.07%	2.40%
Fixed Income - High Yield	-12.19%	15.08%	0.27%	0.44%	2.02%	4.58%
High Yield Custom Benchmark	-12.82%	15.34%	0.00%	0.18%	2.05%	4.11%
Private Equity	25.20%	49.61%	1.83%	24.02%	20.42%	16.80%
NYC R3000 + 3% Lagged Index	15.25%	67.21%	-6.37%	21.74%	18.82%	17.62%
Private Real Estate	29.56%	7.75%	1.81%	12.43%	11.32%	12.70%
NCREIF NFI-ODCE NET + 100 BP Index	29.57%	8.15%	2.34%	12.77%	10.64%	11.25%
<b>In-House Portfolio</b>						
Short-term Investments	0.00%	0.15%	1.44%	0.52%	1.08%	0.77%

## Notes:

- 1) For Fiscal Years 2022, 2021, and 2020, the investment returns are reported net of fees.
- 2) For trailing 3 and 5 years, the investment returns are reported net of fees. For trailing 10 years, the investment returns are reported gross of fees.

## SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS Year Ended June 30, 2022

Entity Name	Assets under Management (in thousands)	Management Fees per Share	Fees (in dollars)
<b>Investment Managers' Fees</b>			
<b>Fixed Income</b>			
Advent (Convertible Bonds)	\$ 821,409	\$ 0.00	\$ 3,861,067
AFL-CIO (Mortgage Sector)	315,562	0.00	1,080,547
Bain Bank Loans (Fixed Income)	1,204	0.01	8,224
BlackRock (Corporate)	604	0.15	87,645
BlackRock (Government Sector)	971,480	0.00	469,744
BlackRock (Mortgage)	2,481,439	0.00	1,143,605
BlackRock - TIPS Managers	804,757	0.00	466,908
Eaton Vance Management Inc. (Enhanced Yield)	301,482	0.00	982,483
GIA Partners LLC (Core Plus)	182,420	0.00	446,063
LM Capital-MTA (Core Plus)	320,556	0.00	505,134
MacKay Shields LLC (Enhanced Yield)	336,475	0.00	996,503
Neuberger Berman - Credit (Credit Sector)	1,341,396	0.00	1,498,952
Neuberger Berman (Enhanced Yield)	431,124	0.00	1,585,988
Neuberger Berman (Mortgage)	-	-	(51,635)
Nomura Management Inc. (Enhanced Yield)	317,483	0.00	1,104,680
Oaktree (Enhanced Yield)	409,181	0.00	1,520,990
PIMCO Mortgage (Mortgage Sector)	1,300,598	0.00	1,386,364
Pinebridge (High Yield)	342,844	0.00	1,314,119
Pinebridge-Credit (Credit Sector)	764,119	0.00	147,413
Prudential (Corporate)	-	-	76,602
Pugh-CorePlus (Corporate Sector)	46,864	0.00	102,423
Shenkman Capital Management (Enhanced Yield)	382,094	0.00	1,473,982
SSGA 1-3 Treasury Inde (Gov't)	2,021,782	0.00	214,299
SSGA Int Gov Bond Inde (Gov't)	2,442,292	0.00	278,342
SSGA-LT Treasury 10Y Plus (Gov't)	533,145	0.00	63,119
State Street Bank and Trust Co (Gov't)	732,224	0.00	467,118
State Street Global Advisors (TIPS)	2,095,692	0.00	111,814
Stone Harbor (Enhanced Yield)	3,810	(0.00)	(8,940)
T. Rowe Price (Corporate)	2,075,451	0.00	2,170,550
T. Rowe Price (Enhanced Yield)	465,768	0.00	1,234,721
Victory (Convertible Bonds)	527,513	0.00	1,580,475
Voya-Credit (Credit Sector)	803,289	0.00	125,591
Wellington Mortgages (Mortgage)	519,440	0.00	509,523
<b>Total Fixed Income</b>	<b>24,093,497</b>		<b>26,954,413</b>
<b>Domestic Equity</b>			
BlackRock Inst R 1000 CORE	12,918,376	0.00	341,225
BlackRock Inst R 2000 (Growth)	5,937	0.00	303
BlackRock Inst R 2000 Value	70,680	0.00	4,963
Cooke and Bieler - US SCV	92,650	0.00	220,832
Earnest-US MCC	136,606	0.00	7,140
Legal & General US LMCE	1,820,620	0.00	1,610,348
LEG - Altravue - SCV	30,091	0.01	178,791
LEG - Ballast - SCV	15,809	0.01	97,970
LEG - Bridge City - SCG	16,993	0.01	113,469
LEG - Dean - SCV	40,284	0.01	230,579
LEG - Essex - SCG	18,134	0.01	138,204
LEG - Lisanti - SCG	19,476	0.01	155,032
LEG - Nicholas Investment US - SCG	6,837	0.01	53,337

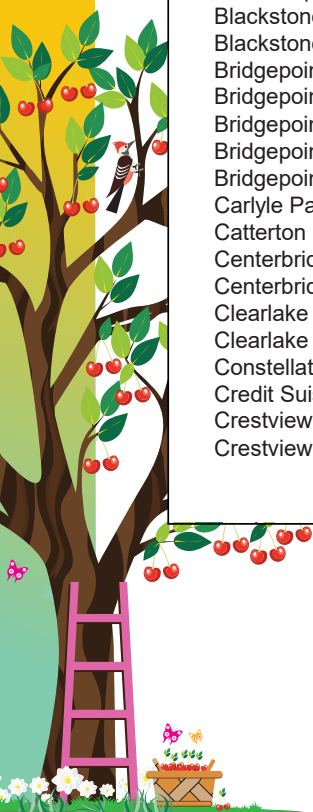
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**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
Year Ended June 30, 2022

Entity Name	Assets under Management (in thousands)	Management Fees per Share	Fees (in dollars)
LEG - Transition	\$ -	\$ -	\$ (5,156)
MFS Institutional Advisors	150,008	0.00	74,721
PanAgora US SCC	153,022	0.01	1,203,124
Pzena-US SCV	141,373	0.01	1,128,341
RAFI Enhanced Large Companies	2,181,450	0.00	2,816,146
SSGA-US LC Russell Top 200 Core	1,513,297	0.00	24,206
T. Rowe Price US SCV	-	-	168,121
Victory-US MCV	160,835	0.00	313,117
Wasatch-US SCG	156,965	0.02	3,393,916
Wellington SCV (Small Cap Value)	336,262	0.01	2,857,387
Westfield Capital Management Company	143,675	0.00	236,395
William Blair-US SCG	150,930	0.01	1,518,076
<b>Total Domestic Equity</b>	<b>20,280,310</b>		<b>16,880,587</b>
<b>Private Equity</b>			
Acon Equity Partners III LP	227	0.01	1,172
Altaris Health Partners III LP	10,130	0.01	114,326
American Securities Partners VII LP	108,464	0.00	271,088
Apax Partners IX LLP	172,928	0.01	1,261,799
Apax Partners X	60,700	0.02	1,410,752
Apollo Investment Fund VIII	74,531	0.01	448,996
Apollo Investment Fund IX	203,853	0.01	2,944,000
Ardian-ASF VI	13,605	0.01	126,017
Ardian-ASF VII	60,382	0.01	465,447
Ardian-ASF VIII B	117,050	0.01	1,740,000
Ares Corp Opportunities Fund IV	59,879	0.00	215,195
Ares Corp Opportunities Fund V	93,338	0.00	429,641
Ares Corp Opportunities Fund VI	53,361	0.04	1,921,196
AXA Secondary Fund V B	189	0.00	227
BC European Capital IX	80,170	0.01	597,095
BC European Capital X	109,745	0.01	792,852
BC European Capital X Co Investment SC	57,941	0.00	358
BC Partners XI	35,180	0.03	1,074,167
BC Partners XI Co-Invest	27,654	0.00	728
BDCM Opportunity Fd III	68,503	0.01	439,923
Blackstone Capital Partners VI	53,356	0.00	128,990
Blackstone Capital Partners VIII	52,696	0.03	1,556,022
Bridgepoint Europe IV	4,144	0.01	34,130
Bridgepoint Europe V	47,013	0.01	504,356
Bridgepoint EUR V Co Investment SC	23,103	0.00	358
Bridgepoint Europe VI	111,012	0.02	1,835,162
Bridgepoint Europe VI Co Investment	30,272	0.00	48,491
Carlyle Partners VI	55,855	0.01	307,522
Catterton Partners VI	10,786	0.00	49,007
Centerbridge Cap III	23,008	0.01	297,697
Centerbridge Capital Partners IV	29,939	0.06	1,921,380
Clearlake Capital Partners VI	65,742	0.02	1,416,339
Clearlake Capital Partners VII	41,963	0.03	1,153,685
Constellation Ventures III	573	0.01	3,363
Credit Suisse Emerging Market Domestic Mgrs Fund	67,063	0.01	610,016
Crestview Partners II	26,452	0.01	184,373
Crestview Partners III	59,235	0.01	725,515

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**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
**Year Ended June 30, 2022**

<b>Entity Name</b>	<b>Assets under Management (in thousands)</b>	<b>Management Fees per Share</b>	<b>Fees (in dollars)</b>
Crestview Partners IV	\$ 41,232	\$ 0.02	\$ 994,000
CVC Capital Partners VI	147,991	0.01	938,973
CVC Capital Partners VII	194,302	0.01	1,610,247
CVC Capital Partners VIII A	33,260	0.06	2,026,611
EQT IX Co-invest	28,018	(0.00)	(26)
EQT IX USD	91,261	0.02	1,384,945
EQT VI LP	231	0.44	100,876
EQT VII LP	123,714	0.02	2,278,299
EQT VIII Co-Invest	47,119	0.00	49,909
EQT VIII LP	147,929	0.01	1,246,130
Fairview Capl Ptnrs III	148	0.19	28,807
Fairview Emerging Managers I	522	(0.00)	(339)
Fairview Emerging Managers II	31,099	0.00	86,930
FS Equity Partners VI	11,990	0.00	42,378
FT Ventures Fd III	6,888	0.00	26,449
FTV Capital IV	15,377	0.01	141,401
FTV Capital V	54,831	0.01	370,611
FTV Capital VI	31,036	0.01	359,796
Grain Communications Opportunity Fund III	8,332	0.04	306,394
Grain Fund II	29,166	0.01	405,727
Green Equity Investors VI	149,884	0.00	592,372
Green Equity Investors VII	140,846	0.00	703,634
Green Equity Investors VIII	90,375	0.01	930,548
Grey MT Ptnrs Fund III	677	0.04	25,834
Halyard Capital II	6,242	0.00	31,105
HarbourVest Centre Street Co-Investment	69,436	0.00	53,751
Heartwood Partners II	5,777	0.01	62,036
Heartwood Partners III	11,780	0.02	283,834
Hg Genesis 9 A	25,734	0.03	668,428
ICV Partners IV LP	10,085	0.04	360,000
Incline Equity Partners III LP	124	0.10	12,879
Insight Partners XII	49,731	0.02	1,008,000
Insight Partners XII Buyout Annex Fund	17,696	0.00	84,232
J.P. Morgan Fleming Trache B	33,544	0.01	212,532
J.P. Morgan Investment Management	6,524	0.01	41,619
KKR Americas Fund XII LP	242,639	0.01	1,372,254
KKR Asian Fund IV	21,956	0.05	1,081,500
KKR Europe V	68,670	0.01	807,922
Landmark Equity Ptnrs XIV	9,517	0.02	146,503
Landmark Equity Ptnrs XV	28,860	0.02	555,106
Lexington Capital Partners VII	8,234	0.01	41,371
Lexington Capital Partners VIII	81,220	0.01	656,043
Lexington Capital Partners IX LP	96,589	0.01	552,904
Lincolnshire Equity Fund III	19,655	0.01	278,339
Lincolnshire Equity Fund IV	8,389	0.01	53,978
Lindsay Goldberg V LP	40,509	0.04	1,522,500
Midocean Partners III	2,300	0.06	134,715
Mill City Capital	8,231	0.01	71,816
Montreux Equity Partners IV	16,450	0.01	196,231
New Mainstream Capital II	3,576	0.02	74,360
New Mountain Partners III	5,113	0.05	251,870
NGN BioMed Opportunity II	10,106	0.00	31,514

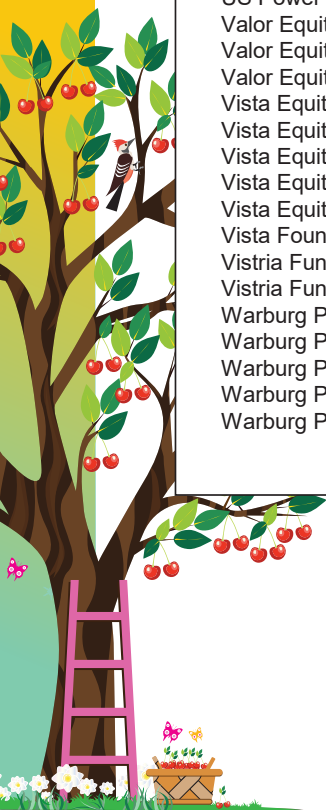
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## SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS

### Year Ended June 30, 2022

Entity Name	Assets under Management (in thousands)	Management Fees per Share	Fees (in dollars)
NMS Fund III	\$ 13,229	\$ 0.02	\$ 251,396
NYC-NorthBound Emerging Managers Program	66,028	0.00	238,228
One Rock Capital Partners III LP	19,706	0.04	813,416
Onex Partners III	12,785	0.00	22,831
Paladin Homeland Security III	15,229	0.02	295,445
Palladium EQ Partners IV	47,947	0.01	543,921
Palladium EQ Partners V	23,991	0.02	523,162
Patriot Financial Partners II	3,490	0.02	73,409
Patriot Financial Partners III	16,888	0.02	253,750
PCGAM Clean Energy & Tech Fund	10,905	0.00	35,391
Pegasus Partners V LP	15,878	0.01	121,865
Platinum Equity Capital Partners V	202,104	0.01	1,108,031
Platinum Equity Small Cap I	38,422	0.01	373,199
Quaker BioVentures II LP	1,700	0.03	51,781
Raine Partners II	28,130	0.01	173,232
Raine Partners III	33,525	0.01	361,102
Reverence Capital Partners III	8,037	0.04	320,351
Reverence Capital Partners Opportunities Fund II	20,519	0.02	391,243
Riverstone/Carlyle GLB EP IV	233	0.08	17,869
RLJ Equity Partners Fund 1	3,323	0.00	5,168
SCP Vitalife Partners II	4,708	0.02	103,926
Siris Capital Group LLC	25,655	0.01	256,894
Siris Partners IV	97,545	0.01	1,385,790
Snow Phipps Group II	18,155	0.01	230,595
Starvest Partners II	10,385	0.01	121,491
Stellex Capital Management LP	20,415	0.01	255,380
Stellex Capital Partners II	17,522	0.08	1,427,799
Terra Firma Capital Partner III	-	-	590
The Resolute Fund V	64,578	0.02	1,260,000
Thomas, McNerney & Partners II	47	0.30	14,106
TPG Rise Climate LP	2,987	0.16	491,115
Trident V LP A160	72,302	0.01	639,648
Trilantic Capital Partners V	35,467	0.01	339,243
Trilantic Capital Partners VI	47,158	0.02	801,190
US Power Fund II	674	0.16	108,259
US Power Fund III	1,636	0.08	132,972
Valor Equity Partners III	7,772	0.02	116,649
Valor Equity Partners IV	62,671	0.01	439,666
Valor Equity Partners V	26,056	0.01	272,600
Vista Equity Partners III	2,718	0.00	7,580
Vista Equity Partners IV	79,751	0.00	391,492
Vista Equity Partners V	175,611	0.01	1,198,492
Vista Equity Partners VI	267,681	0.01	2,431,173
Vista Equity Partners VII	188,551	0.01	2,662,500
Vista Foundation Fund II	16,231	0.01	172,502
Vistria Fund III	20,939	0.01	296,607
Vistria Fund IV	22,070	0.01	240,000
Warburg Pincus Financial Sector II	37,960	0.01	540,736
Warburg Pincus Global Growth	147,223	0.00	340,456
Warburg Pincus PE	152,765	0.01	897,932
Warburg Pincus PE XI	52,135	0.00	221,929
Warburg Pincus PE XII	278,383	0.01	1,566,898

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**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
**Year Ended June 30, 2022**

Entity Name	Assets under Management (in thousands)	Management Fees per Share	Fees (in dollars)
Webster Capital Management LLC	\$ 8,533	\$ 0.01	\$ 102,633
Wellspring Capital Partners V	12,685	0.01	99,708
Welsh Carson Anderson & Stowe XI	102,709	0.00	507,159
Welsh Carson Anderson & Stowe XIII	80,319	0.02	1,234,876
<b>Total Private Equity</b>	<b>7,189,023</b>		<b>77,614,609</b>
<b>Private Equity-Opport. &amp; Global Fixed Income</b>			
400 Capital Centre Street	50,639	0.00	216,558
Angelo Gordon CT ST Partners	232,457	0.01	1,315,930
Apollo Centre St. Partnership LP	310,113	0.00	1,444,426
Ares Centre Street Partnership	247,320	0.01	2,277,286
Brightwood Capital Fund III LP	10,113	0.03	260,765
Brightwood Capital Fund IV LP	75,554	0.01	716,197
Contrarian C A LLC	109,616	0.01	817,307
FCO MA Centre Street II ER	101,798	0.00	197,898
FCO MA Centre Street II EXP ER	24,895	0.00	75,676
Fortress CTR ST Partners	109,836	0.01	1,128,485
GCM Grosvenor Emerging OFI Manager	72,917	0.00	254,533
Golden Tree OD MTA 111	236,247	0.01	1,731,338
ICG Centre St Partnership	112,375	0.01	1,125,601
KKR SP-OFI(KKR-NYC Credit B)	211,080	0.01	1,217,563
KKR-NYC Credit C	30,294	0.01	186,503
Lone Star Fund VIII	19,232	0.00	37,042
Maranon Centre Street Parnership	121,405	0.00	553,584
Marathon CTR ST Partners	467,198	0.01	2,997,512
Oak Hill Ctr. St. Partners	430,615	0.01	2,269,191
Oaktree OPP FD IX	75,082	0.01	968,235
Torchlight Debt Opp V	7,198	0.02	158,920
Torchlight Debt Opp VI	75,652	0.01	818,112
Torchlight Debt Opp VII	27,618	0.03	880,000
<b>Total Private Equity-Opport. &amp; Global Fixed Income</b>	<b>3,159,254</b>		<b>21,648,662</b>
<b>Private Real Estate</b>			
Aermont Capital Real Estate Fund IV	41,942	0.02	758,126
Almanac Realty Securities VII	40,655	0.01	416,087
Almanac Realty Securities VII-SideCar	11,988	0.00	23,500
Almanac Realty Securities VIII	27,788	0.01	315,599
Almanac Realty Securities VIII-SideCar	21,236	0.00	61,446
Almanac Realty Securities IX	67	1.29	86,665
American Value Ptnrs I	1,029	0.04	36,480
Artemis Co-Investment (Artemis Mach II LLC)	37,456	0.01	343,837
Artemis Income & Growth	34,373	0.01	481,035
Avanath Capital (Avanath Aff Housing II)	-	-	23,194
Big Real Estate Fund I	13,781	0.01	163,585
Big Real Estate Fund II	9,550	0.04	338,762
Blackstone RE Europe IV	37,456	0.01	447,245
Blackstone RE Partners EUR VI	38,002	0.02	620,677
Blackstone Real Estate Ptnrs VII	42,916	0.02	698,581
Blackstone Real Estate Ptnrs VIII	127,909	0.01	1,196,740
Blackstone Real Estate Ptnrs IX	154,365	0.01	1,909,000
Brookfield Premier Real Estate Partners	274,982	0.01	1,661,299
Brookfield Strategic RE Partners I	35,681	0.01	269,582

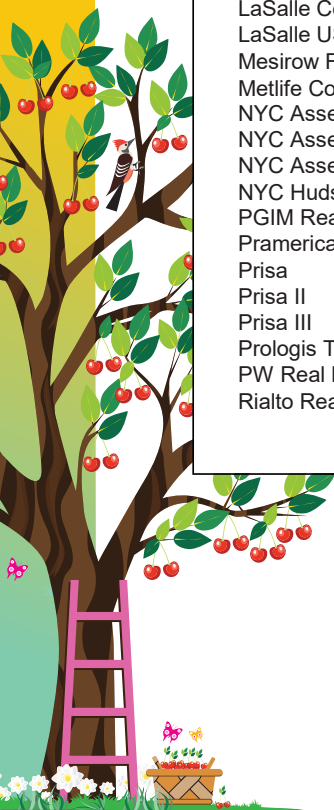
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## SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS

### Year Ended June 30, 2022

Entity Name	Assets under Management (in thousands)	Management Fees per Share	Fees (in dollars)
Brookfield Strategic Real Estate Partner III	\$ 140,328	\$ 0.01	\$ 1,480,972
Capri Urban Investors	373	0.13	49,785
Carlyle Fund VII	22,127	0.01	188,438
Carlyle Property Investors	167,589	0.00	787,113
Carlyle R.P. Fd V	462	0.01	4,617
Carlyle R.P. Fd VI	5,896	0.00	27,139
CIREP Centre Street	50,921	0.02	989,528
Clarion Partners LLC (Lion Industrial Trust)	235,669	0.01	1,586,803
Cortland Partners	165,600	0.01	866,483
DivcoWest Fund IV	1,537	0.01	19,102
DivcoWest Fund V	45,530	0.01	368,033
DivcoWest Fund VI A	25,636	0.02	413,197
DRA Advisors LLC	37,430	0.01	549,401
DRA Growth and Income Fund X	35,533	0.02	567,117
Elmtree US Net Lease Fund IV	39,028	0.01	552,500
Exeter Core Fund II	60,199	0.00	109,161
Exeter Core Fund III	92,391	0.00	145,432
Exeter Value Fund IV	4,295	0.04	159,065
Exeter Value Fund V	57,076	0.00	281,750
GCM Grosvenor	92,905	0.02	1,573,334
GreenOak Asia USD III	28,784	0.02	449,421
Harrison St Core Prop Fd	110,490	0.01	714,989
Harrison St Core Prop SideCar	49,331	0.00	41,504
Heitman America Real Estate Trust	181,300	0.00	689,276
Heitman Credit	138,871	0.00	658,002
H/2 Spec Opportunity Fd II	614	0.02	13,362
H/2 Spec Opportunity Fd III	16,520.00	0.01	218,074
H/2 Spec Opportunity Fd IV	101,844	0.01	910,000
Jamestown Premier Fund	41,035.00	0.01	242,854
JPMC SP Fund	61,781	0.01	822,858
JPMC SS Fund	171,848.00	0.01	1,685,449
KKR Real Estate Credit Opp Prtnrs Agg I	105,148	0.01	1,088,100
KKR Real Estate Partners Americas II LP	59,474	0.01	879,012
KKR Real Estate Partners Americas III	72,323	0.02	1,095,706
KKR Real Estate Partners Europe II USD	46,581	0.02	1,062,985
LaSalle Centre Street RE Co-Inv Core	39,573	0.00	31,508
LaSalle Centre Street RE Co-Inv Non Core	44,193	0.00	26,079
LaSalle US Property Fund	196,377	0.01	1,011,546
Mesirow Financial Real Estate Value IV	8,910	0.05	442,750
Metlife Core Property	82,214	0.00	410,274
NYC Asset #1 - Vanbarton (Emmes)	31,113	0.01	309,512
NYC Asset #2 - Related (fka Sandy)	57,650	0.00	275,144
NYC Asset #3 - Hudson	39,844	0.01	365,352
NYC Hudson Multifamily Green Fund	24,939	0.00	86,326
PGIM Real Estate Capital VII	18,182	0.01	101,282
Pramerica VI LP	22,652	0.01	274,078
Prisa	151,634	0.01	787,832
Prisa II	270,226	0.01	1,871,033
Prisa III	247,871	0.01	2,227,526
Prologis Targeted US Logistic Fd	94,255	0.00	201,946
PW Real Estate Fund III LP	80,422	0.00	319,459
Rialto Real Estate Fund IV - Debt	54,011	0.03	1,530,000

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**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
**Year Ended June 30, 2022**

