



# 2021

## Annual Comprehensive Financial Report

**FOR THE FISCAL YEARS ENDED JUNE 30, 2021 AND JUNE 30, 2020**

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

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

**BROOKLYN, NEW YORK**

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

**ANNUAL COMPREHENSIVE FINANCIAL REPORT**

**FOR THE FISCAL YEARS ENDED  
JUNE 30, 2021 AND JUNE 30, 2020**

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

**Mario DiSanto, Acting Director, Finance**

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

**Actuary:** **Sherry Chan, Chief Actuary**

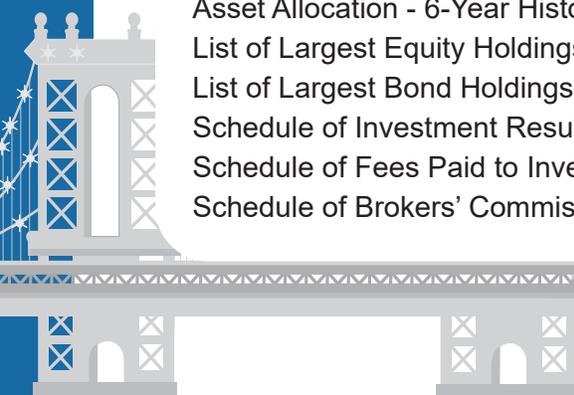
**Custodian of Funds:** **Scott Stringer,  
Comptroller of the City of New York**

**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, 2021 AND JUNE 30, 2020**

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**PART 1**  
**INTRODUCTORY SECTION**

## BOARD OF TRUSTEES

<p><b>Mayor's Representative</b> Mr. John Adler, Chairperson</p>	
<p><b>Honorable Scott Stringer</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 James Oddo</b> Borough President of Staten Island</p>
<p><b>Honorable Gale Brewer</b> Borough President of Manhattan</p>	<p><b>Mr. Henry Garrido</b> Executive Director District Council 37, AFSCME</p>
<p><b>Honorable Eric Adams</b> Borough President of Brooklyn</p>	<p><b>Mr. Anthony Utano</b> President Transport Workers Union, Local 100</p>
<p><b>Honorable Ruben Diaz, Jr.</b> Borough President of The Bronx</p>	<p><b>Mr. Gregory Floyd</b> President International Brotherhood of Teamsters, Local 237</p>

**Ms. Melanie Whinnery**  
NYCERS Executive Director







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, 2020

*Christopher P. Morill*

Executive Director/CEO





Public Pension Coordinating Council

***Recognition Award for Administration  
2021***

Presented to

**New York City Employees' Retirement System**

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

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

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

A handwritten signature in black ink that reads "Alan H. Winkle". The signature is written in a cursive style with a large, prominent 'A' and 'W'.

Alan H. Winkle  
Program Administrator



December 31, 2021

Board of Trustees  
New York City Employees' Retirement System  
335 Adams Street  
Brooklyn, NY 11201-3724

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, 2021. 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.

The Annual Comprehensive Financial Report (ACFR) is the new term and acronym that replaces the comprehensive annual financial report in generally accepted accounting principles for state and local governments.

## 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, 2021 and 2020, 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, 2020. 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 35 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, 2021 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 Administration to NYCERS for 2021. This is the twelfth 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, 2019, the date of the Plan's most recent actuarial valuation, the Plan's membership included 191,501 members in active pay status, 157,153 retirees and beneficiaries receiving benefits, 21,788 terminated vested members who are not yet receiving benefits, and 31,273 members who are no longer on payroll, but not otherwise classified.

## INITIATIVES

### Legacy Replacement Project

The Legacy Replacement Project (LRP) is a 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 is intended to 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 will be completed over five phases. Phase 1 began on June 22, 2021. It is anticipated each phase will take approximately one year to complete.

### Pension Outreach Programs

NYCERS' Pension Outreach Programs participates in events sponsored by employer and union partners and hosts Comprehensive Pre-Retirement Planning Seminars via video conference. Video conferenced seminars will continue for the foreseeable future, as virtual events have enabled NYCERS to reach significantly more members than onsite events. Closed Captioning is also now offered at virtual events. Approximately 12,361 clients attended virtual educational events during this period. Prospective members can easily sign up online for a membership in this retirement system.

An in-depth Train-the-Trainer session was held with employer benefit coordinators and union partners that included 175 participants, 145 from 37 participating employers and 30 participants representing seven labor unions. In these sessions, important information is provided about NYCERS' benefits, including, but not limited to, membership, loans, buybacks, tier reinstatement, retirement plans, benefit calculations, filing for retirement, survivor benefits, and post-retirement employment.

Pension Outreach Programs continues to update seminar booklets that are available for viewing and/or downloading in the retirement section of our website at [www.nycers.org](http://www.nycers.org). Important retirement planning information from our partners at the NYC Office of Labor Relations, the NYC Department for the Aging and the Social Security Administration has also been made available.

## **Succession Planning**

NYCERS has continued to strengthen succession planning efforts in order to deliver on the organization's strategic objectives and goals. During this period, a Deputy Director was hired for the Internal Audit Division and changes were made within the business divisions to strengthen the supervisory structure during the support of the Legacy Replacement Project.

## **COVID-19 PANDEMIC**

### **Emergency Response to COVID-19**

In March 2020, as part of its emergency response to the COVID-19 pandemic, NYCERS safely transitioned its workforce – except those employees providing services essential to be performed onsite – to work remotely.

Although teleworking initially presented some challenges, NYCERS adapted efficiently and was able to continue business operations while working remotely. The implementation of technology modernization initiatives such as the new MyNYCERS platform and Call Center as a Service continued to improve NYCERS' efficiency and service during the pandemic.

### **Operational Changes**

Significant temporary operational changes were also made as part of NYCERS' emergency COVID-19 response in order to continue serving members while keeping our staff and members safe in the midst of the pandemic. These changes, as well as laws and Executive Orders enacted during the pandemic, were posted on the [nycers.org](http://nycers.org) website as FAQs and homepage alerts, and updated continuously as needed.

As of May 2021, the NYCERS workforce has returned to working onsite in compliance with Local Law 75 of 2020, and most of the temporary operational changes have been rescinded. Information about NYCERS' current operational policies is posted on the [nycers.org](http://nycers.org) website under the Operations During Pandemic tab.

### **COVID-19 Legislation Implementation**

During the first year of the pandemic, NYCERS developed and implemented policies and

procedures to administer the financial relief and survivor benefits afforded by coronavirus-related legislation: the Federal CARES Act, IRS Notice 2020-23, and the New York State COVID-19 Accidental Death Benefit (Chapter 89 of the Laws of 2020 and as amended by Chapter 78 of the Laws of 2021). The Federal CARES Act and IRS Notice 2020-23 expired in 2020, and NYCERS continues to administer benefits under Chapter 89 of the Laws of 2020/Chapter 78 of the Laws of 2021.

## 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 Transit Authority, the Triborough Bridge and Tunnel Authority, the New

York City Housing Authority, the New York City Health and Hospitals Corporation, the New York City Housing Development Corporation, the City University of New York, the New York City School Construction Authority, and the New York City Municipal Water Finance Authority. A table listing these employers and the number of their respective participating employees may be found on page 211 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. Contributions and investment income for fiscal year 2021 totaled \$22.6 billion, an increase of \$15.9 billion from \$6.7 billion in fiscal year 2020. As discussed in the Financial Section of the MD&A, the increase was mainly due to favorable performance in the investment portfolio, primarily in equity securities. The Table of Revenue by Source on page 228 presents 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 230 and the Table of Changes in Fiduciary Net Position on page 229 present 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, 2019, the Plan's most recent actuarial valuation date, the Plan's funded ratio is 76.8%, an increase from 74.1% as of June 30, 2018. 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, 2021, the fiduciary net position represents 93.1% of total pension liability for NYCERS and the five Variable Supplements 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, 2021, the Plan's rate of return on investments was 26.63%, higher than NYCERS' Policy Benchmark, which had a rate of return of 26.34%. 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 152 and 153. 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.

## ECONOMIC CONDITIONS<sup>1</sup>

The City's economy grew robustly through much of Fiscal Year 2021, but has yet to make a full recovery from the adverse impacts wrought by the COVID-19 pandemic. The City entered the fiscal year with much of the economy closed and record unemployment. With the emergency use authorization of COVID vaccines, the City's economic rebound resumed as the pace of vaccinations picked up through the winter and into the spring, aided by massive Federal stimulus.

The City ended the fiscal year with steady economic growth. According to the New York City Comptroller, employment rose to a seasonally adjusted 3.6 million in June 2021, up 226,000 from the start of the fiscal year, but still 505,000 below pre-pandemic highs.

At the end of Fiscal Year 2021, large sectors of the economy remained profoundly altered. Many stores had closed and more New Yorkers switched to online shopping. While some white-collar workers had returned back to the office, New York City's office towers remained mostly unoccupied.

The more contagious Delta variant of the virus remains the greatest threat to a full economic recovery. While the City has so far been spared a dramatic rise in cases like those of other states and countries, the risk of resurgence has led a number of New York City based-firms to rethink their plans and timelines for returning to the office. Travel from much of the world remains restricted. As the Delta variant continues to explode elsewhere, these travel restrictions are more likely to persist, depressing demand for New York City services.

The supplemental pandemic unemployment insurance programs, which helped New Yorkers and the businesses they patronize survive the past year, expired in September 2021. But while job postings remain elevated, and anecdotes of labor shortages abound, New York City's pace of job creation slowed in the summer. It remains to be seen how many unemployed New Yorkers will be able and willing to find work in an economy threatened by a resurgent virus.

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<sup>1</sup> Source: 2021 New York City Annual Comprehensive Financial Report

## 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 155. A listing of brokerage firms, and the amounts paid to such firms, can be found in the Schedule of Brokers' Commissions on page 165. Other consultant services are shown in the Financial Section's Schedule of Payments to Consultants on page 141. 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



Mario DiSanto  
Acting Director of Finance



# Legislation (enacted between 7/1/20 and 6/30/21)

## Laws of 2020

(enacted between July 1, 2020 and December 31, 2020)

### **Chapter 58 of the Laws of 2020 (Item NNN) – Increases 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) to increase 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, 2020.

### **Chapter 169 of the Laws of 2020 – Amends and extends the provisions of the September 11th Worker Protection Task Force Act**

This Act amends the September 11th Workers Protection Task Force Act to require new appointments to the task force, set a biannual meeting requirement, reset the deadline for an annual report, and extend the provisions of the Act until June 10, 2025. It also expands the mandated areas of study to include: (1) Coverage for public employees who participated in WTC rescue/recovery/cleanup operations in a professional or volunteer capacity; (2) those who had not yet been a member of a retirement system at the time of such participation; (3) appeals processes, opportunities to synchronize WTC-related benefits at the Federal and state level; and (4) methods of identifying participants so the state may work to proactively treat the conditions described in RSSL§63(g). This law is effective as of September 11, 2020.

### **Chapter 323 of the Laws of 2020 – Reforms the Statutory Short Form and other Powers of Attorney**

This law amends the General Obligations Law (GOL) to reform the Statutory Short Form and other Powers of Attorney (POAs) for purposes of financial and estate planning. This law amends the strict requirements of the former POA law and states that a valid POA must only substantially conform to the required statutory language. Further, a separate gift rider is no longer required. This law is effective as of May 14, 2021.

## Laws of 2021

(enacted between January 1, 2021 and June 30, 2021)

### Chapter 78 of the Laws of 2021 – Extends eligibility for death benefits provided to statutory beneficiaries of members whose death was a result of or was contributed to by COVID-19

This Act replaces the COVID-19 Accidental Death Benefit established by Chapter 89 of the Laws of 2020 and extends the deadline for members to December 31, 2022. The Act does not extend eligibility with respect to retirees. The benefit is provided, subject to documentation requirements, to the eligible beneficiary of a member where such member reported to their usual place of employment or an alternate worksite outside their home at the direction of their employer on or after March 1, 2020 and contracted COVID-19 within 45 days after reporting for work, and whose death was caused by COVID-19 or where COVID-19 contributed to such member's death. Amounts payable are reduced by payments of any ordinary death benefits. This Act is effective as of March 1, 2020. The Act shall expire and be deemed repealed on December 31, 2022.

### Chapter 59 of the Laws of 2021 (Part 183) – Authorizing the City of New York and the NYC Board of Education to provide a temporary retirement incentive for certain public employees

This Act authorizes the City of New York and the NYC Board of Education (DOE), to provide a temporary retirement incentive for eligible employees. **The incentive is subject to the Mayor of the City of New York passing a local law and the Chancellor of the DOE passing a resolution.**

With respect to NYCERS members, Subpart A of the Act provides additional service credit to certain NYCERS members in the form of one-twelfth of a year of additional service credit per year of service, up to three additional years of service credit. Further, certain members not otherwise eligible to retire would qualify for service retirement under this Act with reductions to the retirement benefit. Subpart B of the Act allows certain Tier 2, 3 and 4 Members to retire early with an unreduced benefit. Eligible members **may not** avail themselves of the provisions of both Subpart A and B.