Entity Name	Assets under Management (in thousands)	Management Fees per Share	Fees (in dollars)
RREEF America REIT II	\$ 251,098	\$ 0.00	\$ 828,035
RREEF Core Plus Industrial Fund	125,279	0.00	13,250
Silverpeak Legacy Partners III	2,114	(0.00)	(1,657)
Stockbridge Real Estate Fd III A	21,293	0.00	44,715
Taconic NYC Inv Fd LP	3,375	0.01	17,879
TPG RE Thematic Advantage Core-Plus IV	57,599	0.00	197,555
Tristan European Property Inv	42,469	0.01	342,304
UBS Trumbull Property Fund (TPF)	97,539	0.01	747,408
USAA Eagle Real Estate Feeder 1	109,435	0.01	616,974
Walton St Real Estate Fund VI	19,108	0.00	62,427
Westbrook Real Estate VII LP	5,603	0.01	34,377
Westbrook Real Estate VIII LP	7,028	0.01	49,445
Westbrook RE Fund X CO-INVEST	12,737	0.02	194,611
Westbrook RE Fund XI	29,129	0.07	2,116,500
<b>Total Private Real Estate</b>	<b>5,665,517</b>		<b>46,677,472</b>
<b>Infrastructure</b>			
Actis Energy 4	38,602	0.01	445,056
Actis Energy 5 A	-	-	2,814,000
Ardian Infrastructure Fund V	34,811	0.02	616,062
ASF VII Infrastructure	48,067	0.01	450,279
ASF VIII Infrastructure B	6,743	0.14	932,343
Axium Infrastructure Canada II	44,646	0.01	396,392
Axium Infrastructure US Country	28,774	0.01	219,543
Axium Infrastructure US II Class G	30,949	0.00	31,404
Basalt Infrastructure Partners III A	64,094	0.01	560,318
BIS NYC Infra Emerging Manager Opp Fund	8,448	0.00	11,589
Brookfield Infra Fund II	61,722	0.01	329,198
Brookfield Infra Fund III	63,223	0.01	493,548
Brookfield Infra Fund IV B	82,455	0.01	1,045,350
EIG Energy Partners	24,811	0.01	159,829
EQT Infrastructure III	26,977	0.03	758,309
EQT Infrastructure IV	97,295	0.01	868,302
EQT Infra IV Co-Inv F SCSP Connect	20,128	(0.00)	(11)
EQT Infra IV Co-Inv Saber	10,762	0.00	324
EQT Infrastructure V NO 2 SCSP	58,723	0.03	1,670,625
Global Energy & Power Infra Fund II	17,997	0.02	371,164
Global Energy & Power Infra Fund III	47,391	0.01	624,293
Global Infrastructure Partners III	121,601	0.01	1,502,877
Global Infrastructure Partners IV	62,493	0.02	1,163,518
IFM Global Infrastructure	134,438	0.01	1,268,925
InfraVia European Fund V	9,616	0.02	196,939
KKR Global Infrastructure Investment II	38,726	0.02	626,805
KKR Global Infrastructure Investment III	56,247	0.02	952,332
Stonepeak Infrastructure Fund IV LP	59,415	0.04	2,293,609
<b>Total Infrastructure</b>	<b>1,299,154</b>		<b>20,802,922</b>
<b>International Equity</b>			
Acadian (Emerging Markets)	670,865	0.00	2,559,309
Acadian (Small Cap)	498,756	0.00	1,960,054
Algert EAFE SC	115,911	0.00	516,570
AQR-EM SCC	175,957	0.01	1,430,670

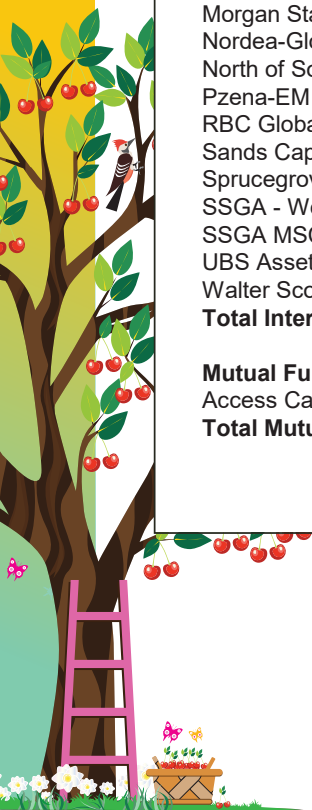
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## SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS

### Year Ended June 30, 2022

Entity Name	Assets under Management (in thousands)	Management Fees per Share	Fees (in dollars)
Aubrey-EM ACG - Xponance	\$ 23,134	\$ 0.00	\$ 92,967
Baillie Gifford Overseas (Emerging Markets)	683,315	0.01	4,738,647
Baillie Gifford-WorldxUS LMCC	1,088,250	0.00	4,438,833
BIV - Arga Investment Management	34,908	0.01	217,781
BIV - Bailard Inc.	-	-	(80)
BIV - Blackcrane Capital LLC	5,573	0.01	46,318
BIV - Dunda Partners LLP	33,858	0.01	236,429
BIV - Global Alpha Capital Management	8,275	0.01	55,041
BIV - Promethos-WorldxUS ACC	30,614	0.01	201,532
BIV - Radin Capital Partners Inc.	7,213	0.01	45,126
BIV - Redwood-EM ACV	6,970	0.01	49,014
BIV - RVX-EM ACV	8,085	0.01	48,616
BIV - Smith International	30,349	0.01	205,906
BIV - Transition - WorldxUS	3	(0.25)	(734)
BlackRock MSCI - EM Core	610,614	0.00	198,386
Causeway-WorldxUS LMCC	1,279,055	0.00	5,265,953
DFA (Emerging Markets)	527,964	0.00	2,123,297
Fierra Canada Corporation	363,878	0.01	2,427,223
FIS - Arga Investment Management	26,428	0.00	98,691
FIS - Dundas Global Investors	17,447	0.00	72,783
FIS - Foresight Global Investors	22,226	0.00	83,920
FIS - Martin Investment Management	20,165	0.00	77,103
FIS - Osmosis Investment Management	20,760	0.00	79,393
FIS - Redwood Investments	14,079	0.00	61,161
FIS - Transition	7	(0.01)	(61)
LEI - Applied Research International	-	-	121,986
LEI - Ativo Capital Management	29,472	0.01	199,133
LEI - Blackcrane Capital LLC	71	1.82	128,137
LEI - Haven-WorldxUS LMCV	33,276	0.01	178,283
LEI - Henry James International Management	27,747	0.01	281,427
LEI - Promethos Capital	26,028	0.00	56,741
LEI - Redwood Investments	28,418	0.01	259,876
LEI - Solstein-WorldxUS ACC	17,822	0.00	13,046
LEI - Transition	30	0.34	10,318
Morgan Stanley Investment Management (Global Equity)	110,343	0.00	483,890
Nordea-Global MCG (Global Equity)	151,977	0.00	66,216
North of South-EM ACV - Xponance	18,807	0.00	72,744
Pzena-EM ACV	306,230	0.01	2,391,345
RBC Global Asset Management (EM ACG)	220,773	0.00	653,537
Sands Capital Management LLC (EM LCG)	173,425	0.01	1,357,035
Sprucegrove (LMCC)	1,478,021	0.00	3,686,203
SSGA - WorldxUS LMC MSCI Core	1,424,888	0.00	203,042
SSGA MSCI EAFE Small Cap Index MTA	659,746	0.00	250,237
UBS Asset Management (EM ACC)	202,243	0.01	1,297,102
Walter Scott EAFE Large Cap	1,519,587	0.00	5,651,308
<b>Total International Equity</b>	<b>12,753,563</b>		<b>44,691,454</b>
<b>Mutual Fund - Mortgages</b>			
Access Capital Strategies RBC	151,879	0.00	294,791
<b>Total Mutual Fund - Mortgages</b>	<b>151,879</b>		<b>294,791</b>

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**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
**Year Ended June 30, 2022**

<b>Entity Name</b>	<b>Assets under Management (in thousands)</b>	<b>Management Fees per Share</b>	<b>Fees (in dollars)</b>
<b>Mutual Fund - Fixed Income Bank Loan</b>			
Babson Capital Management MTA	\$ 973	\$ 0.00	\$ 3,357
Credit Suisse BL MTA	91	0.03	2,501
<b>Total Mutual Fund - Fixed Income Bank Loan</b>	<b>1,064</b>		<b>5,858</b>
<b>Total For All Investment Managers</b>	<b>\$ 74,593,261</b>		<b>\$ 255,570,768</b>
<b>Consultant Fees</b>			
Aksia			144
Burgiss			64,361
Callan Associates Inc.			515,000
CDP			(128)
Foley & Lardner LLP			87,212
Institutional Shareholders Services			112,801
Meketa Investment Group			(42,350)
MSCI BARRA LLC			436,842
Stepstone Group LLC			1,274,885
<b>Total Consultant Fees</b>			<b>2,448,767</b>
<b>Legal Fees</b>			
Cox, Castle & Nicholson LLP			60,693
Daypitney LLP			51,561
Foster Gravey PC			65,767
Hitchcock Law Firm			(275)
Morgan, Lewis & Bockius LLP			65,750
Phillsbury Winthrop Shaw Pittman LLP			207,735
Reinhart Boerner Van Deuren			188,699
Seward Kissel			64,825
<b>Total Legal Fees</b>			<b>704,755</b>
<b>Total Fees FY 2022</b>			<b>\$ 258,724,290</b>

Note: Investment managers' fees are paid out of investment income.



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**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2022

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
ABEL NOSER	115,025	\$ 0.05	\$ 5,751
ABG SECURITIES LIMITED	247	0.05	13
ABN AMRO CLEARING BANK NV	313,793	0.02	6,430
ACADEMY SECURITIES INC	9,095	0.02	182
ALEX BROWN CAPITAL ADVISORY & TRUST CO	227,605	0.02	4,584
ALLEN & COMPANY LLC	35,115	0.02	795
APEX CLEARING CORPORATION	67,791	0.03	1,990
ARQAAM CAPITAL LIMITED	513,191	0.01	2,935
ARQAAM SECURITIES LLC	4,028,024	0.00	7,450
AUTREPAT DIV RE	48,070	0.03	1,320
B RILEY & CO LLC	146,345	0.02	3,145
BAADER BANK AG	2,593	0.06	160
BANCO CHASE MANHATTAN SA	754,020	0.00	289
BANCO ITAU SA	671,626	0.01	5,354
BANCO PACTUAL SA	7,094,646	0.00	14,291
BANCO SANTANDER (BRASIL) SA	529,876	0.00	1,104
BANCO SANTANDER CENTRAL HISPANO	278,138	0.01	1,958
BANCO SANTANDER CHILE	1,944,285	0.00	134
BANCO SANTANDER MEXICANO SA	133,938	0.01	1,036
BANCROFT CAPITAL LLC	71,035	0.01	568
BANK OF AMERICA CORPORATION	2,041,209	0.01	29,352
BANK OF NOVA SCOTIA SCUSA	23,660	0.02	365
BANQUE PICTET ET CIE SA	204,075	0.01	1,917
BARCLAYS CAPITAL	2,522,081	0.01	30,231
BARCLAYS CAPITAL INC	1,916,184	0.00	7,988
BARCLAYS CAPITAL INC LE	3,824,893	0.01	29,915
BARCLAYS CAPITAL LE	6,441,739	0.01	40,469
BARRINGTON RESEARCH ASSOCIATES	5,595	0.03	168
BERENBERG CAPITAL MARKETS LLC	42,981	0.03	1,504
BERNSTEIN AUTONOMOUS LLP	11,106,315	0.01	111,324
BMO CAPITAL MARKETS	759,290	0.03	20,136
BMO NESBITT BURNS INC	478,715	0.02	11,278
BNP PARIBAS	881,056	0.00	3,586
BNP PARIBAS PRIME BROKERAGE INC	5,867,204	0.01	46,242
BNP PARIBAS SECURITIES (ASIA) LTD	789,313	0.00	666
BNP PARIBAS SECURITIES INDIA PRIVATE LIM	13,458	0.01	91
BNP PARIBAS SECURITIES SERVICES	6,085,711	0.01	31,784
BNP PARIBAS SECURITIES SERVICES SA	9,770,908	0.00	12,411
BNY MELLON/HSBC BANK PLC	1,100	0.06	65
BOFA SECURITIES INC	87,135,650	0.01	550,660

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## SCHEDULE OF BROKERS' COMMISSIONS

### Year Ended June 30, 2022

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
BRADESCO SA CTVM	3,752,367	\$ 0.00	\$ 5,420
BROADCORT CAPITAL CORP	600	0.01	4
BTG PACTUAL CASA DE BOLSA	17,100	0.01	236
BTG PACTUAL CHILE SA CORREDORES DE BOLSA	28,824,083	0.00	1,252
BTIG LLC	1,097,879	0.03	28,188
CABRERA CAPITAL MARKETS	299,651	0.01	4,164
CABRERA CAPITAL MARKETS LLC	173,947	0.06	10,477
CANACCORD GENUITY (AUSTRALIA) LIMITED	4,998	0.01	47
CANACCORD GENUITY INC	221,560	0.04	9,269
CANADIAN IMPERIAL BANK OF COMMERCE	13,275	0.01	101
CANTOR FITZGERALD & CO	851,126	0.02	14,908
CANTOR FITZGERALD EUROPE	260,607	0.00	408
CAPITAL GUARDIAN BROKER	29,297	0.01	293
CAPITAL INSTITUTIONAL SERVICES INC EQUITIES	476,909	0.04	16,692
CARNEGIE AS	1,708,656	0.03	53,845
CARNEGIE INVESTMENT BANK AB	62,565	0.06	3,459
CARNEGIE SECURITIES FINLAND	295,690	0.02	6,153
CASTLEOAK SECURITIES LP	41,951	0.02	916
CF GLOBAL TRADING LLC	25,325	0.05	1,242
CGS-CIMB SECURITIES (HONG KONG) LTD	2,621,081	0.00	1,712
CHINA INTERNATIONAL CAPITAL CO	1,464,820	0.00	5,750
CHINA RENAISSANCE SECURITIES HK LTD	467,500	0.01	2,430
CIBC WORLD MARKETS INC	1,470,661	0.01	9,329
CIMB GK SECURITIES PTE LTD	720,200	0.00	836
CIMB SECURITIES (THAILAND) CO LTD	266,600	0.00	393
CIMB SECURITIES LTD KOREA BRANCH	2,822	0.07	196
CITADEL SECURITIES INSTITUTIONAL LLC	1,000	0.01	12
CITIBANK AG	29,370	0.07	2,130
CITIBANK EUROPE PLC	13,400	0.08	1,092
CITIBANK EUROPE PLC AUSTRIA BRANCH	28,267	0.02	658
CITIBANK INTERNATIONAL PLC	112,524	0.03	3,530
CITIBANK MEXICO	48,500	0.00	182
CITIBANK NA	5,537,933	0.00	16,564
CITIBANK NA SPAIN	4,800	0.01	45
CITIBANK OF COLOMBIA	209,610	0.00	870
CITIBANK SOUTH AFRICA	291,987	0.01	2,202
CITIGROUP GLOBAL MARKETS AUSTRALIA PTY	235,327	0.00	257
CITIGROUP GLOBAL MARKETS EUROPE AG	6,734,189	0.01	71,617
CITIGROUP GLOBAL MARKETS INC	42,660,736	0.00	97,299
CITIGROUP GLOBAL MARKETS INDIA	12,199,865	0.00	51,981

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**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2022

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
CITIGROUP GLOBAL MARKETS KOREA SECS LTD	285,936	\$ 0.02	\$ 6,186
CITIGROUP GLOBAL MARKETS LIMITED	11,993,447	0.01	65,681
CITIGROUP GLOBAL MARKETS TAIWAN	2,317,000	0.00	3,803
CL SECURITIES TAIWAN COMPANY LIMITED	4,052,642	0.00	14,540
CLSA AMERICAS	68,311	0.01	485
CLSA AUSTRALIA PTY LTD	6,146,931	0.00	4,878
CLSA SECURITIES KOREA LTD	2,638,794	0.02	46,062
CLSA SECURITIES MALAYSIA SDN BHD	16,084,424	0.00	5,622
CLSA SINGAPORE PTE LTD	19,216,394	0.00	74,005
CLSA UK	4,473,144	0.00	8,893
COAST PARTNERS SECURITIES	17,777	0.01	89
COMMERCIAL BANK OF QATAR LTD	1,537,742	0.00	2,976
COMPASS POINT	39,797	0.03	1,308
CONVENCAO SA CORRETORA DE VALORES	342,900	0.01	2,338
CORNERSTONE MACRO LLC	30,602	0.04	1,096
COWEN AND COMPANY LLC	8,591,308	0.01	93,144
CRAIG HALLUM	175,248	0.04	6,605
CREDIT AGRICOLE CIB	47,115	0.01	236
CREDIT INDUSTRIEL ET COMMERCIAL	1,542	0.02	35
CREDIT LYONNAIS SECURITIES (ASIA)	261,596,063	0.00	127,015
CREDIT LYONNAIS SECURITIES (USA) INC	357,400	0.00	1,689
CREDIT LYONNAIS SECURITIES INDIA	12,628,720	0.00	42,139
CREDIT MUTUEL CIC BANQUES	560	0.07	40
CREDIT SUISSE FIRST BOSTON	19,449,079	0.00	30,684
CREDIT SUISSE FIRST BOSTON (EUROPE)	833,742	0.01	5,196
CREDIT SUISSE FIRST BOSTON SA CTVM	3,746,353	0.00	9,413
CREDIT SUISSE INTERNATIONAL	5,804,277	0.00	21,289
CREDIT SUISSE SECURITIES (INDIA) PRIVATE LTD	584,793	0.01	5,712
CREDIT SUISSE SECURITIES (USA) LLC	305,591,878	0.00	213,223
CREDIT SUISSE SECURITIES CANADA INC	12,938	0.01	154
CS FIRST BOSTON (HONG KONG) LIMITED	1,555,556	0.00	4,024
CSFB AUSTRALIA EQUITIES LTD	2,723,563	0.00	1,561
CUTTONE & CO INC	27,766	0.02	499
DA DAVIDSON & COMPANY	45,119	0.03	1,293
DAIWA CAPITAL MARKETS AMERICA INC	1,855,651	0.05	89,172
DAIWA SBCM EUROPE	227,600	0.02	4,118
DAIWA SECURITIES (HK) LTD	2,187,000	0.00	2,469
DAIWA SECURITIES COMPANY LTD	27,415	0.03	933
DAIWA SECURITIES SB CAPITAL MARKETS	923,621	0.01	6,466
DAIWA SECURITIES SMBC CATHAY CO	2,000	0.07	138

*Continued on next page*

**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2022

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
DANSKE BANK AS	68	\$ 0.09	\$ 6
DBS VICKERS SECURITIES (SINGAPORE)	860,100	0.02	16,267
DEUTSCHE BANK AG	465,000	0.00	153
DNB BANK ASA	189,741	0.00	269
DNB MARKETS CUSTODY, A BUSINESS UNIT OF DNB BANK ASA OSLO	1,996	0.09	189
DOM INWESTYCYJNY BRE BANKU SA	148,860	0.00	287
DSP MERRILL LYNCH LTD	22,862,946	0.00	78,185
EUROMOBILIARE SIM SPA	16,285	0.06	983
EVERCORE GROUP LLC	197,340	0.02	4,617
EVERCORE ISI	658,245	0.02	13,627
EXANE SA	3,342,946	0.02	61,882
FIDELITY CAPITAL MARKETS	496,476	0.02	8,343
FIDELITY CLEARING CANADA ULC	1,125,200	0.01	8,172
FINANCIAL BROKERAGE GROUP (FBG)	1,246,048	0.00	3,980
FLOW CORRETORA DE MERCADORIAS LTDA	957,818	0.00	2,883
FUBON SECURITIES CO LTD	27,100	0.01	306
GK GOH OMETRACO PT	54,800	0.00	78
GOLDMAN SACHS (ASIA) LLC	11,817,773	0.00	8,887
GOLDMAN SACHS (INDIA)	15,197,657	0.00	23,839
GOLDMAN SACHS AUSTRALIA PTY LTD	663,454	0.00	426
GOLDMAN SACHS CO LLC	132,908,530	0.00	260,854
GOLDMAN SACHS DO BRASIL CORRETORA	1,507,252	0.00	3,724
GOLDMAN SACHS INTERNATIONAL	19,644,023	0.00	91,317
GOODBODY STOCKBROKERS	35,099	0.00	86
GUGGENHEIM CAPITAL MARKETS LLC	7,034	0.04	259
GUZMAN & COMPANY	638,230	0.01	5,978
HAITONG INTERNATIONAL SECURITIES COMPANY LIMITED	4,807,300	0.00	17,831
HANWHA SECURITIES SEOUL	117,761	0.13	15,308
HEIGHT SECURITIES LLC	7,454	0.02	149
HILLTOP SECURITIES INC	820,896	0.03	22,943
HONGKONG AND SHANGHAI BANKING CORP LTD	1,407,017	0.00	4,825
HSBC BANK PLC	224,282,836	0.00	59,467
HSBC BROKERAGE (USA) INC	12,556	0.01	63
HSBC SECURITIES (USA) INC	98,616,376	0.00	52,763
HSBC SECURITIES INDIA HOLDINGS	1,314,688	0.00	2,799
HYUNDAI SECURITIES	58,382	0.06	3,343
ICBCFS LLC	24,127	0.01	267
ICHIYOSHI SECURITIES CO LTD	300	0.05	15
ICICI BROKERAGE SERVICES	26,538,948	0.00	83,508
IM TRUST SA CORREDORES DE BOLSA	139,760	0.00	271

*Continued on next page*

**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2022

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
INDIA INFOLINE LTD	23,360	\$ 0.03	\$ 622
INSTINET AUSTRALIA CLEARING SRVC PTY LTD	12,830,888	0.00	16,220
INSTINET EUROPE LIMITED	12,815	0.05	671
INSTINET LLC	57,539,760	0.00	86,748
INSTINET PACIFIC LIMITED	354,837,924	0.00	111,893
INSTINET SINGAPORE SERVICES PT	8,549,877	0.00	12,831
INSTINET UK LTD	109,687,824	0.00	454,633
INTESA SANPAOLO SPA	360	0.03	10
INVESTEC BANK PLC	15,487	0.01	125
INVESTEC MARKETS (PROPRIETARY) LIMITED	838,825	0.00	3,899
INVESTMENT TECHNOLOGY GROUP INC	37,652	0.03	1,178
ITG AUSTRALIA LTD	29,419,371	0.00	17,326
ITG CANADA	908,042	0.00	4,316
ITG INC	297,460	0.01	1,744
JANE STREET EXECUTION SERVICES LLC	1,500	0.01	19
JANNEY MONTGOMERY SCOTT INC	106,715	0.03	2,832
JB CAPITAL MKTS SOCIEDAD DE VALORES SA	156,932	0.00	521
JEFFERIES HONG KONG LIMITED	1,093,908	0.01	9,333
JEFFERIES INDIA PRIVATE LIMITED	5,713,840	0.01	41,326
JEFFERIES INTERNATIONAL LTD	43,590,111	0.00	38,409
JEFFERIES LLC	11,348,449	0.01	100,485
JMP SECURITIES	19,192	0.02	384
JOH BERENBERG GOSSLER & CO KG	4,155,695	0.01	34,618
JONESTRADING INSTITUTIONAL SERVICES LLC	832,595	0.02	16,321
JP MORGAN BROKING HK LIMITED	847,500	0.00	3,896
JP MORGAN INDIA PRIVATE LTD	2,517,507	0.00	6,028
JP MORGAN SECURITIES (ASIA PACIFIC) LTD	90,220,892	0.00	41,425
JP MORGAN SECURITIES (FAR EAST) LTD SEOUL	430,825	0.02	9,880
JP MORGAN SECURITIES (TAIWAN) LTD	1,772,644	0.00	1,142
JP MORGAN SECURITIES AUSTRALIA LTD	5,822,097	0.00	5,977
JP MORGAN SECURITIES INC	8,576,549	0.00	27,694
JP MORGAN SECURITIES LIMITED	327,056	0.02	5,462
JP MORGAN SECURITIES LLC	7,111,132	0.01	82,178
JP MORGAN SECURITIES PLC	35,602,601	0.01	211,988
JP MORGAN SECURITIES SINGAPORE	8,803,700	0.00	6,656
JUPITER SECURITIES SDN BHD	534,000	0.00	401
KB SECURITIES NV	2,101	0.01	14
KEEFE BRUYETTE WOODS INC	634,116	0.03	18,008
KEMPEN & CO NV	400	0.02	6
KEPLER CHEUVREUX	367,730	0.03	12,138