The Mayor must pass a local law by June 30, 2021, or in the case of the DOE, the Chancellor must pass a resolution by May 31, 2021, electing to participate in the incentive. The local law and/or resolution must include what the Open Period for enrollment will be, what type of incentive the City/DOE will offer, and the commencement date of the incentive.

**The Local Law was not passed by the deadline; neither the City nor the DOE elected to participate in the incentive.**

This law is effective as of April 19, 2021, and shall expire and be deemed repealed on April 19, 2022.

## **Chapter 77 of the Laws of 2021 – Provides up to four (4) hours paid leave per injection for COVID-19 vaccine**

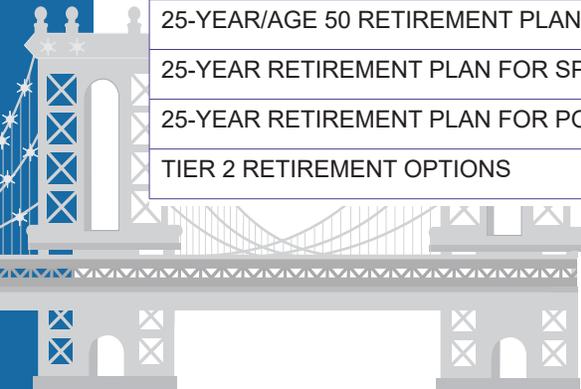
This Act amends the Civil Service Law to provide public employees up to four (4) hours of paid leave per injection to receive the COVID-19 vaccine, unless a greater amount of time is afforded the employee under a collectively bargained agreement, authorized by the employer, or waived by a collectively bargained agreement. The paid leave offered by this Act is considered excused and is not chargeable against any other leave. This Act also prohibits employers from retaliation against an employee for taking leave to receive the COVID-19 vaccine. This Act is effective as of March 12, 2021 and shall expire and be deemed repealed on December 31, 2022.

## **Chapter 84 of the Laws of 2021 – Amends NYS Power of Attorney requirements and the Statutory Short Form**

Chapter 84 of the Laws of 2021 amends the General Obligations Law (GOL) and sets new requirements for NYS Powers of Attorney, including requirements for the Statutory Short Form. This Act requires that two disinterested witnesses sign the Power of Attorney form. In addition, it makes technical changes to the Statutory Short Form requiring that multiple agents must act together unless “My agents may act SEPARATELY” is initialed. This law is effective as of June 13, 2021.

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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. 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. 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; 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
- o Service rendered while a member of another retirement system within New York City or New York State and transferred to NYCERS
- 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; 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)

### DISABILITY RETIREMENT

- ♦ Ordinary - must have ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (defined in law)
- ♦ A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary(ies)
- ♦ 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

## 55-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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (defined in law)
- ♦ A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary(ies)
- ♦ 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 ten 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; plus 1.5% x Final Compensation x TOS above 20 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (defined in law)
- ♦ A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary(ies)
- ♦ 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

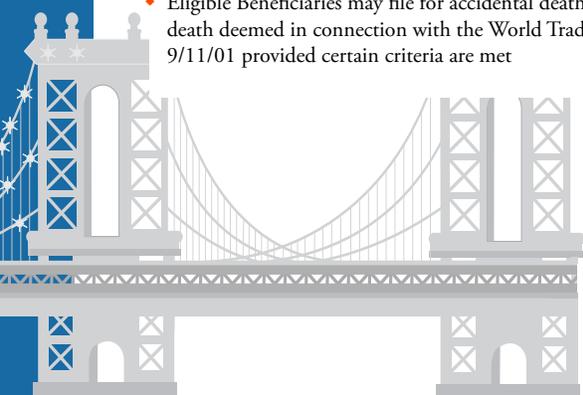
- ♦ Must have five or more years of Allowable Sanitation Service, but less than 20; payable the date the member would have reached 20 years if he/she had not discontinued service
- ♦ For each year of Allowable Service: 2.5% of Final Salary; plus
- ♦ For years other than Allowable Service: 1% of Final 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (defined in law)
- ♦ A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary(ies)
- ♦ 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 (See Plan B)
- ♦ 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; benefit payable when member would have reached 25 years if he/she 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (defined in law)
- ♦ A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary(ies)
- ♦ 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 (See Plan B)
- ♦ 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 =  $2 \times 1/100$  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:
    - ♦  $2 \times 1/100$  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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (defined in law)
- ♦ A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary(ies)
- ♦ 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 ten or more years of Credited Service; Accidental - no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary:  $1.53\% \times$  Final Salary for each year after June 30, 1968;  $1.20\% \times$  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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (defined in law)
- ♦ A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary(ies)
- ♦ 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

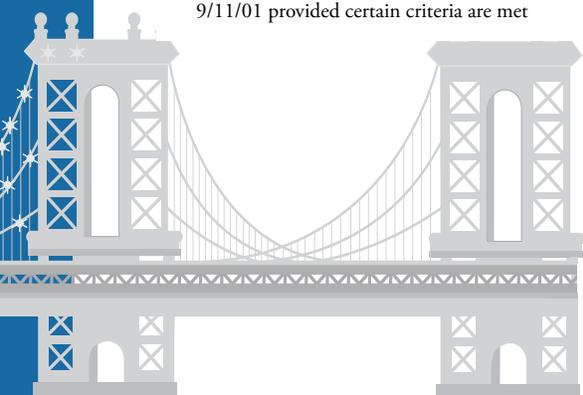
- ♦ Need five or more years of Allowable Service, but less than 25; payable when member would have reached 25 years
- ♦ For each year of Allowable Service: 2.2% of Final Salary

### DISABILITY RETIREMENT

- ♦ Ordinary - must have ten or more years of Credited Service; Accidental - no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary:  $1.53\% \times$  Final Salary for each year after June 30, 1968;  $1.20\% \times$  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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (defined in law)
- ♦ A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary(ies)
- ♦ 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 18 (or 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)

### 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
- ♦ 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 ten or more years of Credited Service; Accidental – no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary:  $1.53\% \times \text{Final Salary}$  for each year after June 30, 1968;  $1.20\% \times \text{Final Salary}$  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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (defined in law)
- ♦ A Presumptive Death Benefit (Death Gamble): If eligible for Service Retirement at time of death, payable to the Designated Beneficiary(ies)
- ♦ 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