*Continued on next page*

## SCHEDULE OF BROKERS' COMMISSIONS

### Year Ended June 30, 2022

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
KEYBANC CAPITAL MARKETS INC	397,763	\$ 0.03	\$ 12,142
KIM ENG SECURITIES (HK) LTD	128,900	0.00	115
KOREA INVESTMENT AND SECURITIES CO LTD	17,263	0.03	493
KOTAK SECURITIES LTD	636,935	0.04	27,656
LARRAIN VIAL	3,380,644	0.00	4,057
LEERINK PARTNERS LLC	111,111	0.03	3,660
LIQUIDNET ASIA LIMITED	25,800	0.00	22
LIQUIDNET CANADA INC	61,549	0.00	281
LIQUIDNET EUROPE LIMITED	13,188,274	0.01	80,318
LIQUIDNET INC	2,070,306	0.02	33,595
LOOP CAPITAL MARKETS	28,208,729	0.01	241,773
LOOP CAPITAL MARKETS LLC	66,510	0.01	333
LUMINEX TRADING AND ANALYTICS	49,879	0.00	249
LUMINEX TRADING AND ANALYTICS LLC	173,331	0.01	1,235
MACQUARIE BANK LIMITED	14,396,082	0.00	22,634
MACQUARIE CAPITAL (EUROPE) LTD	146,257	0.01	764
MACQUARIE CAPITAL (USA) INC	205,124	0.00	612
MACQUARIE CAPITAL SECURITIES S	37,887,201	0.00	51,130
MACQUARIE SECURITIES (INDIA) PVT LTD	61,561	0.02	1,001
MACQUARIE SECURITIES (NZ) LTD	192,406	0.00	93
MACQUARIE SECURITIES (SINGAPORE)	28,900	0.00	14
MACQUARIE SECURITIES KOREA LIMITED	259,116	0.08	19,956
MACQUARIE SECURITIES LIMITED	98,000	0.01	585
MERRILL LYNCH CANADA INC	3,081	0.03	92
MERRILL LYNCH CORREDORES DE BOLSA SPA	345,307	0.04	15,369
MERRILL LYNCH EQUITIES (AUSTRALIA)	2,482,754	0.01	13,339
MERRILL LYNCH INTERNATIONAL	139,163,194	0.00	200,296
MERRILL LYNCH PIERCE FENNER AND SMITH	4,019,385	0.02	99,722
MERRILL LYNCH PROFESSIONAL CLEARING CORP	5,582	0.02	112
MIRABAUD SECURITIES LLP	2,488	0.26	643
MIRAE ASSET SEC USA	8,486	0.03	255
MIRAE ASSET SECURITIES CO LTD	58,012	0.06	3,335
MISCHLER FINANCIAL GROUP	4,035,246	0.00	17,408
MISCHLER FINANCIAL GROUP INC EQUITIES	172,821	0.03	5,013
MITSUBISHI UFJ SECURITIES (USA)	125,604	0.02	3,077
MIZUHO SECURITIES USA INC	306,913	0.04	12,087
MKM PARTNERS LLC	63,407	0.03	2,044
MORGAN STAN INTERNATIONAL LTD	8,760	0.04	335
MORGAN STANLEY AND CO INTERNATIONAL	331,477	0.05	16,185
MORGAN STANLEY AND CO INTERNATIONAL PLC	6,306,211	0.00	12,918

*Continued on next page*

**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2022

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
MORGAN STANLEY AUSTRALIA SECURITIES LTD	2,816,780	\$ 0.00	\$ 969
MORGAN STANLEY BANK	264	0.42	110
MORGAN STANLEY BANK AG	35,014	0.41	14,498
MORGAN STANLEY CO INCORPORATED	86,868,417	0.00	321,751
MORGAN STANLEY HK SECURITIES LTD	2,195,000	0.00	67
MORGAN STANLEY INDIA COMPANY PVT LTD	1,904,738	0.01	11,813
MORGAN STANLEY TAIWAN LIMITED	9,601,005	0.00	20,943
MOTILAL OSWAL SECURITIES LIMITED	9,400	0.07	694
NATIONAL FINANCIAL SERVICES CORPORATION	84,080	0.02	1,613
NATIONAL FINANCIAL SERVICES LLC	31,510	0.02	646
NBC CLEARING SERVICES INCORPORATED	13,981	0.00	21
NEEDHAM & COMPANY	275,903	0.04	11,181
NESBITT BURNS	14,106	0.03	423
NH INVESTMENT AND SECURITIES CO LTD	7,500	0.13	998
NOMURA FINANCIAL ADVISORY & SEC INDIA	1,778,128	0.00	7,049
NOMURA FINANCIAL INVESTMENT KOREA CO LTD	115,375	0.01	1,722
NORTH SOUTH CAPITAL LLC	117,782	0.01	851
NORTHERN TRUST BROKERAGE INSTITUTION	10,238	0.03	307
NORTHLAND SECURITIES INC	54,578	0.02	1,092
NUMIS SECURITIES INC	28,249	0.01	224
ODDO ET CIE	2,796	0.04	114
OPPENHEIMER & CO INC	323,445	0.03	9,866
PAREL	708,506	0.01	3,988
PAVILION GLOBAL MARKETS LTD	673,900	0.03	18,673
PEEL HUNT LLP	5,898	0.07	386
PENSERRA SECURITIES	2,703,638	0.02	54,350
PENSERRA SECURITIES LLC	1,156,463	0.00	2,522
PERSHING LLC	32,667,665	0.01	255,008
PERSHING SECURITIES CANADA LIMITED	104,990	0.02	2,520
PERSHING SECURITIES LIMITED	11,756,104	0.01	132,029
PICTET CANADA LP	83,339	0.01	826
PIPER JAFFRAY & CO	753,760	0.04	27,512
PIPER JAFFRAY AND HOPWOOD	736,894	0.00	1,414
RAYMOND JAMES AND ASSOCIATES INC	569,923	0.04	20,869
RAYMOND JAMES LTD	6,217	0.02	134
RBC CAPITAL MARKETS LLC	31,416,089	0.00	29,228
RBC DOMINION SECURITIES CORPORATION	13,388	0.02	292
RBC DOMINION SECURITIES INC	1,361,300	0.01	7,566
REDBURN (EUROPE) LIMITED	1,925,431	0.01	24,946
ROBERT W BAIRD CO INCORPORATED	2,185,734	0.02	52,454

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**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2022

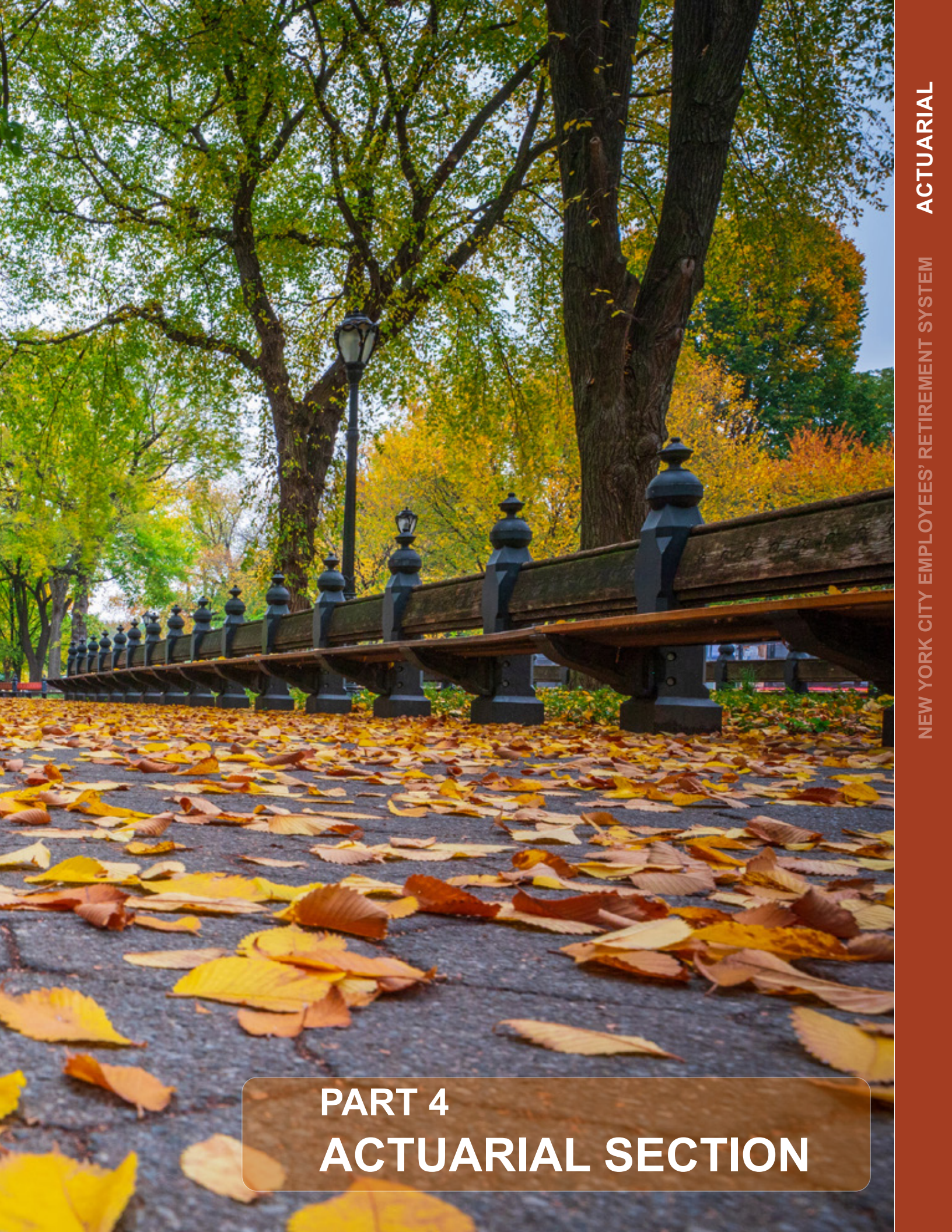
Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
ROSENBLATT SECURITIES INC	1,347	\$ 0.01	\$ 8
ROTH CAPITAL PARTNERS LLC	39,459	0.05	1,951
ROYAL BANK OF CANADA EUROPE LTD	2,920,285	0.01	39,106
SAMSUNG SECURITIES CO LTD	10,006	0.13	1,272
SANFORD C BERNSTEIN (INDIA) PRIVATE LIM	323,196	0.02	4,877
SANFORD C BERNSTEIN AND CO LLC	33,508,907	0.00	70,609
SANTANDER INVESTMENT SECURITIES INC	101,304	0.00	305
SANTANDER SECURITIES SERVICES SA	70,200	0.01	389
SB EQUITIES INCORPORATED	133,750	0.00	296
SCOTIA CAPITAL (USA) INC	229,211	0.01	1,894
SCOTIA CAPITAL INC	761,200	0.01	4,234
SG ASIA SECURITIES (INDIA) PVT LTD	4,922,933	0.00	20,557
SG SECURITIES (HK) LIMITED	35,626,734	0.00	15,229
SG SECURITIES (LONDON) LTD	1,876,617	0.00	2,056
SHENYIN WANGUO SECURITIES (HK) LTD	8,000	0.09	759
SIDCO/VIRTU AMERICAS	690	0.04	28
SINOPAC SECURITIES CORPORATION	335,000	0.00	1,472
SKANDINAVISKA ENSKILDA BANKEN	2,868	0.03	72
SKANDINAVISKA ENSKILDA BANKEN AB GLOBAL	68,320	0.06	3,783
SKANDINAVISKA ENSKILDA BANKEN AS	373	0.19	72
SKANDINAVISKA ENSKILDA BANKEN LONDON	1,510	0.03	49
SMBC NIKKO CAPITAL MARKETS LIMITED	149,600	0.02	2,500
SMBC SECURITIES INC	63,970	0.02	1,094
SOCIETE GENERALE	5,498,603	0.00	10,863
SPARK CAPITAL ADVISORS (INDIA) PRIV LTD	30,851	0.02	730
STATE STREET GLOBAL MARKETS LLC	735,654	0.02	14,996
STEPHENS INC	500,953	0.03	15,576
STIFEL NICOLAUS & CO INC	559,462	0.03	17,050
STIFEL NICOLAUS EUROPE LIMITED	149,264	0.01	786
STONEX FINANCIAL INC	16,166	0.03	424
STRATEGAS SECURITIES LLC	22,570	0.03	770
STUART FRANKEL & CO INC	8,258	0.01	83
SUNTRUST CAPITAL MARKETS INC	238,761	0.03	6,845
SVENSKA HANDELSBANKEN	2,850	0.01	30
TELSEY ADVISORY GROUP	650,314	0.04	27,688
TELSEY ADVISORY GROUP LLC	725	0.02	18
THE BANK OF NEW YORK MELLON	161,926	0.01	860
THE BANK OF NEW YORK MELLON SA NV	106	0.04	4
THE HONGKONG AND SHANGHAI BANK	2,336	0.42	978
TIGRESS FINANCIAL PARTNERS LLC	28,542	0.02	571

*Continued on next page*

**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2022

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
TORONTO DOMINION SECURITIES INC	574,300	\$ 0.01	\$ 3,163
TOURMALINE PARTNERS	3,367,034	0.01	22,149
TULLETT PREBON FINANCIAL SERVICES LLC	1,213	0.02	24
UBS AG	38,008,371	0.01	220,987
UBS AG LONDON BRANCH	1,248,605	0.01	13,411
UBS SECURITIES ASIA LTD	72,225,903	0.00	31,328
UBS SECURITIES CANADA INC	1,615,527	0.01	10,344
UBS SECURITIES HONG KONG LIMITED	302,000	0.00	247
UBS SECURITIES INDIA PRIVATE LTD	9,606,533	0.01	90,087
UBS SECURITIES LLC	16,496,111	0.00	73,789
UBS SECURITIES PTE LTD	847,958	0.00	3,647
UBS SECURITIES PTE LTD SEOUL	410,110	0.07	28,684
UBS SWITZERLAND AG	1,087,158	0.01	7,746
UBS WARBURG AUSTRALIA EQUITIES	1,386,548	0.00	1,136
UOB KAY HIAN PTE LIMITED	396,300	0.00	1,616
VIRTU AMERICAS LLC	1,746,073	0.02	34,979
VIRTU ITG EUROPE LIMITED	1,907,444	0.01	10,743
VTB BANK EUROPE PLC	349,886	0.00	649
WALL STREET ACCESS	104	0.01	1
WEDBUSH SECURITIES INC	33,501	0.03	1,005
WELLS FARGO SECURITIES LLC	2,435,949	0.01	25,517
WILLIAM BLAIR & COMPANY LLC	395,769	0.05	18,554
WILLIAM O NEIL AND CO INC/BCC CLRG	3,590	0.04	144
WILLIAMS CAPITAL GROUP LP (THE)	671,114	0.02	13,953
WOOD AND COMPANY	259,247	0.00	535
WOOD GUNDY INC	26,238	0.01	219
XP INVESTIMENTOS CCTVM SA	8,118,632	0.00	19,665
YUANTA SECURITIES CO LTD	509,400	0.00	1,403
<b>TOTAL</b>	<b>3,055,365,711</b>	<b>\$</b>	<b>7,422,741</b>





**PART 4**  
**ACTUARIAL SECTION**



## 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 2, 2022

Board of Trustees  
 New York City Employees' Retirement System  
 335 Adams Street, Suite 2300  
 Brooklyn, NY 11201-3751

Re: Actuarial Information for the Annual Comprehensive Financial Report (ACFR) for the Fiscal Year Ended June 30, 2022

Dear Members of the Board of Trustees:

The financial objective of the New York City Employees' Retirement System (NYCERS 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, 2020 actuarial valuation is used to determine the Fiscal Year 2022 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 2022, the Actuarial Contributions to NYCERS, 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 23, 2022, the Office of the Actuary published the "Fiscal Year 2022 GASB67/68 Report for the City of New York and the New York City Retirement Systems" (the Fiscal Year 2022 GASB67/68 Report). Appendix A of the Fiscal Year 2022 GASB67/68 Report contains information developed in accordance with GASB67 for NYCERS.

## **Actuarial Assumptions and Methods**

The assumptions and methods used for the June 30, 2020 valuation were presented in the memorandum titled "Proposed Changes to Actuarial Assumptions and Methods (Revised 2021 A&M)" dated July 27, 2021 and were adopted by the Board of Trustees at the August 12, 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, 2020 and June 30, 2019 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, 2020 actuarial valuation is included in this ACFR. A summary of the census data used in the June 30, 2019 actuarial valuation of the Plan is available in the Fiscal Year 2021 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. The 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 16).

Also included in the Actuarial Section of the ACFR is a Solvency Test (i.e., Comparative Summary of Accrued Liabilities Funded by Actuarial Value of Assets) (Table 17) as prescribed by the Government Finance Officers Association (GFOA). This Solvency Test represents an alternative approach to describing progress toward funding objectives.

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New York City Employees' Retirement System  
December 2, 2022  
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### **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, 2020 Actuarial Valuation.
- Summary of Active Member Valuation Data.
- Number and Salary of Active Members by Occupational Position as of the June 30, 2020 Actuarial Valuation.
- Number of Active Members by Occupational Position and Age as of the June 30, 2020 Actuarial Valuation.
- Number of Active Members by Occupational Position and Years of Service as of the June 30, 2020 Actuarial Valuation.
- Active Member Valuation Data by Participating Employers.
- 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.



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New York City Employees' Retirement System  
December 2, 2022  
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The following items in the Financial Section of the ACFR were also prepared by the OA:

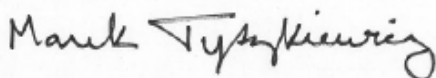
- Membership Data.
- Net Pension Liability.
- Actuarial Assumptions and Methods.
- Schedules of Changes in Employers' Net Pension Liability and Related Ratios.
- Schedules of Employer Contributions.

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 Frankie Chen, Edward Hue, or me.

### **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,



Marek Tyszkiewicz, ASA, MAAA  
Chief Actuary

MT/eh

Att.

cc: Frankie Chen, ASA, EA - New York City Office of the Actuary  
Chun Gong - New York City Employees' Retirement System  
Edward Hue, EA - New York City Office of the Actuary  
Keith Snow, Esq. - New York City Office of the Actuary  
Melanie Whinnery - New York City Employees' Retirement System



## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2020 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 (ACCNY), the Boards of Trustees of the five actuarially-funded NYCRS are to periodically review and adopt actuarial assumptions as proposed by the Actuary for use in the determination of Employer Contributions.

The Actuary issued a memorandum titled “Proposed Changes to Actuarial Assumptions and Methods (Revised 2021 A&M)” dated July 27, 2021. The actuarial assumptions and methods described in that memorandum were adopted by the Board of Trustees at the August 12, 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 by certain occupational groups are used to estimate various withdrawals from active service. Probabilities are shown in Table 1 for members withdrawing from active service for service retirement, Table 2 for members terminating from active service, and Tables 3 and 4 for members withdrawing from active service due to disability or death, respectively. Mortality improvement scale MP-2020, published by the Society of Actuaries, is applied to probabilities of ordinary death for actives and pre-commencement mortality for deferred vesteds.
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 5a and 5b, respectively, and for beneficiaries in Table 5c.



## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)

5. A salary scale is used to estimate salaries at termination, retirement, or death. Percentage increases are shown in Table 6 by certain occupational groups. The Salary Scales include a General Wage Increase (GWI) assumption of 3.0% per annum.
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 7 for certain occupational groups.
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 Plan's Actuary to calculate the Employer Contributions.

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

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

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2020 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 each year under EAN 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 6 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 NYCERS 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-2 valuation date to determine Fiscal Year XX employer contributions.

This methodology requires adjustments to certain components used to determine the Fiscal Year XX employer contributions as follows:

- a. Normal Cost

The normal cost as of June 30, XX-2 is rolled forward with the assumed AIR of 7.0% to derive the normal cost as of December 31, XX-1.

- b. UAL Payments

For determining the UAL payments for Fiscal Year XX, and to be consistent with the OYLM, the UAL as of June 30, XX-2 is adjusted by the discounted value of the employer normal cost and UAL payments paid during Fiscal Year XX-1 and the discounted value of the Administrative Expenses reimbursed during Fiscal Years XX-1 and XX.



## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)

14. The obligations of the New York City Employees' Retirement System (NYCERS) to the Correction Officers' Variable Supplements Fund (COVSF), Housing Police Officer's Variable Supplements Fund (HPOVSF), Housing Police Superior Officers' Variable Supplements Fund (HPSOVSF), Transit Police Officer's Variable Supplements Fund (TPOVSF), and Transit Police Superior Officers' Variable Supplements Fund (TPSOVSF) are recognized through a methodology where the PV of future VSF transfers from NYCERS to the COVSF, HPOVSF, HPSOVSF, TPOVSF, and TPSOVSF is included directly as an actuarial liability of NYCERS. This amount is computed as the excess, if any, of the PV of benefits of the COVSF, HPOVSF, HPSOVSF, TPOVSF, and TPSOVSF over the AVA of the COVSF, HPOVSF, HPSOVSF, TPOVSF, and TPSOVSF, 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.
15. For the June 30, 2020 actuarial valuation, the New York City Off-Track Betting Corporation (OTB) was valued on a going-concern basis.
16. For actuarial valuation purposes, members are separated into six groups:
  - a. General (for calculation purposes, these are further subdivided into Plan Groups).
  - b. Transit Operating.
  - c. MTA Bridges and Tunnels.
  - d. Sanitation.
  - e. Housing and Transit Police.
  - f. Correction.

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)

Table 1					
PROBABILITIES OF SERVICE RETIREMENT: GENERAL					
Age	Reduced Service Retirement	Unreduced Service Retirement For Members Mandated Into Their Retirement Program		Unreduced Service Retirement For Members Who Elected an Improved Retirement Program	
		Year 1	Ultimate	Year 1	Ultimate
≤ 54	0.00%	8.00%	5.00%	40.00%	15.00%
55	3.50%	8.00%	5.00%	40.00%	15.00%
56	3.50%	8.00%	5.00%	40.00%	15.00%
57	3.50%	8.00%	5.00%	40.00%	15.00%
58	3.50%	8.00%	5.00%	40.00%	15.00%
59	5.25%	8.00%	5.00%	40.00%	15.00%
60	7.00%	8.00%	5.00%	40.00%	15.00%
61	8.00%	8.00%	7.50%	40.00%	15.00%
62	8.00% <sup>1</sup>	30.00%/8.00% <sup>2</sup>	10.00%	60.00%	25.00%
63	0.00%	20.00%/30.00% <sup>3</sup>	15.00%	40.00%	20.00%
64	0.00%	20.00%	15.00%	40.00%	20.00%
65	0.00%	30.00%	20.00%	60.00%	25.00%
66	0.00%	20.00%	15.00%	40.00%	20.00%
67	0.00%	20.00%	15.00%	40.00%	20.00%
68	0.00%	20.00%	15.00%	40.00%	20.00%
69	0.00%	20.00%	15.00%	40.00%	20.00%
70	0.00%	25.00%	25.00%	40.00%	25.00%
71	0.00%	25.00%	25.00%	40.00%	25.00%
72	0.00%	25.00%	25.00%	40.00%	25.00%
73	0.00%	25.00%	25.00%	40.00%	25.00%
74	0.00%	25.00%	25.00%	40.00%	25.00%
75	0.00%	25.00%	25.00%	40.00%	25.00%
76	0.00%	25.00%	25.00%	40.00%	25.00%
77	0.00%	25.00%	25.00%	40.00%	25.00%
78	0.00%	25.00%	25.00%	40.00%	25.00%
79	0.00%	25.00%	25.00%	40.00%	25.00%
≥ 80	N/A	100.00%	100.00%	100.00%	100.00%

<sup>1</sup> 8.00% only applies to Tier 6 members; 0.00% otherwise.

<sup>2</sup> 30.00% for Tiers 1-4 members and 8.00% for Tier 6 members.

<sup>3</sup> 20.00% for Tiers 1-4 members and 30.00% for Tier 6 members.



**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**

<b>Table 1 (Cont'd)</b>				
<b>PROBABILITIES OF SERVICE RETIREMENT: CORRECTION</b>				
	<b>Reduced Service Retirement Tiers 1-3</b>		<b>Reduced Service Retirement Tier 3R<sup>1</sup></b>	
	<b>Age</b>	<b>Rate</b>	<b>Service</b>	<b>Rate</b>
	≤ 54	0.00%	≤ 19	0.00%
55	2.00%	20	5.00%	
56	2.00%	21	2.00%	
57	2.00%	22	5.00%	
58	2.00%	23	2.00%	
59	3.00%	24	2.00%	
60	4.00%	≥ 25	N/A	
61	5.00%			
62	0.00%			
≥ 63	N/A			
<b>Age</b>	<b>Unreduced Service Retirement For Members Mandated Into Their Retirement Program</b>		<b>Unreduced Service Retirement For Members Who Elected an Improved Retirement Program</b>	
	<b>Year 1</b>	<b>Ultimate</b>	<b>Year 1</b>	<b>Ultimate</b>
≤ 54	60.00%	20.00%	70.00%	20.00%
55	60.00%	20.00%	70.00%	20.00%
56	60.00%	20.00%	70.00%	20.00%
57	60.00%	20.00%	70.00%	20.00%
58	60.00%	20.00%	70.00%	20.00%
59	60.00%	20.00%	70.00%	20.00%
60	60.00%	20.00%	70.00%	20.00%
61	60.00%	30.00%	70.00%	30.00%
62	60.00%	40.00%	70.00%	40.00%
≥ 63	100.00%	100.00%	100.00%	100.00%

<sup>1</sup> Assumption also used for IDA Tier 3R members.

**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**



Table 1 (Cont'd)				
PROBABILITIES OF SERVICE RETIREMENT: SANITATION				
	Reduced Service Retirement Tiers 1-4		Reduced Service Retirement Tier 3R	
	Age	Rate	Service	Rate
	≤ 54	0.00%	≤ 19	0.00%
	55	4.00%	20	5.00%
	56	4.00%	21	2.00%
	57	4.00%	22	5.00%
	58	4.00%	23	2.00%
	59	6.00%	24	2.00%
	60	8.00%	≥ 25	N/A
	61	10.00%		
	62	0.00%		
	63	0.00%		
	64	0.00%		
	65	0.00%		
	66	0.00%		
	67	0.00%		
	68	0.00%		
	69	0.00%		
	≥ 70	N/A		
Age	Unreduced Service Retirement For Members Mandated Into Their Retirement Program		Unreduced Service Retirement For Members Who Elected an Improved Retirement Program	
	Year 1	Ultimate	Year 1	Ultimate
≤ 45	30.00%	10.00%	40.00%	15.00%
46	30.00%	10.00%	42.00%	15.00%
47	30.00%	10.00%	44.00%	15.00%
48	30.00%	10.00%	46.00%	15.00%
49	30.00%	10.00%	48.00%	15.00%
50	30.00%	10.00%	50.00%	15.00%
51	30.00%	10.00%	52.00%	15.00%
52	30.00%	10.00%	54.00%	15.00%
53	30.00%	10.00%	56.00%	15.00%
54	30.00%	10.00%	58.00%	15.00%
55	30.00%	10.00%	60.00%	15.00%
56	30.00%	10.00%	60.00%	16.00%
57	30.00%	10.00%	60.00%	17.00%
58	30.00%	10.00%	60.00%	18.00%
59	30.00%	10.00%	60.00%	19.00%
60	30.00%	10.00%	60.00%	20.00%
61	30.00%	15.00%	60.00%	25.00%
62	45.00%/30.00% <sup>1</sup>	20.00%/15.00% <sup>2</sup>	60.00%	30.00%
63	30.00%	15.00%	40.00%	20.00%
64	30.00%	15.00%	40.00%	20.00%
65	45.00%	20.00%	60.00%	30.00%
66	30.00%	15.00%	40.00%	20.00%
67	30.00%	15.00%	40.00%	20.00%
68	30.00%	15.00%	40.00%	20.00%
69	30.00%	15.00%	40.00%	20.00%
≥ 70	100.00%	100.00%	100.00%	100.00%

<sup>1</sup> 45.00% for Tier 1-4 members and 30.00% for Tier 3R members.

<sup>2</sup> 20.00% for Tier 1-4 members and 15.00% for Tier 3R members.

**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**

Table 1 (Cont'd)					
PROBABILITIES OF SERVICE RETIREMENT: TBTA					
Age	Members Mandated Into Their Retirement Program			Members Who Elected an Improved Retirement Program	
	Reduced Service Retirement	Unreduced Service Retirement		Unreduced Service Retirement	
		Year 1	Ultimate	Year 1	Ultimate
≤ 54	0.00%	30.00%	20.00%	60.00%	30.00%
55	2.00%	30.00%	20.00%	60.00%	30.00%
56	2.00%	30.00%	20.00%	60.00%	30.00%
57	2.00%	30.00%	20.00%	60.00%	30.00%
58	2.00%	30.00%	20.00%	60.00%	30.00%
59	3.00%	30.00%	20.00%	60.00%	30.00%
60	4.00%	30.00%	20.00%	60.00%	30.00%
61	5.00%	30.00%	30.00%	60.00%	30.00%
62	0.00%	40.00%	40.00%	60.00%	40.00%
63	0.00%	30.00%	30.00%	40.00%	30.00%
64	0.00%	30.00%	30.00%	40.00%	30.00%
65	0.00%	40.00%	40.00%	60.00%	40.00%
66	0.00%	30.00%	30.00%	40.00%	30.00%
67	0.00%	30.00%	30.00%	40.00%	30.00%
68	0.00%	30.00%	30.00%	40.00%	30.00%
69	0.00%	30.00%	30.00%	40.00%	30.00%
70	0.00%	30.00%	30.00%	40.00%	30.00%
71	0.00%	30.00%	30.00%	40.00%	30.00%
72	0.00%	30.00%	30.00%	40.00%	30.00%
73	0.00%	30.00%	30.00%	40.00%	30.00%
74	0.00%	30.00%	30.00%	40.00%	30.00%
75	0.00%	30.00%	30.00%	40.00%	30.00%
76	0.00%	30.00%	30.00%	40.00%	30.00%
77	0.00%	30.00%	30.00%	40.00%	30.00%
78	0.00%	30.00%	30.00%	40.00%	30.00%
79	0.00%	30.00%	30.00%	40.00%	30.00%
≥ 80	N/A	100.00%	100.00%	100.00%	100.00%



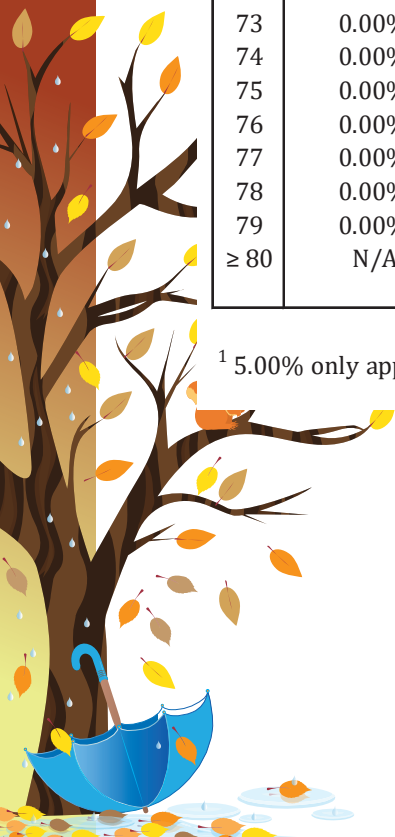
**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**

**Table 1 (Cont'd)**

PROBABILITIES OF SERVICE RETIREMENT: TRANSIT

Age	Reduced Service Retirement	Unreduced Service Retirement For Members Mandated Into Their Retirement Program		Unreduced Service Retirement For Members Who Elected an Improved Retirement Program	
		Year 1	Ultimate	Year 1	Ultimate
≤ 54	0.00%	30.00%	15.00%	25.00%	15.00%
55	2.00%	30.00%	15.00%	25.00%	15.00%
56	2.00%	30.00%	15.00%	25.00%	15.00%
57	2.00%	30.00%	15.00%	25.00%	15.00%
58	2.00%	30.00%	15.00%	25.00%	15.00%
59	3.00%	30.00%	15.00%	25.00%	15.00%
60	4.00%	35.00%	15.00%	30.00%	15.00%
61	5.00%	45.00%	20.00%	40.00%	20.00%
62	5.00% <sup>1</sup>	20.00%	20.00%	50.00%	40.00%
63	0.00%	20.00%	20.00%	40.00%	30.00%
64	0.00%	20.00%	20.00%	40.00%	30.00%
65	0.00%	25.00%	25.00%	50.00%	40.00%
66	0.00%	20.00%	20.00%	40.00%	30.00%
67	0.00%	20.00%	20.00%	40.00%	30.00%
68	0.00%	20.00%	20.00%	40.00%	30.00%
69	0.00%	20.00%	20.00%	40.00%	30.00%
70	0.00%	25.00%	25.00%	40.00%	30.00%
71	0.00%	25.00%	25.00%	40.00%	30.00%
72	0.00%	25.00%	25.00%	40.00%	30.00%
73	0.00%	25.00%	25.00%	40.00%	30.00%
74	0.00%	25.00%	25.00%	40.00%	30.00%
75	0.00%	25.00%	25.00%	40.00%	30.00%
76	0.00%	25.00%	25.00%	40.00%	30.00%
77	0.00%	25.00%	25.00%	40.00%	30.00%
78	0.00%	25.00%	25.00%	40.00%	30.00%
79	0.00%	25.00%	25.00%	40.00%	30.00%
≥ 80	N/A	100.00%	100.00%	100.00%	100.00%

<sup>1</sup> 5.00% only applies to Tier 6 members; 0.00% otherwise.



**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**

<b>Table 2</b>					
PROBABILITIES OF TERMINATION					
	<b>Probabilities of Termination</b>				
<b>Years of Service</b>	<b>General</b>	<b>Correction</b>	<b>Sanitation</b>	<b>TBTA</b>	<b>Transit</b>
0	8.40%	7.50%	4.00%	9.00%	9.00%
1	7.00%	6.00%	2.00%	4.50%	4.50%
2	5.60%	4.50%	1.00%	2.00%	2.00%
3	4.20%	3.00%	1.00%	1.50%	1.50%
4	4.20%	2.25%	1.00%	1.25%	1.25%
5	4.20%	1.50%	1.00%	1.10%	1.10%
6	4.00%	1.35%	0.90%	1.10%	1.10%
7	3.80%	1.20%	0.80%	1.10%	1.10%
8	3.60%	1.05%	0.70%	1.10%	1.10%
9	3.40%	0.90%	0.60%	1.10%	1.10%
10	3.20%	0.75%	0.50%	1.10%	1.10%
11	3.00%	0.75%	0.50%	1.00%	1.00%
12	2.80%	0.75%	0.50%	0.90%	0.90%
13	2.60%	0.75%	0.50%	0.80%	0.80%
14	2.40%	0.75%	0.50%	0.70%	0.70%
15	2.20%	0.75%	0.50%	0.55%	0.55%
16	2.00%	0.75%	0.50%	0.55%	0.55%
17	1.80%	0.75%	0.50%	0.55%	0.55%
18	1.60%	0.75%	0.50%	0.55%	0.55%
19	1.40%	0.75%	0.50%	0.55%	0.55%
20+	1.40%	0.75%	0.50%	0.55%	0.55%

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)



Table 3 PROBABILITIES OF DISABILITY FOR ACTIVE MEMBERS: GENERAL				
	Ordinary Disability		Accidental Disability	
Age	Males	Females	Males	Females
15	0.140%	0.140%	0.028%	0.014%
16	0.140%	0.140%	0.028%	0.014%
17	0.140%	0.140%	0.028%	0.014%
18	0.140%	0.140%	0.028%	0.014%
19	0.140%	0.140%	0.028%	0.014%
20	0.140%	0.140%	0.028%	0.014%
21	0.140%	0.140%	0.028%	0.014%
22	0.140%	0.140%	0.028%	0.014%
23	0.140%	0.140%	0.028%	0.014%
24	0.140%	0.140%	0.028%	0.014%
25	0.140%	0.140%	0.028%	0.014%
26	0.140%	0.140%	0.028%	0.014%
27	0.140%	0.140%	0.028%	0.014%
28	0.140%	0.140%	0.028%	0.014%
29	0.140%	0.140%	0.028%	0.014%
30	0.140%	0.140%	0.028%	0.014%
31	0.154%	0.140%	0.028%	0.014%
32	0.168%	0.140%	0.028%	0.014%
33	0.182%	0.140%	0.028%	0.014%
34	0.196%	0.140%	0.028%	0.014%
35	0.210%	0.140%	0.028%	0.014%
36	0.224%	0.147%	0.028%	0.014%
37	0.238%	0.154%	0.028%	0.014%
38	0.252%	0.161%	0.028%	0.014%
39	0.266%	0.168%	0.028%	0.014%
40	0.280%	0.175%	0.028%	0.014%
41	0.294%	0.182%	0.028%	0.014%
42	0.308%	0.189%	0.028%	0.014%
43	0.322%	0.196%	0.028%	0.014%
44	0.336%	0.203%	0.028%	0.014%
45	0.350%	0.210%	0.028%	0.014%
46	0.364%	0.238%	0.028%	0.014%
47	0.378%	0.266%	0.028%	0.014%
48	0.392%	0.294%	0.028%	0.014%
49	0.406%	0.322%	0.028%	0.014%
50	0.420%	0.350%	0.028%	0.014%
51	0.434%	0.378%	0.028%	0.014%
52	0.448%	0.406%	0.028%	0.014%
53	0.462%	0.434%	0.028%	0.014%
54	0.476%	0.462%	0.028%	0.014%
55	0.490%	0.490%	0.028%	0.014%
56	0.490%	0.490%	0.028%	0.014%
57	0.490%	0.490%	0.028%	0.014%
58	0.490%	0.490%	0.028%	0.014%
59	0.490%	0.490%	0.028%	0.014%
60	0.490%	0.490%	0.028%	0.014%
61	0.490%	0.490%	0.028%	0.014%
62	0.490%	0.490%	0.028%	0.014%
63	0.490%	0.490%	0.028%	0.014%
64	0.490%	0.490%	0.028%	0.014%
65	0.490%	0.490%	0.028%	0.014%
66	0.490%	0.490%	0.028%	0.014%
67	0.490%	0.490%	0.028%	0.014%
68	0.490%	0.490%	0.028%	0.014%
69	0.490%	0.490%	0.028%	0.014%
70	0.490%	0.490%	0.028%	0.014%
71	0.490%	0.490%	0.028%	0.014%
72	0.490%	0.490%	0.028%	0.014%
73	0.490%	0.490%	0.028%	0.014%
74	0.490%	0.490%	0.028%	0.014%
75	0.490%	0.490%	0.028%	0.014%
76	0.490%	0.490%	0.028%	0.014%
77	0.490%	0.490%	0.028%	0.014%
78	0.490%	0.490%	0.028%	0.014%
79	0.490%	0.490%	0.028%	0.014%
≥ 80	N/A	N/A	N/A	N/A

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)

Table 3 (Cont'd)						
PROBABILITIES OF DISABILITY FOR ACTIVE MEMBERS: UNIFORMED GROUPS						
	Correction			Sanitation		
Age	Ordinary Disability	Accidental Disability: Tier 3R Non-enhanced Plan	Accidental Disability: All Other Plans	Ordinary Disability	Accidental Disability: Tier 3R Non-enhanced Plan	Accidental Disability: All Other Plans
15	0.100%	0.125%	0.250%	0.100%	0.050%	0.100%
16	0.100%	0.125%	0.250%	0.100%	0.050%	0.100%
17	0.100%	0.125%	0.250%	0.100%	0.050%	0.100%
18	0.100%	0.125%	0.250%	0.100%	0.050%	0.100%
19	0.100%	0.125%	0.250%	0.100%	0.050%	0.100%
20	0.100%	0.125%	0.250%	0.100%	0.050%	0.100%
21	0.100%	0.138%	0.263%	0.100%	0.050%	0.100%
22	0.100%	0.138%	0.275%	0.100%	0.050%	0.100%
23	0.100%	0.150%	0.288%	0.100%	0.050%	0.100%
24	0.100%	0.150%	0.300%	0.100%	0.050%	0.100%
25	0.100%	0.163%	0.313%	0.100%	0.050%	0.100%
26	0.100%	0.163%	0.325%	0.120%	0.055%	0.110%
27	0.100%	0.175%	0.338%	0.140%	0.060%	0.120%
28	0.100%	0.175%	0.350%	0.160%	0.065%	0.130%
29	0.100%	0.188%	0.363%	0.180%	0.070%	0.140%
30	0.100%	0.188%	0.375%	0.200%	0.075%	0.150%
31	0.120%	0.200%	0.388%	0.220%	0.080%	0.160%
32	0.140%	0.200%	0.400%	0.240%	0.085%	0.170%
33	0.160%	0.213%	0.413%	0.260%	0.090%	0.180%
34	0.180%	0.213%	0.425%	0.280%	0.095%	0.190%
35	0.200%	0.225%	0.438%	0.300%	0.100%	0.200%
36	0.220%	0.225%	0.450%	0.320%	0.105%	0.210%
37	0.240%	0.238%	0.463%	0.340%	0.110%	0.220%
38	0.260%	0.238%	0.475%	0.360%	0.115%	0.230%
39	0.280%	0.250%	0.488%	0.380%	0.120%	0.240%
40	0.300%	0.250%	0.500%	0.400%	0.125%	0.250%
41	0.320%	0.263%	0.513%	0.420%	0.130%	0.260%
42	0.340%	0.263%	0.525%	0.440%	0.135%	0.270%
43	0.360%	0.275%	0.538%	0.460%	0.140%	0.280%
44	0.380%	0.275%	0.550%	0.480%	0.145%	0.290%
45	0.400%	0.288%	0.563%	0.500%	0.150%	0.300%
46	0.420%	0.288%	0.575%	0.520%	0.170%	0.340%
47	0.440%	0.300%	0.588%	0.540%	0.190%	0.380%
48	0.460%	0.300%	0.600%	0.560%	0.210%	0.420%
49	0.480%	0.313%	0.613%	0.580%	0.230%	0.460%
50	0.500%	0.313%	0.625%	0.600%	0.250%	0.500%
51	0.520%	0.325%	0.650%	0.620%	0.280%	0.560%
52	0.540%	0.338%	0.675%	0.640%	0.310%	0.620%
53	0.560%	0.350%	0.700%	0.660%	0.340%	0.680%
54	0.580%	0.363%	0.725%	0.680%	0.370%	0.740%
55	0.600%	0.375%	0.750%	0.700%	0.400%	0.800%
56	0.620%	0.388%	0.775%	0.720%	0.440%	0.880%
57	0.640%	0.400%	0.800%	0.740%	0.480%	0.960%
58	0.660%	0.413%	0.825%	0.760%	0.520%	1.040%
59	0.680%	0.425%	0.850%	0.780%	0.560%	1.120%
60	0.700%	0.438%	0.875%	0.800%	0.600%	1.200%
61	0.720%	0.450%	0.900%	0.820%	0.650%	1.300%
62	0.740%	0.463%	0.925%	0.840%	0.700%	1.400%
63	N/A	N/A	N/A	0.860%	0.750%	1.500%
64	N/A	N/A	N/A	0.880%	0.800%	1.600%
65	N/A	N/A	N/A	0.900%	0.850%	1.700%
66	N/A	N/A	N/A	0.920%	0.910%	1.820%
67	N/A	N/A	N/A	0.940%	0.970%	1.940%
68	N/A	N/A	N/A	0.960%	1.030%	2.060%
69	N/A	N/A	N/A	0.980%	1.090%	2.180%
≥ 70	N/A	N/A	N/A	N/A	N/A	N/A

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)

Table 3 (Cont'd)				
PROBABILITIES OF DISABILITY FOR ACTIVE MEMBERS: OTHERS				
Age	TBTA		Transit	
	Ordinary Disability	Accidental Disability	Ordinary Disability	Accidental Disability
15	0.100%	0.020%	0.100%	0.020%
16	0.100%	0.020%	0.100%	0.020%
17	0.100%	0.020%	0.100%	0.020%
18	0.100%	0.020%	0.100%	0.020%
19	0.100%	0.020%	0.100%	0.020%
20	0.100%	0.020%	0.100%	0.020%
21	0.100%	0.020%	0.100%	0.020%
22	0.100%	0.020%	0.100%	0.020%
23	0.100%	0.020%	0.100%	0.020%
24	0.100%	0.020%	0.100%	0.020%
25	0.100%	0.020%	0.100%	0.020%
26	0.100%	0.020%	0.100%	0.020%
27	0.100%	0.020%	0.100%	0.020%
28	0.100%	0.020%	0.100%	0.020%
29	0.100%	0.020%	0.100%	0.020%
30	0.100%	0.020%	0.100%	0.020%
31	0.120%	0.020%	0.120%	0.020%
32	0.140%	0.020%	0.140%	0.020%
33	0.160%	0.020%	0.160%	0.020%
34	0.180%	0.020%	0.180%	0.020%
35	0.200%	0.020%	0.200%	0.020%
36	0.220%	0.020%	0.220%	0.020%
37	0.240%	0.020%	0.240%	0.020%
38	0.260%	0.020%	0.260%	0.020%
39	0.280%	0.020%	0.280%	0.020%
40	0.300%	0.020%	0.300%	0.020%
41	0.320%	0.020%	0.320%	0.020%
42	0.340%	0.020%	0.340%	0.020%
43	0.360%	0.020%	0.360%	0.020%
44	0.380%	0.020%	0.380%	0.020%
45	0.400%	0.020%	0.400%	0.020%
46	0.420%	0.020%	0.420%	0.020%
47	0.440%	0.020%	0.440%	0.020%
48	0.460%	0.020%	0.460%	0.020%
49	0.480%	0.020%	0.480%	0.020%
50	0.500%	0.020%	0.500%	0.020%
51	0.520%	0.020%	0.520%	0.020%
52	0.540%	0.020%	0.540%	0.020%
53	0.560%	0.020%	0.560%	0.020%
54	0.580%	0.020%	0.580%	0.020%
55	0.600%	0.020%	0.600%	0.020%
56	0.600%	0.020%	0.600%	0.020%
57	0.600%	0.020%	0.600%	0.020%
58	0.600%	0.020%	0.600%	0.020%
59	0.600%	0.020%	0.600%	0.020%
60	0.600%	0.020%	0.600%	0.020%
61	0.600%	0.020%	0.600%	0.020%
62	0.600%	0.020%	0.600%	0.020%
63	0.600%	0.020%	0.600%	0.020%
64	0.600%	0.020%	0.600%	0.020%
65	0.600%	0.020%	0.600%	0.020%
66	0.600%	0.020%	0.600%	0.020%
67	0.600%	0.020%	0.600%	0.020%
68	0.600%	0.020%	0.600%	0.020%
69	0.600%	0.020%	0.600%	0.020%
70	0.600%	0.020%	0.600%	0.020%
71	0.600%	0.020%	0.600%	0.020%
72	0.600%	0.020%	0.600%	0.020%
73	0.600%	0.020%	0.600%	0.020%
74	0.600%	0.020%	0.600%	0.020%
75	0.600%	0.020%	0.600%	0.020%
76	0.600%	0.020%	0.600%	0.020%
77	0.600%	0.020%	0.600%	0.020%
78	0.600%	0.020%	0.600%	0.020%
79	0.600%	0.020%	0.600%	0.020%
≥ 80	N/A	N/A	N/A	N/A



**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**

Table 4 PROBABILITIES OF MORTALITY FOR ACTIVE MEMBERS: CORRECTION AND SANITATION BASE RATES						
	Correction			Sanitation		
	Ordinary Death		Accidental Death	Ordinary Death		Accidental Death
Age	Males	Females	All	Males	Females	All
15	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
16	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
17	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
18	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
19	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
20	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
21	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
22	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
23	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
24	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
25	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
26	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
27	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
28	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
29	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
30	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
31	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
32	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
33	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
34	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
35	0.025%	0.015%	0.005%	0.050%	0.030%	0.010%
36	0.030%	0.018%	0.005%	0.060%	0.036%	0.010%
37	0.035%	0.021%	0.005%	0.070%	0.042%	0.010%
38	0.040%	0.024%	0.005%	0.080%	0.048%	0.010%
39	0.045%	0.027%	0.005%	0.090%	0.054%	0.010%
40	0.050%	0.030%	0.005%	0.100%	0.060%	0.010%
41	0.055%	0.033%	0.005%	0.110%	0.066%	0.010%
42	0.060%	0.036%	0.005%	0.120%	0.072%	0.010%
43	0.065%	0.039%	0.005%	0.130%	0.078%	0.010%
44	0.070%	0.042%	0.005%	0.140%	0.084%	0.010%
45	0.075%	0.045%	0.005%	0.150%	0.090%	0.010%
46	0.080%	0.048%	0.005%	0.160%	0.096%	0.010%
47	0.085%	0.051%	0.005%	0.170%	0.102%	0.010%
48	0.090%	0.054%	0.005%	0.180%	0.108%	0.010%
49	0.095%	0.057%	0.005%	0.190%	0.114%	0.010%
50	0.100%	0.060%	0.005%	0.200%	0.120%	0.010%
51	0.105%	0.064%	0.005%	0.210%	0.128%	0.010%
52	0.110%	0.068%	0.005%	0.220%	0.136%	0.010%
53	0.115%	0.072%	0.005%	0.230%	0.144%	0.010%
54	0.120%	0.076%	0.005%	0.240%	0.152%	0.010%
55	0.125%	0.080%	0.005%	0.250%	0.160%	0.010%
56	0.130%	0.084%	0.005%	0.260%	0.168%	0.010%
57	0.135%	0.088%	0.005%	0.270%	0.176%	0.010%
58	0.140%	0.092%	0.005%	0.280%	0.184%	0.010%
59	0.145%	0.096%	0.005%	0.290%	0.192%	0.010%
60	0.150%	0.100%	0.005%	0.300%	0.200%	0.010%
61	0.160%	0.105%	0.005%	0.320%	0.210%	0.010%
62	0.170%	0.110%	0.005%	0.340%	0.220%	0.010%
63	N/A	N/A	N/A	0.360%	0.230%	0.010%
64	N/A	N/A	N/A	0.380%	0.240%	0.010%
65	N/A	N/A	N/A	0.400%	0.250%	0.010%
66	N/A	N/A	N/A	0.440%	0.280%	0.010%
67	N/A	N/A	N/A	0.480%	0.310%	0.010%
68	N/A	N/A	N/A	0.520%	0.340%	0.010%
69	N/A	N/A	N/A	0.560%	0.370%	0.010%
≥ 70	N/A	N/A	N/A	N/A	N/A	N/A