## 20-YEAR RETIREMENT PLAN FOR CORRECTION OFFICERS (P-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 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
  - ♦  $75\% \times 1.67\% \times \text{Final Compensation} \times \text{Credited Service on or after 09/30/51}$
  - ♦  $55\% \times 1.67\% \times \text{Final Compensation} \times \text{Credited Service prior to 10/11/51}$

### 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:
  - ♦  $2.5\% \times \text{Final Salary} \times \text{Years of ACS up to 20 years}$ , plus
  - ♦  $75\% \times 1.67\% \times \text{Final Compensation} \times \text{Credited Service on or after 09/30/51}$ , plus
  - ♦  $55\% \times 1.67\% \times \text{Final Compensation} \times \text{Credited Service prior to 10/11/51}$

### DISABILITY RETIREMENT

- ♦ Ordinary: If less than 10 years of ACS - 1/3 of Final Salary; more than 10, but less than 20 - 50% of Final Salary; more than 20 -  $2.5\% \times \text{Final Salary} \times \text{Credited Service}$
- ♦ 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 18 (or 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: FIVE-YEAR CERTAIN, TEN-YEAR CERTAIN**

The retiree receives a reduced monthly lifetime benefit. If the retiree dies within five years (or ten 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 (or ten-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 (or ten years) following the effective retirement date, all retirement allowance payments will cease.

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

#### **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). 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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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

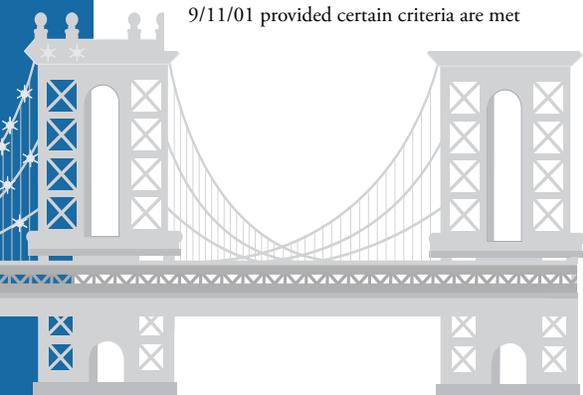
- ♦ Need a minimum of five years of Credited Service
- ♦ Payability Date: Age 62 on an unreduced basis or age 55 on a reduced basis
- ♦ Vested Retirement Benefit is the same as the Service Retirement Benefit

### DISABILITY RETIREMENT

- ♦ Ordinary - must have ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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)

### 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). 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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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

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

### SERVICE RETIREMENT

- ♦ Participants may retire at age 55 with twenty-five or more years of Credited Service
- ♦ The Service Retirement Benefit is:
  - ♦ *1.53% x Final Average Salary 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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 3 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:
  - ♦  $2.5\% \times \text{FAS} \times \text{the years of ACS}$ , plus
  - ♦  $75\% \times 1.67\% \times \text{Final Compensation} \times \text{Credited Service on or after 10/01/51}$

### DISABILITY RETIREMENT

- ♦ Ordinary: If less than 10 years of ACS - 1/3 of FAS; more than 10, but less than 20 - 50% of FAS; more than 20 -  $2.5\% \times \text{FAS} \times \text{Credited Service}$
- ♦ 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(ies) (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 18 (or 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 =  $2 \times 1/100$  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:*
      - ♦  $2 \times 1/100$  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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 (20N/C)

### 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:  $1.5\% \times \text{Final Compensation} \times \text{years of TOS on or after 07/01/68}$ , plus
  - Each year of other service:  $1\% \times \text{Final Compensation} \times \text{years of other service}$
- The Reduced Service Retirement Benefit is:
  - $2\% \times \text{FAS} \times \text{Credited Service}$  (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)

### 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 ten 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:  $2.5\% \times \text{Final Compensation} \times \text{TOS up to 20}$ ; plus  $1.5\% \times \text{Final Compensation} \times \text{TOS above 20}$  rendered on or after 07/01/68; plus  $1\% \times \text{Final Compensation} \times \text{all other service}$ . 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(ies) (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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
  - $75\% \times 1.67\% \times \text{Final Compensation}$  for each year on or after 09/30/51
  - $55\% \times 1.67\% \times \text{Final Compensation} \times \text{Credited Service}$  prior to 10/1/51
- 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:
  - $2.5\% \times \text{FAS} \times \text{years of ACS up to 20 years}$ , plus
  - $75\% \times 1.67\% \times \text{Final Compensation} \times \text{Credited Service on or after 09/30/51}$ , plus
  - $55\% \times 1.67\% \times \text{Final Compensation} \times \text{Credited Service prior to 10/1/51}$

### DISABILITY RETIREMENT

- Ordinary: If less than 10 years of ACS - 1/3 of FAS; more than 10, but less than 20 - 50% of FAS; more than 20 -  $2.5\% \times \text{FAS} \times \text{Credited Service}$
- 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(ies) (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 18 (or 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)

### 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*
  - ♦  $75\% \times 1.67\% \times$  Final Compensation for each year on or after 09/30/51
  - ♦  $55\% \times 1.67\% \times$  Final Compensation  $\times$  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:
  - ♦  $2.5\% \times$  FAS  $\times$  Years of ACS up to 20 years, plus
  - ♦  $75\% \times 1.67\% \times$  Final Compensation  $\times$  Credited Service on or after 09/30/51, plus
  - ♦  $55\% \times 1.67\% \times$  Final Compensation  $\times$  Credited Service prior to 10/1/51

### DISABILITY RETIREMENT

- ♦ Ordinary: If less than 10 years of ACS - 1/3 of FAS; more than 10, but less than 20 - 50% of FAS; more than 20 -  $2.5\% \times$  FAS  $\times$  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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 18 (or 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

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

### 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*
  - ♦  $1.5\% \times$  Final Compensation  $\times$  Allowable Sanitation Service after first 20 years, plus
  - ♦  $1\% \times$  Final Compensation  $\times$  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  $2\% \times$  FAS  $\times$  years of Credited Service*

### VESTED RETIREMENT

- ♦ Need at least 5, but less than 20 years of Allowable Sanitation Service; payable when member would have reached 20 years of such service
- ♦  $2.5\% \times$  FAS  $\times$  each year of Allowable Sanitation Service; plus
- ♦  $1\% \times$  Final Compensation  $\times$  each year of Credited Service