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)

Table 4 (Cont'd)						
PROBABILITIES OF MORTALITY FOR ACTIVE MEMBERS: PLAN GROUPS OTHER THAN CORRECTION AND SANITATION BASE RATES						
	General			Transit and TBTA		
	Ordinary Death		Accidental Death	Ordinary Death		Accidental Death
Age	Males	Females	All	Males	Females	All
15	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
16	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
17	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
18	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
19	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
20	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
21	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
22	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
23	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
24	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
25	0.0240%	0.0180%	0.0000%	0.0240%	0.0180%	0.0060%
26	0.0264%	0.0192%	0.0000%	0.0264%	0.0192%	0.0060%
27	0.0288%	0.0204%	0.0000%	0.0288%	0.0204%	0.0060%
28	0.0312%	0.0216%	0.0000%	0.0312%	0.0216%	0.0060%
29	0.0336%	0.0228%	0.0000%	0.0336%	0.0228%	0.0060%
30	0.0360%	0.0240%	0.0000%	0.0360%	0.0240%	0.0060%
31	0.0384%	0.0252%	0.0000%	0.0384%	0.0252%	0.0060%
32	0.0408%	0.0264%	0.0000%	0.0408%	0.0264%	0.0060%
33	0.0432%	0.0276%	0.0000%	0.0432%	0.0276%	0.0060%
34	0.0456%	0.0288%	0.0000%	0.0456%	0.0288%	0.0060%
35	0.0480%	0.0300%	0.0000%	0.0480%	0.0300%	0.0060%
36	0.0504%	0.0312%	0.0000%	0.0504%	0.0312%	0.0060%
37	0.0528%	0.0324%	0.0000%	0.0528%	0.0324%	0.0060%
38	0.0552%	0.0336%	0.0000%	0.0552%	0.0336%	0.0060%
39	0.0576%	0.0348%	0.0000%	0.0576%	0.0348%	0.0060%
40	0.0600%	0.0360%	0.0000%	0.0600%	0.0360%	0.0060%
41	0.0660%	0.0408%	0.0000%	0.0660%	0.0408%	0.0060%
42	0.0720%	0.0456%	0.0000%	0.0720%	0.0456%	0.0060%
43	0.0780%	0.0504%	0.0000%	0.0780%	0.0504%	0.0060%
44	0.0840%	0.0552%	0.0000%	0.0840%	0.0552%	0.0060%
45	0.0900%	0.0600%	0.0000%	0.0900%	0.0600%	0.0060%
46	0.0960%	0.0660%	0.0000%	0.0960%	0.0660%	0.0060%
47	0.1020%	0.0720%	0.0000%	0.1020%	0.0720%	0.0060%
48	0.1080%	0.0780%	0.0000%	0.1080%	0.0780%	0.0060%
49	0.1140%	0.0840%	0.0000%	0.1140%	0.0840%	0.0060%
50	0.1200%	0.0900%	0.0000%	0.1200%	0.0900%	0.0060%
51	0.1320%	0.0960%	0.0000%	0.1320%	0.0960%	0.0060%
52	0.1440%	0.1020%	0.0000%	0.1440%	0.1020%	0.0060%
53	0.1560%	0.1080%	0.0000%	0.1560%	0.1080%	0.0060%
54	0.1680%	0.1140%	0.0000%	0.1680%	0.1140%	0.0060%
55	0.1800%	0.1200%	0.0000%	0.1800%	0.1200%	0.0060%
56	0.1920%	0.1260%	0.0000%	0.1920%	0.1260%	0.0060%
57	0.2040%	0.1320%	0.0000%	0.2040%	0.1320%	0.0060%
58	0.2160%	0.1380%	0.0000%	0.2160%	0.1380%	0.0060%
59	0.2280%	0.1440%	0.0000%	0.2280%	0.1440%	0.0060%
60	0.2400%	0.1500%	0.0000%	0.2400%	0.1500%	0.0060%
61	0.2520%	0.1560%	0.0000%	0.2520%	0.1560%	0.0060%
62	0.2640%	0.1620%	0.0000%	0.2640%	0.1620%	0.0060%
63	0.2760%	0.1680%	0.0000%	0.2760%	0.1680%	0.0060%
64	0.2880%	0.1740%	0.0000%	0.2880%	0.1740%	0.0060%
65	0.3000%	0.1800%	0.0000%	0.3000%	0.1800%	0.0060%
66	0.3240%	0.1920%	0.0000%	0.3240%	0.1920%	0.0060%
67	0.3480%	0.2040%	0.0000%	0.3480%	0.2040%	0.0060%
68	0.3720%	0.2160%	0.0000%	0.3720%	0.2160%	0.0060%
69	0.3960%	0.2280%	0.0000%	0.3960%	0.2280%	0.0060%
70	0.4000%	0.2400%	0.0000%	0.4000%	0.2400%	0.0060%
71	0.4240%	0.2580%	0.0000%	0.4240%	0.2580%	0.0060%
72	0.4480%	0.2760%	0.0000%	0.4480%	0.2760%	0.0060%
73	0.4720%	0.2940%	0.0000%	0.4720%	0.2940%	0.0060%
74	0.4960%	0.3120%	0.0000%	0.4960%	0.3120%	0.0060%
75	0.5200%	0.3300%	0.0000%	0.5200%	0.3300%	0.0060%
76	0.5680%	0.3660%	0.0000%	0.5680%	0.3660%	0.0060%
77	0.6160%	0.4020%	0.0000%	0.6160%	0.4020%	0.0060%
78	0.6640%	0.4380%	0.0000%	0.6640%	0.4380%	0.0060%
79	0.7120%	0.4740%	0.0000%	0.7120%	0.4740%	0.0060%
≥ 80	N/A	N/A	N/A	N/A	N/A	N/A



**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**

Table 5a					
PROBABILITIES OF MORTALITY FOR SERVICE RETIREES: PLAN GROUPS OTHER THAN HOUSING POLICE AND TRANSIT POLICE 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%



## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)

Table 5a (Cont'd)					
PROBABILITIES OF MORTALITY FOR SERVICE RETIREES: HOUSING POLICE AND TRANSIT POLICE BASE RATES					
Age	Males	Females	Age	Males	Females
15	0.0100%	0.0084%	68	1.4988%	1.0632%
16	0.0135%	0.0103%	69	1.6917%	1.1644%
17	0.0181%	0.0112%	70	1.8929%	1.2629%
18	0.0217%	0.0131%	71	2.1028%	1.4563%
19	0.0240%	0.0140%	72	2.3212%	1.6586%
20	0.0251%	0.0142%	73	2.5833%	1.8689%
21	0.0268%	0.0150%	74	2.8558%	2.0889%
22	0.0284%	0.0158%	75	3.1397%	2.3314%
23	0.0301%	0.0168%	76	3.4343%	2.6045%
24	0.0315%	0.0179%	77	3.7415%	2.8700%
25	0.0327%	0.0191%	78	4.2304%	3.1787%
26	0.0342%	0.0204%	79	4.7399%	3.4795%
27	0.0354%	0.0217%	80	5.2682%	3.8105%
28	0.0371%	0.0231%	81	5.7202%	4.3289%
29	0.0394%	0.0247%	82	6.1782%	4.8678%
30	0.0427%	0.0265%	83	7.0179%	5.4288%
31	0.0492%	0.0316%	84	7.8631%	5.9122%
32	0.0556%	0.0360%	85	8.7167%	6.3661%
33	0.0616%	0.0398%	86	9.5810%	7.1650%
34	0.0669%	0.0427%	87	10.4516%	8.0050%
35	0.0724%	0.0455%	88	11.8437%	8.8541%
36	0.0755%	0.0474%	89	13.2486%	9.6498%
37	0.0779%	0.0497%	90	14.6752%	10.5687%
38	0.0808%	0.0521%	91	16.3354%	12.0267%
39	0.0845%	0.0551%	92	18.0374%	13.4340%
40	0.0901%	0.0588%	93	19.7642%	14.8636%
41	0.1003%	0.0633%	94	21.5622%	16.4543%
42	0.1106%	0.0702%	95	23.4692%	17.7952%
43	0.1212%	0.0792%	96	25.3619%	19.0707%
44	0.1323%	0.0907%	97	27.1816%	20.2419%
45	0.1439%	0.1052%	98	29.0095%	21.1759%
46	0.1563%	0.1228%	99	30.6920%	21.8544%
47	0.1693%	0.1427%	100	32.1584%	22.1859%
48	0.1827%	0.1652%	101	33.7521%	23.0680%
49	0.1964%	0.1865%	102	35.1259%	24.0803%
50	0.2104%	0.1992%	103	36.3671%	25.2770%
51	0.2802%	0.2104%	104	37.3834%	26.6309%
52	0.3506%	0.2186%	105	38.1051%	28.0912%
53	0.4209%	0.2250%	106	38.4698%	29.6244%
54	0.4903%	0.2863%	107	38.6325%	31.1943%
55	0.5297%	0.3409%	108	38.8076%	32.7579%
56	0.5857%	0.3910%	109	38.9794%	34.2712%
57	0.6387%	0.4376%	110	50.0000%	50.0000%
58	0.6875%	0.4613%	111	50.0000%	50.0000%
59	0.7316%	0.5005%	112	50.0000%	50.0000%
60	0.7720%	0.5393%	113	50.0000%	50.0000%
61	0.8439%	0.5785%	114	50.0000%	50.0000%
62	0.9155%	0.6152%	115	50.0000%	50.0000%
63	0.9888%	0.6536%	116	50.0000%	50.0000%
64	1.0644%	0.7279%	117	50.0000%	50.0000%
65	1.1433%	0.8032%	118	50.0000%	50.0000%
66	1.2263%	0.8884%	119	50.0000%	50.0000%
67	1.3135%	0.9736%	120	100.0000%	100.0000%



**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**

<b>Table 5b</b>					
<b>PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: GENERAL PLANS</b>					
<b>BASE RATES</b>					
<b>Age</b>	<b>Males</b>	<b>Females</b>	<b>Age</b>	<b>Males</b>	<b>Females</b>
15	0.2163%	0.1980%	68	3.8171%	2.9280%
16	0.2927%	0.2680%	69	3.8682%	2.9997%
17	0.3945%	0.3612%	70	3.9318%	3.0865%
18	0.4581%	0.3913%	71	4.1518%	3.1548%
19	0.4963%	0.4214%	72	4.3957%	3.4254%
20	0.5178%	0.4416%	73	4.6660%	3.7295%
21	0.5589%	0.4807%	74	4.9632%	3.9658%
22	0.6029%	0.5231%	75	5.2904%	4.2453%
23	0.6500%	0.5662%	76	5.7355%	4.5234%
24	0.7005%	0.6186%	77	6.2253%	4.7961%
25	0.7524%	0.6680%	78	6.7606%	5.1502%
26	0.8054%	0.7165%	79	7.3471%	5.5873%
27	0.8591%	0.7727%	80	7.9843%	6.0964%
28	0.9126%	0.8346%	81	8.6745%	6.6521%
29	0.9647%	0.9008%	82	9.4240%	7.2551%
30	1.0136%	0.9373%	83	10.2386%	7.9112%
31	1.0584%	0.9629%	84	11.1186%	8.6209%
32	1.0978%	0.9955%	85	12.0742%	9.3370%
33	1.1310%	1.0289%	86	12.8184%	10.0511%
34	1.1597%	1.0577%	87	13.3550%	10.8029%
35	1.1838%	1.0841%	88	14.0470%	11.4531%
36	1.2035%	1.1092%	89	14.7705%	12.5564%
37	1.2211%	1.1344%	90	15.5356%	14.1031%
38	1.2388%	1.1618%	91	17.3803%	15.7291%
39	1.2591%	1.1939%	92	19.4620%	17.1860%
40	1.2846%	1.2249%	93	21.5002%	18.5029%
41	1.3114%	1.2570%	94	23.5320%	19.6588%
42	1.3750%	1.2982%	95	25.5906%	20.8223%
43	1.4416%	1.3497%	96	27.4494%	21.5778%
44	1.5115%	1.4058%	97	29.1839%	21.9133%
45	1.5849%	1.4809%	98	30.8635%	22.0663%
46	1.6617%	1.5639%	99	32.2842%	23.0087%
47	1.7422%	1.6535%	100	33.4447%	23.1230%
48	1.8267%	1.7359%	101	35.1022%	23.6022%
49	1.9153%	1.8218%	102	36.5309%	24.5619%
50	2.0462%	1.8919%	103	37.8218%	25.7825%
51	2.2291%	1.9830%	104	38.8787%	27.1635%
52	2.4215%	2.0502%	105	39.6293%	28.6530%
53	2.6231%	2.1047%	106	40.0086%	30.2169%
54	2.8293%	2.1904%	107	40.1778%	31.8182%
55	3.0344%	2.2636%	108	40.3599%	33.4131%
56	3.1146%	2.3429%	109	40.5386%	34.9566%
57	3.1774%	2.4285%	110	50.0000%	50.0000%
58	3.2218%	2.5412%	111	50.0000%	50.0000%
59	3.2493%	2.5588%	112	50.0000%	50.0000%
60	3.2648%	2.5795%	113	50.0000%	50.0000%
61	3.3472%	2.6067%	114	50.0000%	50.0000%
62	3.4295%	2.6272%	115	50.0000%	50.0000%
63	3.5199%	2.6579%	116	50.0000%	50.0000%
64	3.6208%	2.7759%	117	50.0000%	50.0000%
65	3.7368%	2.8107%	118	50.0000%	50.0000%
66	3.7511%	2.8328%	119	50.0000%	50.0000%
67	3.7776%	2.8725%	120	100.0000%	100.0000%

# SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)



Table 5b (Cont'd)					
PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: CORRECTION BASE RATES					
Age	Males	Females	Age	Males	Females
15	0.1529%	0.1504%	68	2.0976%	1.9435%
16	0.2068%	0.2034%	69	2.2316%	2.0901%
17	0.2788%	0.2742%	70	2.3817%	2.2370%
18	0.3328%	0.3273%	71	2.5774%	2.3979%
19	0.3687%	0.3507%	72	2.7948%	2.5741%
20	0.3762%	0.3604%	73	3.0370%	2.7665%
21	0.3973%	0.3851%	74	3.3054%	3.0122%
22	0.4195%	0.4042%	75	3.6032%	3.3026%
23	0.4428%	0.4278%	76	3.9499%	3.6022%
24	0.4673%	0.4574%	77	4.3346%	3.9080%
25	0.4920%	0.4832%	78	4.7588%	4.2919%
26	0.5163%	0.5076%	79	5.2279%	4.7080%
27	0.5402%	0.5362%	80	5.7433%	5.1937%
28	0.5630%	0.5555%	81	6.3425%	5.7290%
29	0.5840%	0.5755%	82	6.9496%	6.3165%
30	0.6026%	0.5962%	83	7.5636%	6.9627%
31	0.6179%	0.6177%	84	8.1812%	7.7122%
32	0.6297%	0.6268%	85	8.8050%	8.4245%
33	0.6376%	0.6361%	86	9.7703%	9.0849%
34	0.6427%	0.6422%	87	10.8005%	9.7986%
35	0.6554%	0.6466%	88	12.0443%	10.5221%
36	0.6683%	0.6504%	89	13.3397%	11.5771%
37	0.6814%	0.6538%	90	14.6958%	12.7805%
38	0.6949%	0.6583%	91	16.4185%	14.0140%
39	0.7086%	0.6655%	92	18.1416%	15.1826%
40	0.7225%	0.6718%	93	19.8574%	16.3730%
41	0.7368%	0.6785%	94	21.6187%	18.3891%
42	0.7513%	0.6898%	95	23.5884%	20.4768%
43	0.7661%	0.7059%	96	25.4266%	21.5778%
44	0.7812%	0.7241%	97	27.2119%	21.9133%
45	0.7966%	0.7516%	98	29.0202%	22.0663%
46	0.8123%	0.7820%	99	30.6654%	23.0087%
47	0.8283%	0.8124%	100	32.1584%	23.1230%
48	0.8446%	0.8431%	101	33.7521%	23.6022%
49	0.8613%	0.8604%	102	35.1259%	24.5619%
50	0.8782%	0.8758%	103	36.3671%	25.7825%
51	0.8956%	0.8871%	104	37.3834%	27.1635%
52	0.9574%	0.8938%	105	38.1051%	28.6530%
53	1.0214%	0.8945%	106	38.4698%	30.2169%
54	1.0859%	0.9896%	107	38.6325%	31.8182%
55	1.1487%	1.0949%	108	38.8076%	33.4131%
56	1.2131%	1.1161%	109	38.9794%	34.9566%
57	1.2733%	1.1402%	110	50.0000%	50.0000%
58	1.3280%	1.1770%	111	50.0000%	50.0000%
59	1.3775%	1.2195%	112	50.0000%	50.0000%
60	1.4231%	1.2648%	113	50.0000%	50.0000%
61	1.4854%	1.3147%	114	50.0000%	50.0000%
62	1.5489%	1.3627%	115	50.0000%	50.0000%
63	1.6175%	1.4176%	116	50.0000%	50.0000%
64	1.6924%	1.5072%	117	50.0000%	50.0000%
65	1.7762%	1.5987%	118	50.0000%	50.0000%
66	1.8712%	1.7097%	119	50.0000%	50.0000%
67	1.9777%	1.8212%	120	100.0000%	100.0000%

**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**

<b>Table 5b (Cont'd)</b>					
<b>PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: SANITATION</b>					
<b>BASE RATES</b>					
<b>Age</b>	<b>Males</b>	<b>Females</b>	<b>Age</b>	<b>Males</b>	<b>Females</b>
15	0.1891%	0.1809%	68	2.4678%	1.9435%
16	0.2558%	0.2447%	69	2.6254%	2.0901%
17	0.3448%	0.3299%	70	2.8020%	2.2370%
18	0.4004%	0.3831%	71	3.0322%	2.3979%
19	0.4338%	0.4126%	72	3.2880%	2.5741%
20	0.4426%	0.4240%	73	3.5729%	2.7665%
21	0.4674%	0.4530%	74	3.8887%	3.0122%
22	0.4935%	0.4755%	75	4.2391%	3.3026%
23	0.5209%	0.5033%	76	4.6469%	3.6022%
24	0.5498%	0.5381%	77	5.0995%	3.9080%
25	0.5788%	0.5685%	78	5.5986%	4.2919%
26	0.6074%	0.5972%	79	6.1505%	4.7080%
27	0.6355%	0.6308%	80	6.7568%	5.1937%
28	0.6623%	0.6535%	81	7.4618%	5.7290%
29	0.6871%	0.6771%	82	8.1760%	6.3165%
30	0.7089%	0.7014%	83	8.8984%	6.9627%
31	0.7269%	0.7267%	84	9.6249%	7.7122%
32	0.7408%	0.7374%	85	10.3588%	8.4245%
33	0.7501%	0.7484%	86	11.4945%	9.0849%
34	0.7561%	0.7555%	87	12.6389%	9.7986%
35	0.7710%	0.7607%	88	13.8008%	10.5221%
36	0.7862%	0.7652%	89	14.9732%	11.5771%
37	0.8017%	0.7692%	90	16.1654%	12.7805%
38	0.8175%	0.7745%	91	18.1783%	14.0140%
39	0.8336%	0.7829%	92	20.1433%	15.1826%
40	0.8500%	0.7904%	93	22.0331%	16.3730%
41	0.8668%	0.7982%	94	23.8872%	18.3891%
42	0.8839%	0.8115%	95	25.7371%	20.4768%
43	0.9013%	0.8305%	96	27.1672%	21.5778%
44	0.9191%	0.8519%	97	28.5248%	21.9133%
45	0.9372%	0.8842%	98	29.8950%	22.0663%
46	0.9556%	0.9200%	99	31.1005%	23.0087%
47	0.9745%	0.9558%	100	32.1584%	23.1230%
48	0.9937%	0.9919%	101	33.7521%	23.6022%
49	1.0133%	1.0122%	102	35.1259%	24.5619%
50	1.0332%	1.0303%	103	36.3671%	25.7825%
51	1.0536%	1.0437%	104	37.3834%	27.1635%
52	1.1263%	1.0515%	105	38.1051%	28.6530%
53	1.2016%	1.0523%	106	38.4698%	30.2169%
54	1.2775%	1.0767%	107	38.6325%	31.8182%
55	1.3514%	1.0949%	108	38.8076%	33.4131%
56	1.4272%	1.1161%	109	38.9794%	34.9566%
57	1.4980%	1.1402%	110	50.0000%	50.0000%
58	1.5624%	1.1770%	111	50.0000%	50.0000%
59	1.6206%	1.2195%	112	50.0000%	50.0000%
60	1.6742%	1.2648%	113	50.0000%	50.0000%
61	1.7475%	1.3147%	114	50.0000%	50.0000%
62	1.8222%	1.3627%	115	50.0000%	50.0000%
63	1.9029%	1.4176%	116	50.0000%	50.0000%
64	1.9910%	1.5072%	117	50.0000%	50.0000%
65	2.0897%	1.5987%	118	50.0000%	50.0000%
66	2.2014%	1.7097%	119	50.0000%	50.0000%
67	2.3267%	1.8212%	120	100.0000%	100.0000%

**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**

Table 5b (Cont'd)					
PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: TRANSIT AND TBTA BASE RATES					
Age	Males	Females	Age	Males	Females
15	0.2122%	0.1981%	68	3.7437%	2.9280%
16	0.2871%	0.2680%	69	3.7938%	2.9997%
17	0.3869%	0.3612%	70	3.8562%	3.0865%
18	0.4493%	0.3913%	71	4.0719%	3.1548%
19	0.4867%	0.4214%	72	4.3111%	3.4254%
20	0.5079%	0.4416%	73	4.5762%	3.7295%
21	0.5481%	0.4807%	74	4.8677%	3.9658%
22	0.5913%	0.5231%	75	5.1886%	4.2453%
23	0.6375%	0.5662%	76	5.6252%	4.5234%
24	0.6871%	0.6186%	77	6.1056%	4.7961%
25	0.7380%	0.6680%	78	6.6306%	5.1502%
26	0.7899%	0.7165%	79	7.2058%	5.5873%
27	0.8426%	0.7727%	80	7.8307%	6.0964%
28	0.8951%	0.8346%	81	8.5077%	6.6521%
29	0.9462%	0.9008%	82	9.2427%	7.2551%
30	0.9941%	0.9373%	83	10.0417%	7.9112%
31	1.0381%	0.9629%	84	10.9048%	8.6209%
32	1.0767%	0.9955%	85	11.8420%	9.3370%
33	1.1093%	1.0289%	86	12.5719%	10.0511%
34	1.1374%	1.0577%	87	13.0981%	10.8029%
35	1.1611%	1.0841%	88	13.7768%	11.4531%
36	1.1803%	1.1092%	89	14.4864%	12.5564%
37	1.1976%	1.1344%	90	15.2369%	14.1031%
38	1.2150%	1.1618%	91	17.0460%	15.7291%
39	1.2349%	1.1939%	92	19.0878%	17.1860%
40	1.2599%	1.2249%	93	21.0868%	18.5029%
41	1.2862%	1.2570%	94	23.0794%	19.6588%
42	1.3485%	1.2982%	95	25.0984%	21.1183%
43	1.4139%	1.3497%	96	26.9216%	22.4310%
44	1.4825%	1.4058%	97	28.6226%	23.5901%
45	1.5544%	1.4809%	98	30.2699%	24.4460%
46	1.6298%	1.5639%	99	31.6634%	24.9756%
47	1.7087%	1.6535%	100	32.8016%	25.0896%
48	1.7915%	1.7359%	101	34.4271%	26.0668%
49	1.8784%	1.8218%	102	35.8284%	27.2107%
50	2.0069%	1.8919%	103	37.0944%	28.5630%
51	2.1863%	1.9830%	104	38.1311%	30.0929%
52	2.3750%	2.0502%	105	38.8672%	31.7431%
53	2.5726%	2.1047%	106	39.2392%	33.4756%
54	2.7749%	2.1904%	107	39.4052%	35.2496%
55	2.9761%	2.2636%	108	39.5838%	37.0164%
56	3.0547%	2.3429%	109	39.7590%	38.7265%
57	3.1163%	2.4285%	110	50.0000%	50.0000%
58	3.1599%	2.5412%	111	50.0000%	50.0000%
59	3.1868%	2.5588%	112	50.0000%	50.0000%
60	3.2020%	2.5795%	113	50.0000%	50.0000%
61	3.2829%	2.6067%	114	50.0000%	50.0000%
62	3.3636%	2.6272%	115	50.0000%	50.0000%
63	3.4522%	2.6579%	116	50.0000%	50.0000%
64	3.5511%	2.7759%	117	50.0000%	50.0000%
65	3.6650%	2.8107%	118	50.0000%	50.0000%
66	3.6789%	2.8328%	119	50.0000%	50.0000%
67	3.7049%	2.8725%	120	100.0000%	100.0000%



**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**

Table 5b (Cont'd)					
PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: HOUSING POLICE AND TRANSIT POLICE BASE RATES					
Age	Males	Females	Age	Males	Females
15	0.0138%	0.0095%	68	1.8368%	1.2141%
16	0.0187%	0.0117%	69	2.0342%	1.3912%
17	0.0252%	0.0127%	70	2.2544%	1.5837%
18	0.0301%	0.0148%	71	2.5045%	1.7848%
19	0.0334%	0.0159%	72	2.7644%	1.9944%
20	0.0347%	0.0168%	73	3.0535%	2.2258%
21	0.0371%	0.0185%	74	3.3359%	2.4880%
22	0.0402%	0.0205%	75	3.6300%	2.7766%
23	0.0431%	0.0227%	76	4.1253%	3.0785%
24	0.0467%	0.0251%	77	4.6178%	3.3525%
25	0.0503%	0.0274%	78	5.1289%	3.6752%
26	0.0544%	0.0298%	79	5.5682%	4.1794%
27	0.0586%	0.0322%	80	6.0116%	4.7030%
28	0.0633%	0.0348%	81	6.7832%	5.2484%
29	0.0681%	0.0374%	82	7.6009%	5.7185%
30	0.0730%	0.0400%	83	8.4279%	6.1948%
31	0.0781%	0.0425%	84	9.2040%	7.0110%
32	0.0830%	0.0450%	85	10.1002%	7.8321%
33	0.0898%	0.0476%	86	11.5115%	8.6046%
34	0.0933%	0.0491%	87	12.7944%	9.3702%
35	0.0972%	0.0512%	88	14.1662%	10.2595%
36	0.1019%	0.0534%	89	15.7578%	11.5941%
37	0.1080%	0.0563%	90	17.3856%	12.9378%
38	0.1153%	0.0590%	91	19.0388%	14.3081%
39	0.1286%	0.0629%	92	20.6360%	15.3704%
40	0.1417%	0.0688%	93	22.5718%	16.4875%
41	0.1550%	0.0766%	94	24.4562%	17.6613%
42	0.1690%	0.0865%	95	26.1404%	18.7606%
43	0.1838%	0.0992%	96	28.0695%	19.7397%
44	0.1997%	0.1148%	97	29.6855%	20.6328%
45	0.2170%	0.1330%	98	30.9177%	21.2676%
46	0.2279%	0.1538%	99	32.6552%	21.8544%
47	0.2387%	0.1769%	100	33.9880%	22.1859%
48	0.2492%	0.2017%	101	34.9681%	23.0680%
49	0.3237%	0.2316%	102	35.9346%	24.0803%
50	0.3948%	0.2637%	103	36.6434%	25.2770%
51	0.4620%	0.2870%	104	37.3834%	26.6309%
52	0.5249%	0.3323%	105	38.1051%	28.0912%
53	0.5528%	0.3677%	106	38.4698%	29.6244%
54	0.5891%	0.4196%	107	38.6325%	31.1943%
55	0.6260%	0.4722%	108	38.8076%	32.7579%
56	0.6814%	0.5135%	109	38.9794%	34.2712%
57	0.7288%	0.5258%	110	50.0000%	50.0000%
58	0.7710%	0.5452%	111	50.0000%	50.0000%
59	0.8525%	0.5823%	112	50.0000%	50.0000%
60	0.9273%	0.6153%	113	50.0000%	50.0000%
61	1.0007%	0.6486%	114	50.0000%	50.0000%
62	1.0735%	0.7169%	115	50.0000%	50.0000%
63	1.1411%	0.7851%	116	50.0000%	50.0000%
64	1.2250%	0.8630%	117	50.0000%	50.0000%
65	1.3055%	0.9419%	118	50.0000%	50.0000%
66	1.4653%	1.0252%	119	50.0000%	50.0000%
67	1.6473%	1.1204%	120	100.0000%	100.0000%

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)

Table 5c					
PROBABILITIES OF MORTALITY FOR BENEFICIARIES: ALL PLAN GROUPS					
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%



**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**

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

Years of Service	General		Correction		Sanitation		TBTA		Transit	
	Merit Increase	Salary Increase <sup>1</sup>	Merit Increase	Salary Increase <sup>1</sup>	Merit Increase	Salary Increase <sup>1</sup>	Merit Increase	Salary Increase <sup>1</sup>	Merit Increase	Salary Increase <sup>1</sup>
0	6.00%	9.00%	11.00%	14.00%	4.00%	7.00%	8.00%	11.00%	16.00%	19.00%
1	5.00%	8.00%	10.00%	13.00%	6.00%	9.00%	7.00%	10.00%	11.00%	14.00%
2	4.00%	7.00%	9.00%	12.00%	8.00%	11.00%	6.00%	9.00%	7.00%	10.00%
3	3.00%	6.00%	8.00%	11.00%	13.00%	16.00%	5.00%	8.00%	6.00%	9.00%
4	2.50%	5.50%	46.00%	49.00%	22.00%	25.00%	4.00%	7.00%	3.00%	6.00%
5	2.00%	5.00%	1.20%	4.20%	15.00%	18.00%	3.00%	6.00%	2.00%	5.00%
6	1.90%	4.90%	1.40%	4.40%	1.00%	4.00%	2.00%	5.00%	1.50%	4.50%
7	1.80%	4.80%	1.60%	4.60%	1.10%	4.10%	1.00%	4.00%	1.50%	4.50%
8	1.70%	4.70%	1.80%	4.80%	1.20%	4.20%	0.80%	3.80%	1.50%	4.50%
9	1.60%	4.60%	3.20%	6.20%	2.10%	5.10%	0.60%	3.60%	1.50%	4.50%
10	1.50%	4.50%	2.00%	5.00%	1.40%	4.40%	0.50%	3.50%	1.50%	4.50%
11	1.50%	4.50%	1.90%	4.90%	1.30%	4.30%	0.50%	3.50%	1.50%	4.50%
12	1.50%	4.50%	1.80%	4.80%	1.20%	4.20%	0.50%	3.50%	1.50%	4.50%
13	1.50%	4.50%	1.70%	4.70%	1.10%	4.10%	0.50%	3.50%	1.50%	4.50%
14	1.50%	4.50%	2.90%	5.90%	2.00%	5.00%	0.50%	3.50%	1.50%	4.50%
15	1.50%	4.50%	1.50%	4.50%	1.00%	4.00%	0.50%	3.50%	1.50%	4.50%
16	1.45%	4.45%	1.40%	4.40%	1.00%	4.00%	0.50%	3.50%	1.50%	4.50%
17	1.40%	4.40%	1.30%	4.30%	0.90%	3.90%	0.50%	3.50%	1.50%	4.50%
18	1.35%	4.35%	1.20%	4.20%	0.80%	3.80%	0.50%	3.50%	1.50%	4.50%
19	1.30%	4.30%	2.40%	5.40%	1.60%	4.60%	0.50%	3.50%	1.50%	4.50%
20	1.25%	4.25%	1.00%	4.00%	0.70%	3.70%	0.50%	3.50%	1.50%	4.50%
21	1.20%	4.20%	0.90%	3.90%	0.60%	3.60%	0.50%	3.50%	1.50%	4.50%
22	1.15%	4.15%	0.80%	3.80%	0.50%	3.50%	0.50%	3.50%	1.50%	4.50%
23	1.10%	4.10%	0.70%	3.70%	0.50%	3.50%	0.50%	3.50%	1.00%	4.00%
24	1.05%	4.05%	0.60%	3.60%	0.50%	3.50%	0.50%	3.50%	1.00%	4.00%
≥ 25	1.00%	4.00%	0.50%	3.50%	0.50%	3.50%	0.50%	3.50%	1.00%	4.00%

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



**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**

<b>Table 7</b>		
OVERTIME ASSUMPTION: GROUPS OTHER THAN CORRECTION		
<b>Plan Group</b>	<b>Overtime Type</b>	<b>Assumption</b>
General	All Overtime	5.00%
Sanitation	Baseline	12.00%
	Dual Service	16.00%
	Dual Disability	8.00%
TBTA	Baseline	20.00%
	Dual Service	24.00%
	Dual Disability	18.00%
Transit	Baseline	8.00%
	Dual Service	10.00%
	Dual Disability	6.00%



**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2020 ACTUARIAL VALUATION (Cont'd)**

<b>Table 7 (Cont'd)</b>		
NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM		
OVERTIME ASSUMPTION: CORRECTION		
	<b>Correction</b>	
<b>Years of Service</b>	<b>Baseline and Dual Service</b>	<b>Dual Disability</b>
0-15	15.00%	8.00%
16	16.50%	9.00%
17	18.00%	10.00%
18	19.50%	11.00%
19	21.00%	12.00%
20+	22.50%	13.00%

SUMMARY OF ACTIVE MEMBER VALUATION DATA

<p><b>Table 8</b> ACTIVE MEMBER VALUATION DATA</p>				
<p><b>June 30 Actuarial Valuation</b></p>	<p><b>Number</b></p>	<p><b>Annual Salary</b></p>	<p><b>Average Annual Salary</b></p>	<p><b>Percentage Increase/ (Decrease) In Avg. Salary</b></p>
2011	182,021	12,233,572,536	67,210	2.7%
2012	187,114	12,478,129,812	66,687	(0.8%)
2013	185,971	12,642,482,697	67,981	1.9%
2014	184,762	12,672,386,846	68,588	0.9%
2015	185,758	12,917,466,528	69,539	1.4%
2016	185,481	13,216,539,355	71,255	2.5%
2017	189,792	14,065,241,654	74,109	4.0%
2018	190,572	14,459,118,057	75,872	2.4%
2019	191,501	14,981,461,175	78,232	3.1%
2020	191,237	15,289,347,449	79,950	2.2%

Salaries shown are base salary plus assumed overtime paid and reflect certain salary increases with retroactive effective dates, if any, that are not yet reflected in census data.



**NUMBER AND SALARY OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION  
AS OF THE JUNE 30, 2020 ACTUARIAL VALUATION**

<p align="center"><b>Table 9</b> NUMBER AND SALARY OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION AS OF JUNE 30, 2020 ACTUARIAL VALUATION</p>			
<b>Occupation - Main Groups</b>	<b>Number</b>	<b>Annual Payroll</b>	<b>Average Annual Salary</b>
General	136,447	\$ 10,389,935,662	\$ 76,146
Transit Operating	36,976	3,137,065,716	84,841
MTA Bridges and Tunnels	1,175	121,311,129	103,244
Sanitation	7,651	753,710,271	98,511
Correction	<u>8,988</u>	<u>887,324,671</u>	<u>98,723</u>
Total	191,237	\$ 15,289,347,449	\$ 79,950

**NUMBER OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION AND AGE AS  
OF THE JUNE 30, 2020 ACTUARIAL VALUATION**

<b>Table 10</b> NUMBER OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION AND AGE AS OF JUNE 30, 2020 ACTUARIAL VALUATION						
Age	Total	General	Transit Operating	MTA Bridges & Tunnels	Sanitation	Correction
Under 20	30	6	24	0	0	0
20 - 24	1,806	1,382	334	0	25	65
25 - 29	10,188	7,653	1,161	28	419	927
30 - 34	18,636	12,982	2,929	67	903	1,755
35 - 39	23,022	15,416	4,023	106	1,506	1,971
40 - 44	23,874	16,183	4,368	183	1,593	1,547
45 - 49	24,067	16,359	4,934	240	1,341	1,193
50 - 54	27,898	19,394	6,490	216	972	826
55 - 59	29,171	21,437	6,472	184	609	469
60 - 64	21,054	16,442	4,098	113	218	183
65 - 69	8,130	6,443	1,560	27	55	45
70 +	<u>3,361</u>	<u>2,750</u>	<u>583</u>	<u>11</u>	<u>10</u>	<u>7</u>
Total	191,237	136,447	36,976	1,175	7,651	8,988



**NUMBER OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION AND YEARS OF SERVICE AS OF THE JUNE 30, 2020 ACTUARIAL VALUATION**

<b>Table 11</b>						
<b>NUMBER OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION AND YEARS OF SERVICE AS OF JUNE 30, 2020 ACTUARIAL VALUATION</b>						
<b>Years Of Service</b>	<b>Total</b>	<b>General</b>	<b>Transit Operating</b>	<b>MTA Bridges &amp; Tunnels</b>	<b>Sanitation</b>	<b>Correction</b>
Under 5	55,476	41,502	9,517	182	1,461	2,814
5 – 9	37,659	25,479	7,969	216	1,911	2,084
10 – 14	31,349	22,146	5,905	284	1,159	1,855
15 – 19	24,684	16,566	4,730	226	1,620	1,542
20 – 24	17,965	11,530	4,800	143	1,051	441
25 – 29	11,536	8,810	2,300	58	247	121
30 – 34	8,945	7,251	1,391	47	160	96
35 – 39	2,836	2,464	298	16	32	26
40 +	<u>787</u>	<u>699</u>	<u>66</u>	<u>3</u>	<u>10</u>	<u>9</u>
<b>Total</b>	<b>191,237</b>	<b>136,447</b>	<b>36,976</b>	<b>1,175</b>	<b>7,651</b>	<b>8,988</b>

## ACTIVE MEMBER VALUATION DATA BY PARTICIPATING EMPLOYERS

**Table 12**  
ACTIVE MEMBER VALUATION DATA BY PARTICIPATING EMPLOYERS

Employer	June 30, 2020			June 30, 2011		
	Number of Employees	Annual Salary	Percentage by Number of Employees	Number of Employees	Annual Salary	Percentage by Number of Employees
City of New York	106,268	\$ 8,427,533,031	55.56%	96,700	\$ 6,446,014,471	53.13%
NYC Transit Authority	39,120	3,357,875,373	20.46%	37,558	2,814,996,468	20.63%
NYC Housing Authority	8,893	627,546,718	4.65%	10,419	615,943,931	5.72%
NYC Health and Hospitals Corporation	31,141	2,462,511,870	16.28%	31,650	2,026,032,600	17.39%
MTA Bridges and Tunnels	1,175	121,311,129	0.61%	1,573	126,191,286	0.86%
NYC Off-Track Betting Corporation	0	0	0.00%	0	0	0.00%
NYC School Construction Authority	68	9,280,612	0.04%	70	7,085,821	0.04%
NYC Housing Development Corporation	87	9,831,658	0.05%	85	7,973,208	0.05%
City University of New York – Senior Colleges	4,474	272,247,991	2.34%	3,955	188,416,172	2.17%
New York State Courts	0	0	0.00%	0	0	0.00%
NYC Municipal Water Authority	<u>11</u>	<u>1,209,067</u>	<u>0.01%</u>	<u>11</u>	<u>918,579</u>	<u>0.01%</u>
<b>Total</b>	<b>191,237</b>	<b>\$ 15,289,347,449</b>	<b>100.00%</b>	<b>182,021</b>	<b>\$ 12,233,572,536</b>	<b>100.00%</b>

Due to the lag actuarial valuation, the latest finalized data for 2022 ACFR would be June 30, 2020.



## SUMMARY OF PLAN MEMBERSHIP DATA

As of the June 30, 2020 and June 30, 2019 actuarial valuations, the Plan's membership consisted of the following:

<b>Table 13</b>		
SUMMARY OF PLAN MEMBERSHIP		
<b>Group</b>	<b>June 30, 2020</b>	<b>June 30, 2019</b>
Active members	191,237	191,501
Terminated Nonvested Members/Active Off Payroll <sup>1</sup>	32,027	31,273
Deferred vested members not yet receiving benefits	23,034	21,788
Retirees and beneficiaries currently receiving benefits	<u>159,906</u>	<u>157,153</u>
Total	406,204	401,715

<sup>1</sup>Active Off Payroll as of June 30, 2019 represents members no longer on payroll, but not otherwise classified.





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

**Table 14**  
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>		
2011	8,564	\$261,133,473	5,583	\$101,421,090	135,468	\$3,352,398,215	5.0%	\$24,747
2012	7,628	274,865,758	5,109	95,823,182	137,987	3,531,440,791	5.3%	25,593
2013	7,334	244,447,724	5,922	116,360,332	139,399	3,659,528,183	3.6%	26,252
2014	8,132	276,606,560	5,436	107,547,552	142,095	3,828,587,191	4.6%	26,944
2015	8,219	289,143,851	5,788	117,910,540	144,526	3,999,820,502	4.5%	27,675
2016	8,407	295,570,322	5,419	115,894,203	147,514	4,179,496,621	4.5%	28,333
2017	8,756	329,831,284	5,851	127,341,967	150,419	4,381,985,938	4.8%	29,132
2018	9,606	345,164,441	5,909	131,216,661	154,116	4,595,933,718	4.9%	29,821
2019	9,431	570,731,545	6,394	147,333,875	157,153	5,019,331,388	9.2%	31,939
2020	9,750	399,565,874	6,997	170,363,372	159,906	5,248,533,890	4.6%	32,823

<sup>1</sup>All allowances shown through June 30, 2018 are those presented in census data. Beginning 2016, SADB payments to beneficiaries are included. Beginning June 30, 2019, disclosed pensioner benefits include VSF benefit, anticipated increases due to non-finalized pensioners, and other changes not otherwise reflected in the census data.

## ACTUARIAL AND STATUTORY CONTRIBUTION HISTORY

<b>Table 15</b>			
<b>ACTUARIAL AND STATUTORY CONTRIBUTION HISTORY</b>			
<b>Fiscal Year Ended June 30</b>	<b>Actuarial Contribution Certified</b>	<b>Statutory Contribution Contributed<sup>1</sup></b>	<b>Employer Rate of Contribution<sup>2</sup></b>
2013	\$ 3,046,845,264	\$ 3,046,845,264	25.5%
2014	3,114,068,148	3,114,068,148	25.6%
2015	3,160,257,868	3,160,257,868	25.7%
2016	3,365,454,212	3,365,454,212	27.3%
2017	3,328,192,582	3,328,192,582	26.5%
2018	3,377,024,173	3,377,024,173	26.3%
2019	3,694,364,590	3,681,746,978	26.7%
2020	3,726,701,492	3,713,824,960	26.3%
2021	3,762,898,267	3,762,898,267	25.5%
2022	3,831,464,423	3,831,464,423	25.4%

<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.

## FUNDED STATUS BASED ON ENTRY AGE NORMAL COST METHOD

Table 16 FUNDED STATUS BASED ON ENTRY AGE NORMAL COST METHOD (\$ Thousands)						
June 30 Valuation Date	(1) Actuarial Value of Assets (AVA) <sup>1</sup>	(2) Accrued Liability (AL)	(3) Unfunded AL (UAL) <sup>1</sup> (2) - (1)	(4) Funded Ratio (1) / (2)	(5) Covered Payroll <sup>2</sup>	(6) UAL as a % of Covered Payroll (3) / (5)
2011	\$42,409,059	\$65,269,251	\$22,860,192	65.0%	\$12,233,573	186.9%
2012	44,676,721	67,417,018	22,740,297	66.3%	12,478,130	182.2%
2013	47,282,884	70,028,252	22,745,368	67.5%	12,642,483	179.9%
2014	50,505,971	74,123,437	23,617,466	68.1%	12,672,387	186.4%
2015	53,573,694	76,678,220	23,104,526	69.9%	12,917,467	178.9%
2016	56,491,829	79,081,183	22,589,354	71.4%	13,216,539	170.9%
2017	59,573,653	82,462,951	22,889,298	72.2%	14,065,242	162.7%
2018	63,615,892	85,845,125	22,229,233	74.1%	14,459,118	153.7%
2019	68,524,124	89,230,196	20,706,072	76.8%	14,981,461	138.2%
2020	71,778,640	91,942,981	20,164,341	78.1%	15,289,347	131.9%

<sup>1</sup> Unfunded Accrual Liability excludes contributions receivable in the Actuarial Value of Assets.

<sup>2</sup> Salaries shown are base salaries plus assumed overtime paid and reflect certain salary increases with retroactive effective dates, if any, that are not yet reflected in census data.



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

**Table 17**

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

June 30 Valuation Date	Accrued Liabilities for			Active Members' Employer-Financed Portion (C)	Actuarial Value of Assets <sup>1</sup> (D)	Percentage of Accrued Liabilities Funded by Actuarial Value of Assets		
	Accumulated Member Contributions (A)	Current Retirees and Beneficiaries (B)				(A)	(B)	(C)
2011	\$7,010,301	\$33,116,897		\$29,062,680	\$42,409,059	100%	100%	8%
2012	7,261,912	35,028,113		29,336,710	44,676,721	100	100	8
2013	7,611,951	36,181,288		30,646,015	47,282,884	100	100	11
2014	7,958,544	38,662,825		32,009,068	50,505,971	100	100	12
2015	8,328,939	40,648,703		32,711,419	53,573,694	100	100	14
2016	8,692,025	42,399,551		33,445,905	56,491,829	100	100	16
2017	9,080,025	44,751,281		34,346,628	59,573,653	100	100	17
2018	9,455,594	46,970,749		35,467,496	63,615,892	100	100	20
2019	9,747,537	50,018,530		29,464,129	68,524,124	100	100	30
2020	10,179,418	52,348,897		29,414,666	71,778,640	100	100	31

<sup>1</sup> Actuarial Value of Assets excludes contributions receivable.

See following "SOLVENCY TEST - NOTES."

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

### SOLVENCY TEST – NOTES

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

- 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 have been revised. The two most recent changes in assumptions and methods occurred in the June 30, 2019 valuation used to compute the Employer Contributions for Fiscal Year 2021 and in the June 30, 2017 valuation used to compute the Employer contribution for Fiscal Year 2019.



## CONTRIBUTIONS

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

### A. MEMBER CONTRIBUTIONS

#### Tier 1 and Tier 2

A member who joined prior to July 27, 1976 contributes by salary deductions on the basis of a normal rate of contribution which is assigned by the System at the time he or she elects his or her plan. The normal contribution rate, which is dependent upon the member's age and plan, as well as the tables in effect for such purpose at the time he or she became a member, is determined to provide approximately one-fourth of the service retirement allowance at the earliest age for service retirement in those contributory plans for which a fixed number of years of service is required for service retirement, except that in the case of the career pension plan, the rates of members' contributions are determined so as to provide an annuity of approximately one-fourth of the benefit on account of the first 25 years of service. In plans which permit retirement for service at age 55 regardless of the number of years of service earned, the rate of contribution is calculated to provide an annuity equal to 1.0% of final compensation for each year of service at the earliest age for service retirement. Beginning July 1, 1970, no contributions are required from members who elected the Transit 20-Year Plan.