### DISABILITY RETIREMENT

- ♦ Ordinary: Need 5 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,  $1\% \times$  Average Compensation  $\times$  years in excess of 20, plus  $.5\% \times$  Average Compensation  $\times$  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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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:
  - ♦  $2.5\% \times \text{FAS} \times \text{each year of Allowable Sanitation Service}$ , plus
  - ♦  $1\% \times \text{Final Compensation} \times \text{each year of Credited Service}$

### 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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):  $1.5\% \times \text{FAS}$
- ♦ 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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 5 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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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-D)

### 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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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-D)

### 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 ten 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
- ♦ 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 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 ten 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(ies) (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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

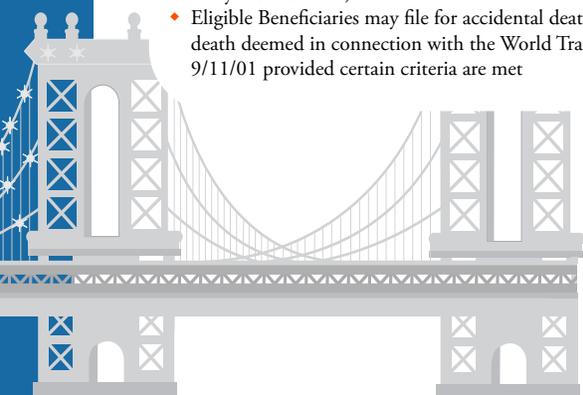
- No provision for Vesting. However, all Tier 2 members with at least 10 years of Credited Service are eligible for the Death Benefit for Vested Members (see below).

### DISABILITY RETIREMENT

- Ordinary - must have ten 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(ies) (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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)

### 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 ten or more years of Credited Service; Accidental – no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary:  $1.53\% \times FAS$  for each year after June 30, 1968;  $1.20\% \times FAS$  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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 POLICE COMMUNICATION OPERATORS (911)

### 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 ten or more years of Credited Service; Accidental – no minimum service, but disability resulted from an on-the-job accident
- ♦ Disability Retirement Benefit:
  - ♦ Ordinary:  $1.53\% \times FAS$  for each year after June 30, 1968;  $1.20\% \times FAS$  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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 5 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 ten 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 ten-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 ten years following the effective retirement date, all retirement allowance payments will cease.

The retiree may change the beneficiary/beneficiaries any time within the ten-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

### 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:  $1.67\% \times \text{each year of Credited Service} \times \text{Final Average Salary (FAS)}$*
  - ♦ *20 or more years of Credited Service:  $2\% \times \text{each year of Credited Service} \times \text{FAS}$*
- ♦ 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 one-third of FAS or  $2\% \times \text{Credited Service} \times \text{FAS}$  (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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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

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

### 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") 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"
- ♦ 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  $1.67\% \times \text{each year of Credited Service} \times \text{FAS}$ . 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 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"
- ♦ 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 18 (or 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)

### 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"
- 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"
- 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(ies) (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 18 (or 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

## 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% of FAS times the 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"
- 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"
- 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(ies) (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 18 (or 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)

### 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 times 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"
- 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  $1.67\% \times$  each year of Credited Service  $\times$  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"
- 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(ies) (member's designation)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 18 (or 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

## DA INVESTIGATORS 22-YEAR RETIREMENT PLAN (DA-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:
  - $2.1\% \times$  FAS  $\times$  years of Credited Service at the completion of 20 years of Credited Service; plus
  - $.33\% \times$  FAS  $\times$  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:
  - $2.1\% \times$  FAS  $\times$  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
  - $2\% \times$  FAS  $\times$  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(ies) 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(ies) (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, Accident 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)

### 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(ies) 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(ies) (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 18 (or 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.

## UNIFORMED CORRECTION FORCE 22-YEAR ENHANCED DISABILITY RETIREMENT PLAN (CF-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:
  - ◆  $2.1\% \times \text{FAS} \times \text{years of Credited Service at the completion of 20 years of Credited Service; plus}$
  - ◆  $.33\% \times \text{FAS} \times \text{each month of service in excess of 20 years, but not more than 50\% of FAS; minus}$
  - ◆ 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(ies) 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(ies) (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 18 (or 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:
  - ◆  $2.1\% \times \text{FAS} \times \text{years of Credited Service at the completion of 20 years of Credited Service}$ ; 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 (5) years of Credited Service and be considered disabled by Social Security Administration. Benefit equal to the greater of:
  - ◆  $1/3$  of FAS or
  - ◆  $2\% \times \text{FAS} \times \text{Credited Service, if eligible for service retirement, not in excess of 22 years of such service, minus}$
  - ◆ 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(ies) 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(ies) (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 18 (or 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:
    - ◆  $2.1\% \times \text{FAS} \times \text{years of Credited Service at the completion of 20 years of Credited Service}$ ; 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: 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
  - ◆  $2\% \times \text{FAS} \times \text{years of Credited Service, but not in excess of 22 years of such service}$
- ◆ 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(ies) 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(ies) (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 18 (or 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 ten 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 ten-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 ten years following the effective retirement date, all retirement allowance payments will cease.

The retiree may change the beneficiary/beneficiaries any time within the ten-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.



## 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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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, 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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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, 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

### 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:*  $1.67\% \times \text{each year of Credited Service} \times \text{Final Average Salary (FAS)}$
  - ♦ *Between 20 and 30 years of Credited Service:*  $2\% \times \text{each year of Credited Service} \times \text{FAS}$
  - ♦ *More than 30 years of Credited Service:*  $2\% \times \text{each year for first 30 years of Credited Service} \times \text{FAS}$ , plus  $1.5\% \times \text{each year of Credited Service in excess of 30 years} \times \text{FAS}$

### 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 ten 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  $1.67\% \times \text{each year of Credited Service} \times \text{FAS}$
- ♦ 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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

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

### 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:*  $2\% \times \text{each year of Credited Service} \times \text{FAS}$
  - ♦ *More than 30 years of Credited Service:*  $2\% \times \text{each year for first 30 years of Credited Service} \times \text{FAS}$ , plus  $1.5\% \times \text{each year of Credited Service in excess of 30 years} \times \text{FAS}$

### 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 ten 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  $1.67\% \times \text{each year of Credited Service} \times \text{FAS}$ ; 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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, 112% 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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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)

### 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 ten 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(ies) (member's designation)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 18 (or 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

## DISPATCHER 25 - YEAR RETIREMENT PLAN (DIS-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 year of Allowable Service in excess of 25
  - ◆ Benefit limited to 30 years

### VESTED RETIREMENT

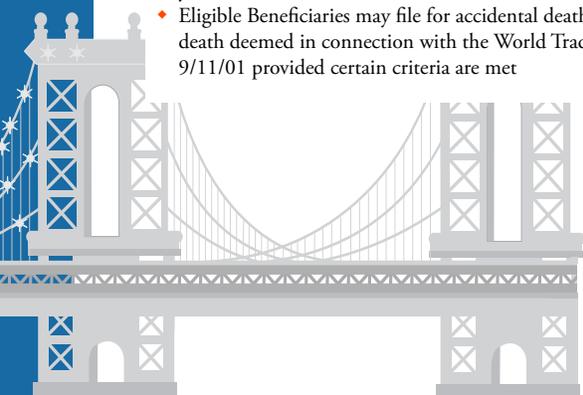
- ◆ Must have at least five years but less than 25 years of Allowable Service
- ◆ Payable on the date the member would have completed 25 years of Allowable Service
- ◆ 2% of FAS for each year of Allowable Service

### DISABILITY RETIREMENT

- ◆ Eligibility: Must have ten 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(ies) (member's designation)
- ◆ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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)

### 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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 18 (or 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

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

### 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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 (9 1 1) 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 ten 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 ten-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.

## BASIC 63/10 RETIREMENT PLAN

### SERVICE RETIREMENT

- ♦ Participants may retire at age 63 with 10 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 10 years of Credited Service, two of which must be Membership Service
- ♦ Payability Date: age 63
- ♦ Benefit calculation same as Service Retirement calculation for the 63/10 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 10 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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
  - ♦  $1.5\% \times \text{FAS} \times \text{the number of years of Credited Service in excess of 20, up to a maximum of 30 years.}$
- ♦ Not eligible for service retirement with a deficit in Additional Member Contributions (AMCs).

### VESTED RETIREMENT

- ♦ Must have at least 10 but less than 20 years of Credited Service
- ♦ Payability Date: age 63
- ♦  $2.5\% \times \text{FAS} \times \text{the number of years of Credited Service}$
- ♦ 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  $1.67\% \times \text{FAS} \times \text{years of service}$
- ♦ 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 18 or child under 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 10 but less than 25 years of Allowable Service
- ♦ Payability Date: age 63
- ♦  $2\% \times \text{FAS} \times \text{the number of years of Allowable Service}$

### 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  $1.67\% \times \text{FAS} \times \text{years of service}$
- ♦ 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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)

### 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 10 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 18 or child under 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.

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

### 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 10 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 10 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 10 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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 10 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

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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 FAS x 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(ies) (member's designation)
- ♦ An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Eligible Beneficiary(ies) (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

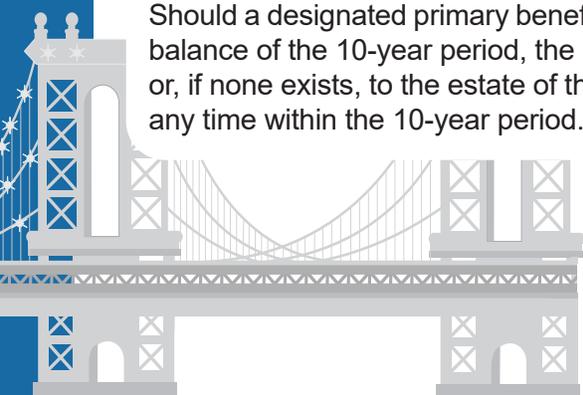
The retiree receives a reduced monthly lifetime allowance. When the retiree dies, the surviving beneficiary receives a lifetime benefit of 25%, 50% or 75% of the retiree's reduced monthly benefit, depending on the retiree's choice. Only one beneficiary may be named, and the beneficiary may not be changed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





**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

We have audited the accompanying 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 the Transit Police Superior Officers' Variable Supplements Fund (collectively, the "System"), which comprise the combining statements of fiduciary net position as of June 30, 2021 and 2020 and the related combining statements of changes in fiduciary net position for the years then ended, and the related notes to combining financial statements.

### Management's responsibility for the combining financial statements

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

### Auditor's responsibility

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

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

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

**Opinion**

In our opinion, the combining financial statements referred to above present fairly, in all material respects, the combining fiduciary net position of the System as of June 30, 2021 and 2020, 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.

**Other matters***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, Schedule 2 - Schedules of Employer Contributions, and Schedule 3 - Schedule of Investment Returns, as listed in the table of contents, be presented to supplement the basic combining financial statements. Such information, 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 the financial reporting for placing the basic combining financial statements in an appropriate operational, economic, or historical context. This required supplementary information is the responsibility of management. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America. 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.

*Other information*

Our audit was conducted for the purpose of forming an opinion on the basic combining financial statements. The Introductory Section, Additional Supplementary Information, Investment Section, Actuarial Section, and Statistical Section, as listed in the foregoing table of contents, are presented for the purpose of additional analysis and are not a required part of the basic combining financial statements.

The Additional Supplementary Information (Schedule of Investment Expenses, Schedule of Administrative Expenses and Schedule of Payments to Consultants) for the year ended June 30, 2021, 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. Such information has been subjected to the auditing procedures, applied in the audit of the basic combining financial statements and certain additional procedures, applied in the audit of the basic combining financial statements or to the basic combining financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. 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.



The Introductory Section, Investment Section, Actuarial Section and Statistical Section have not been subjected to the auditing procedures applied in the audit of the basic combining financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

*Grant Thornton LLP*

New York, New York  
October 28, 2021  
(except for the Additional Supplementary Information,  
as to which the date is December 17, 2021)

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

**June 30, 2021 and 2020**

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, 2021 and 2020. It is designed to assist the reader in understanding NYCERS' combining financial statements by providing a review of financial activities during Fiscal Years 2021 and 2020, 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 ("TPOVSF") (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** - presents the financial position of the Funds at fiscal year end. It provides information about the nature and amounts of resources with present service capacity that the Funds presently control (assets), consumption of net assets by the Funds that is applicable to a future reporting period (deferred outflow of resources), present obligations to 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** - presents the results of activities during the fiscal year. All changes affecting the assets/deferred outflow and liabilities/deferred inflow of the Funds are reflected on an accrual basis when the activity occurred, regardless of the timing of the related cash flows. In that regard, changes in the fair value 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, 2021 and 2020

## FINANCIAL HIGHLIGHTS

The Funds' combined net position restricted for benefits increased by \$16.8 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.

The Funds' combined net position restricted for benefits increased by \$1.3 billion (1.9%) from \$68.9 billion at June 30, 2019 to \$70.2 billion at June 30, 2020. The increase in combined net position was mainly due to favorable performance in the investment portfolio, primarily in domestic equities and structured fixed income securities.