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

Beginning July 1960, on a year-to-year basis, the members' contribution rates of certain categories of members were reduced by an Increased-Take-Home-Pay (ITHP) rate equal to either 2.0%, 2.5%, 4.0%, or 5.0% of salary. At present, the reduction is 2.5% of salary for Sanitation and Correction members and 2.0% of salary for all others except for (1) members in transit operating positions who, beginning July 1, 1970, were not required to contribute to the System, and (2) members in the Coordinated-Escalator and Coordinated Retirement Plans. In general, the retirement and death benefits payable to, or on account of members, are supplemented by the reserve for ITHP, accumulated from City contributions equal to the ITHP rate times salary, so that the total benefit is equal to the benefit which would have been paid if the members' rate of contribution had not been reduced. However, the reserve for ITHP is not payable upon the death of a member who joins after June 30, 1973.

## CONTRIBUTIONS (Cont'd)

### Tier 3 and Tier 4

A member who joined on or after July 27, 1976 and before April 1, 2012, is mandated to contribute 3.0% of salary during all years of coverage except for Department of Correction members who contribute 3.0% for not more than 30 years. Effective October 1, 2000, certain members are not required to make contributions after the 10th anniversary of their membership date or completion of 10 years of credited service, whichever is earlier. In addition, certain members who are Tier 2 or Tier 3 corrections officers and certain other Tier 2 and Tier 4 members contribute additional amounts ranging from 1.85% to 7.46% for improved early retirement benefits.

Uniformed members of the Department of Correction, uniformed members of the Department of Sanitation, and DA Investigator members employed in a District Attorney office, who became employed in one of these titles on or after April 1, 2012, participate in a 22-year plan. These members are required to contribute 3.0% of gross wages until the earlier of 25 years of service or until they retire.

### Tier 6

Members who join on and after April 1, 2012 (Tier 6) are mandated to contribute Basic Member Contributions (BMCs) until they separate from City service or until they retire. The BMC rate is dependent on annual wages earned during a plan year and ranges from 3.0% for salaries up to \$45,000 and as much as 6.0% for salaries greater than \$100,000.

In addition to the BMC, Tier 6 Special Plan members must contribute Additional Member Contributions (AMCs). The AMC rate is plan-specific. Tier 6 Special Plan members must contribute AMCs until they attain 30 years of service or retire, whichever comes first, except for TBTA 20/50 Plan members, who must contribute AMCs for 20 years.

## **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 employers.

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



NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM  
DATA USED IN THE JUNE 30, 2020 ACTUARIAL VALUATION  
FOR DETERMINING FINAL FISCAL YEAR 2022 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	30	0	0	0	0	0	0	0	0	30
20 TO 24	1,797	9	0	0	0	0	0	0	0	1,806
25 TO 29	9,257	906	25	0	0	0	0	0	0	10,188
30 TO 34	11,830	5,749	1,047	10	0	0	0	0	0	18,636
35 TO 39	9,467	7,600	4,886	1,031	38	0	0	0	0	23,022
40 TO 44	7,075	6,301	5,792	3,839	859	8	0	0	0	23,874
45 TO 49	5,356	5,048	5,393	4,788	2,886	565	31	0	0	24,067
50 TO 54	4,519	4,501	5,063	5,092	4,617	3,023	1,045	38	0	27,898
55 TO 59	3,397	3,817	4,434	4,597	4,614	4,046	3,608	642	16	29,171
60 TO 64	1,967	2,369	2,969	3,327	3,224	2,693	2,920	1,376	209	21,054
65 TO 69	613	1,027	1,243	1,420	1,206	872	951	538	260	8,130
70 & UP	168	332	497	580	521	329	390	242	302	3,361
<b>TOTAL</b>	<b>55,476</b>	<b>37,659</b>	<b>31,349</b>	<b>24,684</b>	<b>17,965</b>	<b>11,536</b>	<b>8,945</b>	<b>2,836</b>	<b>787</b>	<b>191,237</b>

*SALARIES (IN THOUSANDS):*

UNDER 20	1,412	0	0	0	0	0	0	0	0	1,412
20 TO 24	89,770	675	0	0	0	0	0	0	0	90,445
25 TO 29	546,362	62,233	2,286	0	0	0	0	0	0	610,881
30 TO 34	766,494	445,391	84,606	1,009	0	0	0	0	0	1,297,500
35 TO 39	643,016	618,381	421,563	99,787	4,012	0	0	0	0	1,786,759
40 TO 44	486,797	514,675	498,136	359,815	85,599	802	0	0	0	1,945,823
45 TO 49	375,788	410,368	457,701	433,461	280,797	53,587	3,405	0	0	2,015,107
50 TO 54	317,782	358,325	417,805	441,413	422,013	287,479	102,912	4,469	0	2,352,199
55 TO 59	237,593	294,121	358,582	382,918	406,737	367,022	351,630	66,614	1,450	2,466,667
60 TO 64	139,792	181,002	229,061	273,325	276,817	240,309	272,675	139,145	20,045	1,772,171
65 TO 69	44,836	78,115	97,252	114,684	102,305	74,453	87,557	51,781	27,271	678,254
70 & UP	11,521	23,674	35,819	47,014	43,305	28,231	32,351	21,983	28,232	272,130
<b>TOTAL<sup>1</sup></b>	<b>3,661,164</b>	<b>2,986,961</b>	<b>2,602,809</b>	<b>2,153,425</b>	<b>1,621,587</b>	<b>1,051,883</b>	<b>850,530</b>	<b>283,992</b>	<b>76,998</b>	<b>15,289,347</b>

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

UNDER 20	47,069	0	0	0	0	0	0	0	0	47,069
20 TO 24	49,955	74,973	0	0	0	0	0	0	0	50,080
25 TO 29	59,022	68,690	91,434	0	0	0	0	0	0	59,961
30 TO 34	64,792	77,473	80,808	100,918	0	0	0	0	0	69,623
35 TO 39	67,922	81,366	86,280	96,786	105,585	0	0	0	0	77,611
40 TO 44	68,805	81,682	86,004	93,726	99,649	100,200	0	0	0	81,504
45 TO 49	70,162	81,293	84,869	90,531	97,296	94,845	109,840	0	0	83,729
50 TO 54	70,321	79,610	82,521	86,688	91,404	95,097	98,481	117,607	0	84,314
55 TO 59	69,942	77,055	80,871	83,297	88,153	90,712	97,458	103,760	90,649	84,559
60 TO 64	71,069	76,405	77,151	82,154	85,861	89,235	93,382	101,123	95,909	84,173
65 TO 69	73,142	76,062	78,240	80,763	84,830	85,382	92,068	96,247	104,887	83,426
70 & UP	68,576	71,307	72,071	81,059	83,119	85,808	82,951	90,839	93,482	80,967
<b>TOTAL</b>	<b>65,995</b>	<b>79,316</b>	<b>83,027</b>	<b>87,240</b>	<b>90,264</b>	<b>91,183</b>	<b>95,084</b>	<b>100,138</b>	<b>97,837</b>	<b>79,950</b>

Note: Age is nearest birthdate. 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 EMPLOYEES' RETIREMENT SYSTEM  
 DATA USED IN THE JUNE 30, 2020 ACTUARIAL VALUATION  
 FOR DETERMINING FINAL FISCAL YEAR 2022 EMPLOYER CONTRIBUTIONS  
 SUMMARY OF PENSIONERS BY CAUSE AND GENDER

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	1	25,000	25,000	0	0	0	1	25,000	25,000
40 TO 44	34	2,332,829	68,613	19	1,282,085	67,478	53	3,614,914	68,206
45 TO 49	295	18,755,068	63,577	142	9,583,625	67,490	437	28,338,693	64,848
50 TO 54	1,345	83,103,231	61,787	689	43,459,071	63,076	2,034	126,562,302	62,223
55 TO 59	5,781	321,498,186	55,613	2,491	113,806,382	45,687	8,272	435,304,568	52,624
60 TO 64	10,277	477,365,791	46,450	6,529	228,914,665	35,061	16,806	706,280,457	42,025
65 TO 69	16,096	659,994,668	41,004	10,701	334,640,122	31,272	26,797	994,634,790	37,117
70 TO 74	15,974	607,120,780	38,007	11,106	319,919,633	28,806	27,080	927,040,413	34,233
75 TO 79	12,605	435,884,213	34,580	8,183	216,599,914	26,469	20,788	652,484,127	31,388
80 TO 84	8,523	266,244,531	31,238	5,590	129,053,541	23,087	14,113	395,298,072	28,009
85 TO 89	4,617	130,888,707	28,349	3,144	62,025,211	19,728	7,761	192,913,918	24,857
90 & UP	2,892	77,272,014	26,719	2,856	48,367,343	16,935	5,748	125,639,357	21,858
<b>TOTAL</b>	<b>78,440</b>	<b>3,080,485,017</b>	<b>39,272</b>	<b>51,450</b>	<b>1,507,651,593</b>	<b>29,303</b>	<b>129,890</b>	<b>4,588,136,609</b>	<b>35,323</b>
<i>ORDINARY DISABILITY:</i>									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	1	47,800	47,800	1	47,800	47,800
35 TO 39	15	451,838	30,123	6	156,589	26,098	21	608,427	28,973
40 TO 44	39	1,188,320	30,470	34	609,651	17,931	73	1,797,972	24,630
45 TO 49	122	3,001,147	24,600	85	1,829,018	21,518	207	4,830,165	23,334
50 TO 54	369	8,727,328	23,651	291	5,570,447	19,142	660	14,297,776	21,663
55 TO 59	835	19,787,903	23,698	697	13,854,773	19,878	1,532	33,642,676	21,960
60 TO 64	1,137	25,843,290	22,729	803	15,101,118	18,806	1,940	40,944,408	21,105
65 TO 69	1,051	22,244,343	21,165	749	13,732,371	18,334	1,800	35,976,714	19,987
70 TO 74	1,059	21,167,735	19,988	501	8,233,434	16,434	1,560	29,401,169	18,847
75 TO 79	736	15,066,612	20,471	310	4,759,686	15,354	1,046	19,826,297	18,954
80 TO 84	371	7,387,494	19,912	170	2,260,360	13,296	541	9,647,854	17,833
85 TO 89	118	2,150,914	18,228	63	821,557	13,041	181	2,972,471	16,422
90 & UP	59	1,212,946	20,558	35	388,066	11,088	94	1,601,012	17,032
<b>TOTAL</b>	<b>5,911</b>	<b>128,229,871</b>	<b>21,693</b>	<b>3,745</b>	<b>67,364,871</b>	<b>17,988</b>	<b>9,656</b>	<b>195,594,742</b>	<b>20,256</b>
<i>ACCIDENTAL DISABILITY:</i>									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	5	145,679	29,136	5	121,279	24,256	10	266,959	26,696
35 TO 39	45	2,263,104	50,291	11	526,185	47,835	56	2,789,289	49,809
40 TO 44	106	5,895,801	55,621	29	1,486,609	51,262	135	7,382,411	54,685
45 TO 49	191	10,856,331	56,839	60	3,369,811	56,164	251	14,226,143	56,678
50 TO 54	374	19,107,391	51,089	124	5,205,344	41,979	498	24,312,736	48,821
55 TO 59	574	27,027,903	47,087	148	5,692,133	38,460	722	32,720,036	45,319
60 TO 64	494	20,496,799	41,491	117	4,462,683	38,143	611	24,959,482	40,850
65 TO 69	517	20,768,444	40,171	75	2,242,460	29,899	592	23,010,905	38,870
70 TO 74	593	19,768,607	33,337	50	1,137,458	22,749	643	20,906,065	32,513
75 TO 79	495	15,125,551	30,557	45	923,963	20,533	540	16,049,513	29,721
80 TO 84	263	8,018,659	30,489	32	540,411	16,888	295	8,559,070	29,014
85 TO 89	117	3,392,003	28,991	18	262,767	14,598	135	3,654,771	27,072
90 & UP	80	2,389,722	29,872	10	167,992	16,799	90	2,557,714	28,419
<b>TOTAL</b>	<b>3,854</b>	<b>155,255,995</b>	<b>40,284</b>	<b>724</b>	<b>26,139,097</b>	<b>36,104</b>	<b>4,578</b>	<b>181,395,092</b>	<b>39,623</b>



NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM  
 DATA USED IN THE JUNE 30, 2020 ACTUARIAL VALUATION  
 FOR DETERMINING FINAL FISCAL YEAR 2022 EMPLOYER CONTRIBUTIONS  
 SUMMARY OF PENSIONERS BY CAUSE AND GENDER

AGE	MALE			FEMALE			TOTAL		
	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
<i>ACCIDENTAL DEATH:</i>									
UNDER 30	13	464,315	35,717	16	597,649	37,353	29	1,061,965	36,619
30 TO 34	3	135,161	45,054	8	282,186	35,273	11	417,348	37,941
35 TO 39	5	164,198	32,840	15	676,720	45,115	20	840,918	42,046
40 TO 44	3	82,709	27,570	19	742,187	39,062	22	824,896	37,495
45 TO 49	2	49,599	24,800	22	1,231,801	55,991	24	1,281,400	53,392
50 TO 54	6	241,421	40,237	40	2,456,828	61,421	46	2,698,249	58,658
55 TO 59	5	205,838	41,168	67	3,351,995	50,030	72	3,557,833	49,414
60 TO 64	9	377,567	41,952	52	2,700,991	51,942	61	3,078,558	50,468
65 TO 69	2	66,604	33,302	51	2,645,891	51,880	53	2,712,495	51,179
70 TO 74	3	112,487	37,496	32	1,763,363	55,105	35	1,875,850	53,596
75 TO 79	3	124,134	41,378	26	1,255,392	48,284	29	1,379,527	47,570
80 TO 84	1	27,723	27,723	15	430,946	28,730	16	458,669	28,667
85 TO 89	1	36,888	36,888	6	179,143	29,857	7	216,031	30,862
90 & UP	0	0	0	4	100,522	25,130	4	100,522	25,130
<b>TOTAL</b>	<b>56</b>	<b>2,088,646</b>	<b>37,297</b>	<b>373</b>	<b>18,415,613</b>	<b>49,372</b>	<b>429</b>	<b>20,504,259</b>	<b>47,795</b>
<i>OTHER BENEFICIARIES:</i>									
UNDER 30	100	1,431,604	14,316	130	1,838,924	14,146	230	3,270,528	14,220
30 TO 34	82	1,070,699	13,057	102	1,305,003	12,794	184	2,375,702	12,911
35 TO 39	114	1,504,989	13,202	127	1,665,770	13,116	241	3,170,759	13,157
40 TO 44	136	2,005,782	14,748	220	2,884,196	13,110	356	4,889,978	13,736
45 TO 49	158	1,807,592	11,440	251	3,329,543	13,265	409	5,137,135	12,560
50 TO 54	161	1,875,213	11,647	366	4,867,107	13,298	527	6,742,320	12,794
55 TO 59	192	2,326,714	12,118	571	9,044,147	15,839	763	11,370,862	14,903
60 TO 64	208	3,198,857	15,379	896	15,895,064	17,740	1,104	19,093,921	17,295
65 TO 69	215	3,727,087	17,335	1,241	25,499,724	20,548	1,456	29,226,811	20,073
70 TO 74	209	3,325,437	15,911	1,716	34,411,721	20,053	1,925	37,737,158	19,604
75 TO 79	190	3,257,060	17,142	1,956	38,511,540	19,689	2,146	41,768,599	19,463
80 TO 84	139	2,218,440	15,960	1,901	34,250,494	18,017	2,040	36,468,934	17,877
85 TO 89	95	1,490,249	15,687	1,678	28,592,749	17,040	1,773	30,082,998	16,967
90 & UP	93	1,212,205	13,034	2,106	30,355,275	14,414	2,199	31,567,481	14,355
<b>TOTAL</b>	<b>2,092</b>	<b>30,451,928</b>	<b>14,556</b>	<b>13,261</b>	<b>232,451,259</b>	<b>17,529</b>	<b>15,353</b>	<b>262,903,187</b>	<b>17,124</b>
<i>ALL PENSIONERS AND BENEFICIARIES:</i>									
UNDER 30	113	1,895,919	16,778	146	2,436,573	16,689	259	4,332,493	16,728
30 TO 34	90	1,351,540	15,017	116	1,756,269	15,140	206	3,107,808	15,086
35 TO 39	180	4,409,129	24,495	159	3,025,265	19,027	339	7,434,393	21,930
40 TO 44	318	11,505,441	36,181	321	7,004,730	21,822	639	18,510,171	28,967
45 TO 49	768	34,469,737	44,882	560	19,343,797	34,542	1,328	53,813,534	40,522
50 TO 54	2,255	113,054,584	50,135	1,510	61,558,797	40,767	3,765	174,613,382	46,378
55 TO 59	7,387	370,846,545	50,203	3,974	145,749,430	36,676	11,361	516,595,975	45,471
60 TO 64	12,125	527,282,305	43,487	8,397	267,074,521	31,806	20,522	794,356,826	38,708
65 TO 69	17,881	706,801,147	39,528	12,817	378,760,568	29,551	30,698	1,085,561,715	35,363
70 TO 74	17,838	651,495,046	36,523	13,405	365,465,610	27,263	31,243	1,016,960,656	32,550
75 TO 79	14,029	469,457,569	33,463	10,520	262,050,495	24,910	24,549	731,508,064	29,798
80 TO 84	9,297	283,896,846	30,536	7,708	166,535,752	21,606	17,005	450,432,598	26,488
85 TO 89	4,948	137,958,761	27,882	4,909	91,881,427	18,717	9,857	229,840,189	23,317
90 & UP	3,124	82,086,887	26,276	5,011	79,379,198	15,841	8,135	161,466,085	19,848
<b>TOTAL</b>	<b>90,353</b>	<b>3,396,511,457</b>	<b>37,592</b>	<b>69,553</b>	<b>1,852,022,432</b>	<b>26,627</b>	<b>159,906</b>	<b>5,248,533,890</b>	<b>32,823</b>





**PART 5**

**STATISTICAL SECTION**

## Statistical Section Overview

The Statistical Section assists users in understanding the basic financial statements. It presents detailed relevant financial and demographic information that provides historical perspective to the Plan's economic condition, trends, and operations. All data in this section is derived from the Plan's internal sources.

Page #	Table Name	Table Description
Page 227	<ul style="list-style-type: none"> <li>Cash Receipts and Disbursements</li> </ul>	Activity of the year, on a cash basis, for the Plan and the five Variable Supplements Funds
Page 228 - 233	<ul style="list-style-type: none"> <li>Additions (QPP &amp; VSF)</li> <li>Additions (VSF)</li> <li>Changes in Fiduciary Net Position</li> <li>Benefit Payments by Type (QPP)</li> <li>Benefit Payments (VSF)</li> </ul>	10-year financial information that helps the reader understand how financial activities have changed over time for the Plan and the five Variable Supplements Funds
Page 234 - 239	<p><u>Service Retirement Experience</u></p> <ul style="list-style-type: none"> <li>Average Annual Benefit Payments (10-year history)</li> <li>Average Retirement Allowance by Age and Service</li> <li>Distribution of Retirement Allowance by Age</li> <li>Distribution of Retirement Allowance by Service</li> </ul>	Profile of a substantial percentage of members who retired during calendar year 2021, with information concerning years of service, average salary base, age of retirees, and range of retirement allowances. The benefits stated reflect the maximum benefit to which the retirees in question would have been entitled as a Single Life retirement benefit, which does not provide payments to beneficiaries
Page 240 - 241	<p><u>Disability Retirement Experience</u></p> <ul style="list-style-type: none"> <li>Ordinary Disability</li> <li>Accidental Disability</li> </ul>	10-year history of the average ages, benefit payments, and salary bases of new disability recipients of each calendar year
Page 242 - 243	<ul style="list-style-type: none"> <li>Recipients by Benefit Type and Pension Option</li> <li>Retirement Benefits by Type (10-year history)</li> </ul>	Profiles of the entire retiree and beneficiary population, and the types of benefits and options under which they are being paid
Page 244 - 245	<ul style="list-style-type: none"> <li>Table of Pensioners and Active Members</li> <li>Table of Recipients (VSF)</li> </ul>	Changes over the last 10 years in the number of pensioners and active members of the Plan; and the recipients of five Variable Supplements Funds



## CASH RECEIPTS AND DISBURSEMENTS

Year Ended June 30, 2022  
(in thousands)

	NYCERS	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	TOTAL
<b>Cash Balance July 1, 2021</b>	<b>\$ 122,698</b>	<b>\$ 5,411</b>	<b>\$ 161</b>	<b>\$ 175</b>	<b>\$ 139</b>	<b>\$ 164</b>	<b>\$ 128,748</b>
<b><u>Receipts</u></b>							
Member Contributions	585,123	-	-	-	-	-	585,123
Employer Contributions	3,777,975	-	-	-	-	-	3,777,975
Member Loan Payments	376,010	-	-	-	-	-	376,010
Interest and Dividends	1,979,392	1,517	-	-	-	-	1,980,909
Investments Redeemed	159,411,811	100,003	-	-	-	-	159,511,814
Transfers to Variable Supplements Funds	-	932,000	1,617	2,389	3,266	2,736	942,008
Miscellaneous	3,132	-	-	-	-	-	3,132
<b>Total Cash Receipts</b>	<b>166,133,443</b>	<b>1,033,520</b>	<b>1,617</b>	<b>2,389</b>	<b>3,266</b>	<b>2,736</b>	<b>167,176,971</b>
<b>Total Cash Available</b>	<b>166,256,141</b>	<b>1,038,931</b>	<b>1,778</b>	<b>2,564</b>	<b>3,405</b>	<b>2,900</b>	<b>167,305,719</b>
<b><u>Disbursements</u></b>							
Benefit Payments and Withdrawals	5,856,568	103,765	1,495	2,310	3,100	2,557	5,969,795
Transfers to other Retirement Systems	10,520	-	-	-	-	-	10,520
Transfers to Variable Supplements Funds	842,008	100,000	-	-	-	-	942,008
Loans to Members	381,405	-	-	-	-	-	381,405
Investments Purchased	158,689,221	833,517	-	-	-	-	159,522,738
Investment Expenses	298,704	-	-	-	-	-	298,704
Administrative Expenses	110,905	-	-	-	-	-	110,905
Miscellaneous	350	4	2	1	2	1	360
<b>Total Cash Disbursements</b>	<b>166,189,681</b>	<b>1,037,286</b>	<b>1,497</b>	<b>2,311</b>	<b>3,102</b>	<b>2,558</b>	<b>167,236,435</b>
<b>Cash Balance June 30, 2022</b>	<b>\$ 66,460</b>	<b>\$ 1,645</b>	<b>\$ 281</b>	<b>\$ 253</b>	<b>\$ 303</b>	<b>\$ 342</b>	<b>\$ 69,284</b>



**TABLE OF ADDITIONS (QPP & VSF)**  
 Fiscal Years 2013 through 2022  
 (in thousands)

Fiscal Year Ended June 30	Member Contributions QPP	Employer Contributions QPP	Net Investment Income (loss) QPP	Net Investment Income (loss) VSF	Net Investment Income (loss) QPP+VSF	Other Income QPP	Total Additions QPP + VSF
2022	\$ 595,587	\$ 3,831,464	\$ (6,917,849)	\$ 2,507	\$ (6,915,342)	\$ 3,282	\$ (2,485,009)
2021	579,560	3,761,532	18,263,201	434	18,263,635	3,365	22,608,092
2020	563,893	3,727,558	2,404,316	5,400	2,409,716	3,317	6,704,484
2019	547,807	3,692,711	4,431,926	6,304	4,438,230	3,258	8,682,006
2018	523,535	3,377,024	5,153,254	2,265	5,155,519	3,422	9,059,500
2017	513,514	3,328,193	6,982,304	(152)	6,982,152	3,266	10,827,125
2016	485,508	3,365,454	1,171,720	184	1,171,904	2,928	5,025,794
2015	467,129	3,160,258	1,175,099	10	1,175,109	4,140	4,806,636
2014	447,689	3,114,068	7,911,004	20	7,911,024	4,648	11,477,429
2013	437,775	3,046,845	4,967,018	38	4,967,056	5,072	8,456,748

Note: Effective 2013 and thereafter, the financial statements include the Variable Supplements Funds.

**TABLE OF ADDITIONS (VSF)<sup>1</sup>**  
 Fiscal Years 2013 through 2022  
 (in thousands)

Fiscal Year Ended June 30	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF
2022	\$ 2,507	\$ 1,433	\$ 2,232	\$ 3,002	\$ 2,497
2021	924,996	1,572	2,363	3,208	2,674
2020	31,704	1,662	2,428	3,290	2,731
2019	109,715	1,722	2,522	3,446	2,799
2018	207,277	1,825	2,573	3,612	2,887
2017	285,772	1,889	2,595	3,830	2,983
2016	(52,540)	1,968	2,648	3,945	2,964
2015	30,022	2,100	2,686	4,040	3,080
2014	190,020	2,168	2,797	4,070	3,090
2013	38	2,188	2,823	4,142	3,121

Notes:

- 1) NYCERS administers the following Variable Supplements Funds:
- Correction Officers' Variable Supplements Fund (COVSF)
  - Housing Police Officers' Variable Supplements Fund (HPOVSF)
  - Housing Police Superior Officers' Variable Supplements Fund (HPSOVSF)
  - Transit Police Officers' Variable Supplements Fund (TPOVSF)
  - Transit Police Superior Officers' Variable Supplements Fund (TPSOVSF)
- TPOVSF, TPSOVSF, HPOVSF, and HPSOVSF are closed to new entrants.