Cash and cash equivalents balances totaled \$129 million at June 30, 2021. 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 are 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 \$3.4 billion as of June 30, 2021, an increase of \$1.6 billion (94.4%) from \$1.7 billion as of June 30, 2020, which was an increase of \$0.5 billion (46.5%) from \$1.2 billion as of June 30, 2019. 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 these timing differences.

## Fiduciary Net Position

June 30, 2021, 2020, and 2019

(In thousands)

	2021	2020	2019
Cash and cash equivalents	\$ 128,748	\$ 85,110	\$ 73,004
Receivables for investment securities sold	3,353,658	1,725,083	1,177,445
Receivables for member loans	1,079,822	1,120,769	1,150,018
Receivables for accrued earnings	393,868	359,866	339,309
Investments, at fair value	88,091,585	70,449,702	68,452,483
Securities lending collateral	10,208,522	6,007,306	6,406,505
Other assets	125,193	137,428	128,259
Total assets	<u>103,381,396</u>	<u>79,885,264</u>	<u>77,727,023</u>
Accounts payable	142,625	126,822	464,116
Payable for investment securities purchased	5,494,894	3,091,164	1,406,303
Accrued benefits payable	451,975	413,284	509,130
Due to other retirement systems	1,785	1,052	617
Payables for securities lending transactions	10,208,522	6,007,306	6,406,505
Total liabilities	<u>16,299,801</u>	<u>9,639,628</u>	<u>8,786,671</u>
Net position restricted for pensions	<u>\$ 87,081,595</u>	<u>\$ 70,245,636</u>	<u>\$ 68,940,352</u>

**New York City Employees' Retirement System****MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED****June 30, 2021 and 2020**

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.

The receivables for member loans decreased by \$29 million (-2.5%), from \$1.15 billion at June 30, 2019 to \$1.12 billion at June 30, 2020. The main reason for the decrease was that the amount of loans issued was lower than that of Fiscal Year 2019.

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.

Fair value of investments, including securities lending collateral at June 30, 2020 was \$76.5 billion, an increase of \$1.6 billion (2.1%) from the June 30, 2019 investment value of \$74.9 billion. The increase in fair value of investments was driven by strong investment returns in domestic equities and structured fixed income.

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 a reduction in the employer contribution receivables in Fiscal Year 2021.

Other assets increased by \$9 million (7.1%), from \$128 million at June 30, 2019 to \$137 million at June 30, 2020. The increase in the receivable resulted from unpaid employer pension contributions by New York OTB for Fiscal Year 2020.

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.

Payables for investment securities purchased totaled \$3.1 billion as of June 30, 2020, an increase of \$1.7 billion (119.8%) from \$1.4 billion as of June 30, 2019. The increase was due to a new strategic asset allocation that was approved to shift assets toward traditional-fixed income products, such as government bonds, mortgages and corporate securities as well as timing differences.

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.

Accrued benefits payable decreased by \$96 million (-18.8%), from \$509 million at June 30, 2019 to \$413 million at June 30, 2020. The decrease in payables was primarily due to the resolution of collective bargaining cases, resulting in the receipt of increased benefits by pensioners.

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

**June 30, 2021 and 2020**

**Changes in Fiduciary Net Position**  
**Years Ended June 30, 2021, 2020, and 2019**  
(In thousands)

	2021	2020	2019
<b>Additions:</b>			
Member contributions	\$ 579,560	\$ 563,893	\$ 547,807
Employer contributions	3,761,532	3,727,558	3,692,711
<b>Investment earnings:</b>			
Interest and dividend income	1,814,598	1,866,537	1,909,986
Net appreciation in fair value of investments	16,741,619	766,682	2,728,030
Net securities lending income	20,644	22,164	40,758
Investment expenses	(313,226)	(245,667)	(240,544)
Net investment income	18,263,635	2,409,716	4,438,230
Other income	3,365	3,317	3,258
Total additions	22,608,092	6,704,484	8,682,006
<b>Deductions:</b>			
Benefit payments and withdrawals	5,679,049	5,312,446	5,258,806
Payments to other retirement systems	5,671	9,087	9,769
Administrative expenses	87,413	77,667	82,073
Total deductions	5,772,133	5,399,200	5,350,648
Net increase in net position	16,835,959	1,305,284	3,331,358
<b>Net position restricted for pensions:</b>			
Beginning of year	70,245,636	68,940,352	65,608,994
End of year	\$ 87,081,595	\$ 70,245,636	\$ 68,940,352

Employer contributions for Fiscal Year 2021 were \$3.8 billion, a slight increase of \$35.4 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.

Employer contributions remained relatively level at \$3.7 billion in Fiscal Year 2020, increasing by \$35 million (0.9%). The increase is primarily due to an increase in the amortization payment for the initial unfunded liability.

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.

Net investment income for the Fiscal Year 2020 totaled \$2.4 billion, compared to net investment income of \$4.4 billion in Fiscal Year 2019. The decrease was the result of weaker relative performance in the investment portfolio. The preponderance of net investment income was attributable to interest and dividends.

**New York City Employees' Retirement System****MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED****June 30, 2021 and 2020**

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.

Investment expenses for Fiscal Year 2020 were \$246 million, increasing by \$5 million (2.1%). The increase in fees was primarily due to an increase in fair value of investments.

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.

Benefit payments and withdrawals for Fiscal Year 2020 remained relatively level at \$5.3 billion, increasing by \$54 million (1.0%). The increase is due to the increasing number of retirees and their corresponding higher average retirement allowances.

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.

Administrative expenses for Fiscal Year 2020 were \$78 million, a decrease of \$4 million (-5.4%) from \$82 million in Fiscal Year 2019. The decrease in administrative expenses was driven by a reduction in costs associated with software licenses and consultant contractual services, predominantly incurred in Fiscal Year 2019, associated with the technology modernization efforts.