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## TABLE OF CHANGES IN FIDUCIARY NET POSITION (QPP & VSF)<sup>1</sup>

Fiscal Years 2013 through 2022  
(in thousands)

Fiscal Year Ended June 30	Additions to Fiduciary Net Position	Deductions from Plan Net Position				Net Change in Fiduciary Net Position
		Benefit Payments and Withdrawals	Payments to Other Pension Systems and Funds	Administrative Expenses	Total Deductions	
2022	\$ (2,485,009)	\$ 5,950,439	\$ 11,046	\$ 104,988	\$ 6,066,473	\$ (8,551,482)
2021	22,608,092	5,679,049	5,671	87,413	5,772,133	16,835,959
2020	6,704,484	5,312,446	9,087	77,667	5,399,200	1,305,284
2019	8,682,006	5,258,806	9,769	82,073	5,350,648	3,331,358
2018	9,059,500	4,986,709	9,055	59,689	5,055,453	4,004,047
2017	10,827,125	4,648,941	8,087	59,671	4,716,699	6,110,426
2016	5,025,794	4,454,255 <sup>2</sup>	7,440	56,683	4,518,378	507,416
2015	4,806,636	4,325,756	7,142	54,635	4,387,533	419,103
2014	11,477,429	4,040,445	7,228	50,431	4,098,104	7,379,325
2013	8,456,748	3,863,491	5,250	48,666	3,917,407	4,539,341

**Notes:**

- 1) Breakout between the QPP and each VSF for FY 2021 and FY 2022 is included in the Combining Statement of Changes in Fiduciary Net Position.
- 2) Excludes an accrual of \$41,925 that was included in the June 30, 2016 financial statements. In November 2016, after issuance of the financial statements, the NYC Office of the Actuary provided a memo to the COVSF Board of Trustees confirming that assets were insufficient to provide a COVSF benefit in December 2016. Management doesn't believe this change in estimated benefit payments has a material effect on the 2016 and 2017 combining financial statements.



**TABLE OF BENEFIT PAYMENTS BY TYPE (QPP)**

Fiscal Years 2013 through 2022  
(in thousands)

Fiscal Year Ended June 30	Retirement Benefits	Refunds	Death In Service	Death After Retirement	Other Benefits	Total Benefit Payments and Withdrawals	Member Loans	
							Amount Paid	No. of Loans Issued <sup>1</sup>
2022	\$ 5,618,099	\$ 108,720	\$ 93,558	\$ 46,588	\$ (30,773)	\$ 5,836,192	\$ 380,062	36,718
2021	5,310,281	93,713	88,680	33,038	40,663	5,566,375	331,216	33,355
2020	5,113,823	80,001	59,245	43,282	(94,100)	5,202,251	375,006	39,557
2019	4,884,580	89,960	59,493	38,804	79,751	5,152,588	417,795	45,205
2018	4,633,853	89,493	63,161	38,259	57,846	4,882,612	406,811	48,478
2017	4,400,869	75,765	69,383	32,524	56,479	4,635,020	404,624	47,877
2016	4,155,638	72,135	72,354	46,025	56,354	4,402,506	389,619	49,142
2015	4,058,520	66,738	60,493	34,575	15,239	4,235,565	381,243	48,449
2014	3,855,575	66,747	63,598	34,934	(30,548)	3,990,306	397,705	51,702
2013	3,692,992	60,179	57,590	27,542	12,914	3,851,217	392,580	52,952

Note:

1) 2022 data includes all tiers and loans taken at retirement. 2021 and prior data includes Tier 3, 4 and 6 loans only.

**TABLE OF BENEFIT PAYMENTS (VSF)<sup>1</sup>**  
 Fiscal Years 2013 through 2022  
 (in thousands)

Fiscal Year Ended June 30	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF
2022	\$ 105,083	\$ 1,433	\$ 2,232	\$ 3,002	\$ 2,497
2021	102,857	1,572	2,363	3,208	2,674
2020	100,084	1,662	2,428	3,290	2,731
2019	95,729	1,722	2,522	3,446	2,799
2018	93,200	1,825	2,573	3,612	2,887
2017	2,624	1,889	2,595	3,830	2,983
2016	40,224 <sup>2</sup>	1,968	2,648	3,945	2,964
2015	78,285	2,100	2,686	4,040	3,080
2014	38,014	2,168	2,797	4,070	3,090
2013	-	2,188	2,823	4,142	3,121

Notes:

1) NYCERS administers the following Variable Supplements Funds:

- Correction Officers' Variable Supplements Fund (COVSF)
  - Housing Police Officers' Variable Supplements Fund (HPOVSF)
  - Housing Police Superior Officers' Variable Supplements Fund (HPSOVSF)
  - Transit Police Officers' Variable Supplements Fund (TPOVSF)
  - Transit Police Superior Officers' Variable Supplements Fund (TPSOVSF)
- TPOVSF, TPSOVSF, HPOVSF, and HPSOVSF are closed to new entrants.

2) Excludes an accrual of \$41,925 that was included in the June 30, 2016 financial statements. In November 2016, after issuance of the financial statements, the NYC Office of the Actuary provided a memo to the COVSF Board of Trustees confirming that assets were insufficient to provide a COVSF benefit in December 2016. Management doesn't believe this change in estimated benefit payments has a material effect on the 2016 and 2017 combining financial statements.



**SERVICE RETIREMENT EXPERIENCE – 10-YEAR HISTORY**  
**TABLE OF AVERAGE ANNUAL BENEFIT PAYMENTS BY YEARS OF SERVICE**

Calendar Years 2017 through 2021

Calendar Year	Years of Service										Total Population	
	5 - 9.9	10 - 14.9	15 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 & Up				
Number of Retirees	2021	47	440	431	1,513	1,192	1,365	655	160			5,803
	2020	63	466	388	1,383	1,404	1,452	587	114			5,857
	2019	56	433	371	1,183	1,473	1,395	555	105			5,571
	2018	133	552	446	1,178	1,715	1,426	558	154			6,162
	2017	130	525	408	1,164	1,624	1,242	531	122			5,746
Average Retirement Benefit	2021	\$ 9,070	\$ 16,612	\$ 22,022	\$ 46,292	\$ 53,473	\$ 61,906	\$ 71,456	\$ 79,407			\$ 50,839
	2020	8,834	16,039	20,815	46,879	54,405	64,372	71,678	81,813			51,596
	2019	9,723	14,221	21,120	44,519	51,431	60,514	69,266	78,783			49,200
	2018	7,936	13,886	20,433	41,284	48,786	59,195	65,713	87,357			46,197
	2017	8,909	13,979	19,396	41,249	49,424	56,972	64,653	88,699			45,353
Average Salary Base	2021	\$ 64,787	\$ 80,253	\$ 77,542	\$ 100,200	\$ 99,393	\$ 100,661	\$ 103,112	\$ 94,871			\$ 96,836
	2020	65,922	77,861	72,781	101,032	101,503	104,669	104,031	100,138			98,277
	2019	66,145	71,462	74,365	96,991	95,954	99,203	100,823	91,821			93,714
	2018	63,996	69,778	71,694	89,360	91,018	96,566	95,237	85,981			88,331
	2017	71,270	70,602	68,536	89,478	91,526	93,550	93,836	83,521			87,555
Average Retirement Benefit as a % of Salary Base	2021	14%	21%	28%	46%	54%	62%	69%	84%			53%
	2020	13%	21%	29%	46%	54%	62%	69%	82%			53%
	2019	15%	20%	28%	46%	54%	61%	69%	86%			53%
	2018	12%	20%	29%	46%	54%	61%	69%	102%			52%
	2017	13%	20%	28%	46%	54%	61%	69%	106%			52%

**SERVICE RETIREMENT EXPERIENCE – 10-YEAR HISTORY (Continued)**  
**TABLE OF AVERAGE ANNUAL BENEFIT PAYMENTS BY YEARS OF SERVICE**

Calendar Years 2012 through 2016

Calendar Year	Years of Service										Total Population
	5 - 9.9	10 - 14.9	15 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 & Up			
Number of Retirees	143	439	376	1,057	1,873	1,134	396	150			5,568
	152	499	371	949	2,043	1,095	285	171			5,565
	134	456	347	1,075	1,884	996	250	189			5,331
	149	447	322	1,239	1,709	915	216	204			5,201
	176	436	307	1,215	1,609	842	178	182			4,945
Average Retirement Benefit	\$ 7,913	\$ 13,123	\$ 19,191	\$ 40,187	\$ 47,836	\$ 55,647	\$ 64,058	\$ 88,142	\$	\$	\$ 44,518
	7,649	13,223	19,352	35,501	46,515	53,945	59,082	81,760			41,968
	7,243	13,312	18,431	35,761	44,660	52,326	61,222	89,189			41,316
	6,741	12,536	17,987	34,628	42,273	50,889	59,072	77,790			38,980
	6,547	12,200	17,973	35,385	42,797	50,869	60,081	73,829			38,586
Average Salary Base	\$ 67,056	\$ 64,965	\$ 69,281	\$ 87,362	\$ 88,750	\$ 91,375	\$ 92,837	\$ 81,162	\$	\$	\$ 85,447
	64,281	64,821	69,363	78,541	86,944	88,146	85,010	77,424			81,491
	60,359	64,622	65,592	79,117	84,265	85,921	87,335	85,512			80,226
	58,112	61,601	64,599	76,020	80,120	82,524	80,735	77,442			76,392
	54,558	60,396	63,734	75,933	80,597	82,714	78,846	69,914			75,659
Average Retirement Benefit as a % of Salary Base	12%	20%	28%	46%	54%	61%	69%	109%			52%
	12%	20%	28%	45%	54%	61%	70%	106%			52%
	12%	21%	28%	45%	53%	61%	70%	104%			52%
	12%	20%	28%	46%	53%	62%	73%	101%			51%
	12%	20%	28%	47%	53%	62%	76%	106%			51%



**SERVICE RETIREMENT EXPERIENCE**  
**TABLE OF AVERAGE RETIREMENT ALLOWANCE BY AGE AND YEARS OF SERVICE**  
 Calendar Year 2021

Age at Retirement	Years of Service										Total Population
	5 - 9.9	10 - 14.9	15 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 & Up			
Under 50	0	0	0	199	20	0	0	0	0	0	219
50-54	0	0	2	107	101	66	7	0	0	0	283
55-59	5	55	76	271	360	427	78	0	0	0	1,272
60-64	18	167	142	466	461	605	388	75	0	0	2,322
65-69	17	155	150	335	189	216	139	56	0	0	1,257
70 & Over	7	63	61	135	61	51	43	29	0	0	450
	\$ -	\$ -	\$ -	\$ 66,196	\$ 66,658	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 66,238
Under 50	-	-	49,333	67,164	61,923	72,986	94,911	-	-	-	67,211
50-54	8,425	15,862	19,834	43,487	54,192	64,834	75,016	-	-	-	52,870
55-59	9,987	16,664	22,074	42,266	52,840	61,121	71,676	70,382	0	0	51,774
60-64	7,673	16,896	22,469	38,763	49,302	56,734	69,408	79,859	0	0	43,594
65-69	10,566	16,434	22,632	38,626	48,632	54,285	65,826	101,875	0	0	42,721
70 & Over											
Under 50	0%	0%	0%	51%	55%	0%	0%	0%	0%	0%	51%
50-54	0%	0%	44%	52%	54%	60%	68%	0%	0%	0%	55%
55-59	14%	20%	28%	46%	53%	60%	66%	0%	0%	0%	53%
60-64	14%	21%	28%	45%	54%	63%	70%	76%	0%	0%	55%
65-69	13%	21%	28%	43%	55%	63%	71%	82%	0%	0%	49%
70 & Over	15%	21%	28%	44%	55%	64%	70%	107%	0%	0%	49%

**SERVICE RETIREMENT EXPERIENCE  
TABLE OF DISTRIBUTION OF RETIREMENT ALLOWANCE  
BY AGE OF RETIREMENT  
Calendar Year 2021**

<b>Allowance / Age</b>	<b>Under 50</b>	<b>50-54</b>	<b>55-59</b>	<b>60-64</b>	<b>65-69</b>	<b>70 &amp; Up</b>	<b>Total</b>
\$4,999 or less	-	-	1	5	4	-	10
5,000 - 9,999	-	-	17	48	37	15	117
10,000 - 14,999	-	-	46	77	95	42	260
15,000 - 19,999	-	3	46	101	85	35	270
20,000 - 24,999	-	3	78	132	87	41	341
25,000 - 29,999	-	1	86	157	96	37	377
30,000 - 34,999	1	5	83	152	112	48	401
35,000 - 39,999	-	5	80	171	124	36	416
40,000 - 44,999	-	7	76	177	91	39	390
45,000 - 49,999	7	13	72	171	90	26	379
50,000 - 54,999	19	34	81	174	96	32	436
55,000 - 59,999	46	37	95	158	69	12	417
60,000 - 64,999	39	31	94	118	61	16	359
65,000 - 69,999	42	20	91	130	50	14	347
70,000 - 74,999	26	36	92	121	24	10	309
75,000 - 79,999	11	20	52	82	37	6	208
80,000 - 84,999	10	25	49	85	21	9	199
85,000 - 89,999	9	10	41	71	17	2	150
90,000 - 94,999	5	16	32	37	13	3	106
95,000 - 99,999	3	6	25	49	8	9	100
\$100,000 or more	1	11	35	106	40	18	211
<b>Total</b>	<b>219</b>	<b>283</b>	<b>1,272</b>	<b>2,322</b>	<b>1,257</b>	<b>450</b>	<b>5,803</b>



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**SERVICE RETIREMENT EXPERIENCE  
TABLE OF DISTRIBUTION OF RETIREMENT ALLOWANCE  
BY YEARS OF SERVICE**  
Calendar Year 2021

Allowance / Service	5-9.9 Yrs	10-14.9 Yrs	15-19.9 Yrs	20-24.9 Yrs	25-29.9 Yrs	30-34.9 Yrs	35-39.9 Yrs	40 & Up Yrs	Total
\$4,999 or less	8	2	-	-	-	-	-	-	10
5,000 - 9,999	21	91	5	-	-	-	-	-	117
10,000 - 14,999	13	133	113	1	-	-	-	-	260
15,000 - 19,999	4	89	106	65	5	1	-	-	270
20,000 - 24,999	1	61	68	158	39	13	1	-	341
25,000 - 29,999	-	37	65	129	84	53	8	1	377
30,000 - 34,999	-	15	28	135	119	71	29	4	401
35,000 - 39,999	-	10	20	145	112	94	29	6	416
40,000 - 44,999	-	2	13	127	74	122	38	14	390
45,000 - 49,999	-	-	7	130	92	95	42	13	379
50,000 - 54,999	-	-	4	119	120	124	56	13	436
55,000 - 59,999	-	-	-	140	113	108	50	6	417
60,000 - 64,999	-	-	1	102	101	105	36	14	359
65,000 - 69,999	-	-	1	98	92	106	38	12	347
70,000 - 74,999	-	-	-	63	90	104	44	8	309
75,000 - 79,999	-	-	-	34	38	81	42	13	208
80,000 - 84,999	-	-	-	28	45	79	39	8	199
85,000 - 89,999	-	-	-	15	32	49	51	3	150
90,000 - 94,999	-	-	-	15	13	47	30	1	106
95,000 - 99,999	-	-	-	6	10	44	35	5	100
\$100,000 or more	-	-	-	3	13	69	87	39	211
<b>Total</b>	<b>47</b>	<b>440</b>	<b>431</b>	<b>1,513</b>	<b>1,192</b>	<b>1,365</b>	<b>655</b>	<b>160</b>	<b>5,803</b>



**ORDINARY DISABILITY RETIREMENT EXPERIENCE  
TABLE OF AVERAGE ANNUAL BENEFIT PAYMENTS**  
Calendar Years 2012 through 2021

Calendar Year	Number of Retirees <sup>1</sup>	Average Age	Average Years of Service	Average Retirement Benefit	Average Salary Base <sup>2</sup>	Average Retirement Benefit as a % of Salary Base
2021	201	56	19	\$ 29,692	\$ 81,125	37%
2020	193	55	19	30,999	83,781	37%
2019	328	55	18	26,443	73,453	36%
2018	301	55	18	25,370	70,472	36%
2017	321	55	18	24,455	67,931	36%
2016	318	54	19	25,229	70,080	36%
2015	357	54	18	25,142	67,952	37%
2014	400	54	18	23,948	66,522	36%
2013	446	54	18	23,201	64,447	36%
2012	436	54	18	22,111	61,419	36%

Note:

- 1) For 2021, 86 of the 201 ordinary disability retiree cases have been processed and finalized.
- 2) For 2018, the amount was revised from \$70,126 (as depicted in the 2019 ACFR) to \$70,472 due to numerical rounding modifications.

**ACCIDENTAL DISABILITY RETIREMENT EXPERIENCE  
TABLE OF AVERAGE ANNUAL BENEFIT PAYMENTS**  
Calendar Years 2012 through 2021

Calendar Year	Number of Retirees <sup>1</sup>	Average Age	Average Years of Service	Average Retirement Benefit <sup>2</sup>	Average Salary Base <sup>3</sup>	Average Retirement Benefit as a % of Salary Base
2021	94	52	n/a	\$ 70,058	\$ 102,875	68%
2020	75	48	n/a	74,022	104,256	71%
2019	73	48	n/a	76,105	102,845	74%
2018	74	48	n/a	71,670	98,178	73%
2017	78	47	n/a	70,933	97,168	73%
2016	106	46	n/a	70,330	96,342	73%
2015	108	47	n/a	67,799	91,621	74%
2014	70	47	n/a	69,676	94,157	74%
2013	77	45	n/a	63,221	85,434	74%
2012	89	48	n/a	64,179	86,728	74%

Notes:

- 1) For 2021, 57 of the 94 accidental disability retiree cases have been processed and finalized.
- 2) Certain accidental disability benefits are reduced by amounts awarded by the New York State Workers' Compensation Board.
- 3) For 2018, the amount was revised from \$98,313 (as depicted in the 2019 ACFR) to \$98,178 due to numerical rounding modifications.



**TABLE OF RECIPIENTS BY BENEFIT TYPE AND PENSION OPTION**

Year Ended June 30, 2022

Pension Option	Service	Disability (Non-Duty)	Disability and Deaths (Duty)	Total <sup>1</sup>
Single Life	80,534	5,920	4,085	90,539
Joint and Survivor	29,576	944	145	30,665
Lump Sum or Term Certain	14,122	1,824	487	16,433
Advance Payments <sup>2</sup>	9,271	264	61	9,596
Surviving Annuitants	18,927	2,487	373	21,787
<b>Total</b>	<b>152,430</b>	<b>11,439</b>	<b>5,151</b>	<b>169,020</b>

Notes:

1) Total includes alternative payees such as recipients being paid pursuant to domestic relations orders and similar judgments.

2) Retirees have not yet selected a retirement option.

## TABLE OF RETIREMENT BENEFITS BY TYPE 10-YEAR HISTORY

Fiscal Years 2013 through 2022

Year Ended June 30	Service		Disability (Non-Duty)		Disability (Duty)		Surviving Beneficiaries		Total	
	No. of Recipients	Average Annual Allowance	No. of Recipients	Average Annual Allowance	No. of Recipients	Average Annual Allowance	No. of Recipients	Average Annual Allowance	No. of Recipients	Average Annual Allowance
2022	133,503	\$ 35,956	8,952	\$ 20,851	4,778	\$ 41,313	21,787	\$ 23,761	169,020	\$ 33,735
2021	129,364	34,943	9,089	20,112	4,800	39,457	20,844	22,892	164,097	32,723
2020	127,745	33,520	9,525	19,648	4,812	38,440	19,969	21,522	162,051	31,372
2019	125,815	32,784	9,709	19,450	4,814	37,578	19,525	20,866	159,863	30,663
2018	123,093	32,106	9,802	19,241	4,826	36,683	18,776	20,109	156,497	30,002
2017	119,943	31,259	9,786	18,764	4,777	36,400	18,283	19,013	152,789	29,154
2016	117,625	30,203	9,759	18,485	4,739	34,513	17,817	18,121	149,940	28,141
2015	115,139	29,613	9,795	18,056	4,701	33,328	17,177	17,694	146,812	27,567
2014	113,507	28,788	9,697	17,771	4,681	31,974	16,652	16,903	144,537	26,783
2013	113,291	27,959	9,580	17,560	4,637	31,882	16,360	16,314	143,868	26,069



**TABLE OF PENSIONERS AND ACTIVE MEMBERS**

Fiscal Years 2013 through 2022

Pensioners			Active Members <sup>1</sup>			Total		
Year Ended June 30 <sup>2</sup>	Counts	Percentage Change	Year Ended June 30 <sup>2</sup>	Counts	Percentage Change	Year Ended June 30 <sup>2</sup>	Counts	Percentage Change
2022	172,593	6.4	2022	251,038	2.8	2022	423,631	4.3
2021	162,149	1.4	2021	244,173	(0.9)	2021	406,322	0.0
2020	159,906	1.8	2020	246,298	0.7	2020	406,204	1.1
2019	157,153	2.0	2019	244,562	1.7	2019	401,715	1.8
2018	154,116	2.5	2018	240,444	10.6	2018	394,560	7.3
2017	150,419	2.0	2017	217,389	2.4	2017	367,808	2.2
2016	147,514	2.1	2016	212,365	0.1	2016	359,879	0.9
2015	144,526	1.7	2015	212,067	0.5	2015	356,593	1.0
2014	142,095	1.9	2014	210,963	(0.7)	2014	353,058	0.3
2013	139,399	1.0	2013	212,539	0.1	2013	351,938	0.5

Notes:

- 1) Active Members include:
  - Terminated vested members not yet receiving benefits
  - Inactive members who were no longer on payroll but not otherwise classified (prior to 2020)
  - Members that are on leave with insufficient service for vesting and assumed to not return to active service (2020 and after)
- 2) Data prior to and including 2020 is final. 2021 and 2022 data is preliminary and may be subject to future adjustments as the data is refined.

## TABLE OF RECIPIENTS (VSF)<sup>1</sup>

Fiscal Years 2013 through 2022

Year Ended June 30	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	TOTAL
2022	8,932	118	184	247	206	9,687
2021	8,693	127	193	262	218	9,493
2020	8,406	137	199	268	226	9,236
2019	8,188	142	208	279	230	9,047
2018	7,844	147	212	293	238	8,734
2017	7,488	154	214	313	244	8,413
2016	7,064 <sup>2</sup>	161	218	324	248	8,015
2015	6,663	172	224	333	256	7,648
2014	6,389	179	234	342	260	7,404
2013	-	187	241	347	265	1,040

**Notes:**

1) NYCERS administers the following Variable Supplements Funds:

- Correction Officers' Variable Supplements Fund (COVSF)
  - Housing Police Officers' Variable Supplements Fund (HPOVSF)
  - Housing Police Superior Officers' Variable Supplements Fund (HPSOVSF)
  - Transit Police Officers' Variable Supplements Fund (TPOVSF)
  - Transit Police Superior Officers' Variable Supplements Fund (TPSOVSF)
- TPOVSF, TPSOVSF, HPOVSF, and HPSOVSF are closed to new entrants.

2) COVSF benefits were not authorized to be paid in December 2016. This number represents the count of individuals eligible, if a benefit had been authorized to be paid.





## **CONTACT INFORMATION**

### **MAIL**

30-30 47th Avenue, 10th Floor  
Long Island City, NY 11101

### **VISIT**

Customer Service Center:  
340 Jay Street, Mezzanine Level  
Brooklyn, NY 11201

### **NYCERS' CALL CENTER**

(347) 643-3000  
1-877-6NYCERS  
347-643-3501 - TTY (hearing impaired)

### **EXECUTIVE OFFICES**

335 Adams Street, Suite 2300  
Brooklyn, NY 11201

### **WEBSITE**

[www.nycers.org](http://www.nycers.org)

### **CUSTOMER SERVICE HOURS**

Monday - Friday, 8 am – 5 pm