## New York City Employees' Retirement System

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

June 30, 2021 and 2020

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

**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%.

## New York City Employees' Retirement System

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

June 30, 2021 and 2020

## Investment Summary

June 30, 2020

(In thousands)

Investments - at fair value:	QPP	COVSF	Combined
Short-term investments:			
Commercial paper	\$ 254,826	\$ -	\$ 254,826
Short-term investment fund	678,945	391,147	1,070,092
U.S. treasury bills and agencies	1,638,571	-	1,638,571
Debt (fixed income) securities:			
Bank loans	408,691	-	408,691
Corporate and other	7,559,129	-	7,559,129
Mortgage debt securities	3,966,276	-	3,966,276
Treasury inflation-protected securities	2,714,217	-	2,714,217
U.S. government and agency	6,474,964	-	6,474,964
Equity securities:			
Domestic equity	21,794,066	-	21,794,066
International equity	11,847,317	-	11,847,317
Collective trust funds:			
Bank loans	624,967	-	624,967
Corporate and other	14,051	-	14,051
Domestic equity	1,253	-	1,253
Mortgage debt securities	464,167	-	464,167
Opportunistic-fixed income	219,577	-	219,577
Alternative investments:			
Infrastructure	785,629	-	785,629
Opportunistic-fixed income	2,145,127	-	2,145,127
Private equity	4,660,981	-	4,660,981
Private real estate	3,802,066	-	3,802,066
Hedge fund	3,735	-	3,735
Collateral from securities lending	6,007,306	-	6,007,306
Total	\$ 76,065,861	\$ 391,147	\$ 76,457,008

## INVESTMENT PERFORMANCE

Total portfolio performance (net of fees) for Fiscal Year 2020 was 3.58%, less than NYCERS' Policy benchmark, which had a rate of return of 3.70%. Domestic equities returned 4.25%, less than the Russell 3000 benchmark of 6.53%. International equity (non-U.S. equities) holdings returned 0.49%, more than the World EX USA Custom benchmark of -5.11%. International equity (emerging markets) holdings returned -11.51%, less than the NYCERS Custom EM Index benchmark of -11.27%. Fixed income securities returned 7.61%.

**New York City Employees' Retirement System**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) - CONTINUED**  
**June 30, 2021 and 2020**

**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 Mario DiSanto, Acting Director, 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, 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
<b>OTHER ASSETS</b>	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 FIDUCIARY NET POSITION**

**June 30, 2020**  
**(In thousands)**

	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	Eliminations	Total
<b>ASSETS</b>								
Cash and cash equivalents	\$ 80,415	\$ 4,459	\$ 37	\$ 63	\$ 84	\$ 52	\$ -	\$ 85,110
Receivables:								
Investments securities sold	1,725,083	-	-	-	-	-	-	1,725,083
Member loans (Note 7)	1,120,769	-	-	-	-	-	-	1,120,769
Accrued interest and dividends	359,762	104	-	-	-	-	-	359,866
Receivables from QPP to:								
VSFs (HPO, HPSO, TPO, TPSO)	-	-	858	1,186	1,661	1,346	(5,051)	-
COVSF	-	8,000	-	-	-	-	(8,000)	-
Total receivables	3,205,614	8,104	858	1,186	1,661	1,346	(13,051)	3,205,718
Investments - at fair value (Notes 2 and 3):								
Short-term investments:								
Commercial paper	254,826	-	-	-	-	-	-	254,826
Short-term investment fund	678,945	391,147	-	-	-	-	-	1,070,092
U.S. treasury bills and agencies	1,638,571	-	-	-	-	-	-	1,638,571
Debt (fixed income) securities:								
Bank loans	408,691	-	-	-	-	-	-	408,691
Corporate and other	7,559,129	-	-	-	-	-	-	7,559,129
Mortgage debt securities	3,966,276	-	-	-	-	-	-	3,966,276
Treasury inflation-protected securities	2,714,217	-	-	-	-	-	-	2,714,217
U.S. government and agency	6,474,964	-	-	-	-	-	-	6,474,964
Equity securities:								
Domestic equity	21,794,066	-	-	-	-	-	-	21,794,066
International equity	11,847,317	-	-	-	-	-	-	11,847,317
Collective trust funds:								
Bank loans	624,967	-	-	-	-	-	-	624,967
Corporate and other	14,051	-	-	-	-	-	-	14,051
Domestic equity	1,253	-	-	-	-	-	-	1,253
Mortgage debt securities	464,167	-	-	-	-	-	-	464,167
Opportunistic-fixed income	219,577	-	-	-	-	-	-	219,577
Alternative investments:								
Infrastructure	785,629	-	-	-	-	-	-	785,629
Opportunistic-fixed income	2,145,127	-	-	-	-	-	-	2,145,127
Private equity	4,660,981	-	-	-	-	-	-	4,660,981
Private real estate	3,802,066	-	-	-	-	-	-	3,802,066
Hedge fund	3,735	-	-	-	-	-	-	3,735
Collateral from securities lending	6,007,306	-	-	-	-	-	-	6,007,306
Total investments	76,065,861	391,147	-	-	-	-	-	76,457,008
<b>OTHER ASSETS</b>	137,428	-	-	-	-	-	-	137,428
Total assets	79,489,318	403,710	895	1,249	1,745	1,398	(13,051)	79,885,264
<b>LIABILITIES</b>								
Accounts payable	126,800	-	-	-	22	-	-	126,822
Payable for investment securities purchased	3,091,164	-	-	-	-	-	-	3,091,164
Accrued benefits payable	357,557	50,462	895	1,249	1,723	1,398	-	413,284
Payable from QPP to:								
VSFs (HPO, HPSO, TPO, TPSO)	5,051	-	-	-	-	-	(5,051)	-
COVSF	8,000	-	-	-	-	-	(8,000)	-
Due to other retirement systems	1,052	-	-	-	-	-	-	1,052
Securities lending (Note 2)	6,007,306	-	-	-	-	-	-	6,007,306
Total liabilities	9,596,930	50,462	895	1,249	1,745	1,398	(13,051)	9,639,628
Net position restricted for benefits:								
Benefits to be provided by QPP	69,892,388	-	-	-	-	-	-	69,892,388
Benefits to be provided by VSF	-	353,248	-	-	-	-	-	353,248
Total net position restricted for benefits	\$ 69,892,388	\$ 353,248	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,245,636

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	4,341,092	-	-	-	-	-	-	4,341,092
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	18,555,783	434	-	-	-	-	-	18,556,217
Less:								
Investment expenses	313,226	-	-	-	-	-	-	313,226
Net income	18,242,557	434	-	-	-	-	-	18,242,991
Securities lending transactions:								
Gross securities lending income	22,793	-	-	-	-	-	-	22,793
Less - securities lending fees	2,149	-	-	-	-	-	-	2,149
Net securities lending income	20,644	-	-	-	-	-	-	20,644
Net investment income	18,263,201	434	-	-	-	-	-	18,263,635
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	22,607,658	924,996	1,572	2,363	3,208	2,674	(934,379)	22,608,092
<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	6,593,838	102,857	1,572	2,363	3,208	2,674	(934,379)	5,772,133
Net increase in net position	16,013,820	822,139	-	-	-	-	-	16,835,959
Net position restricted for benefits								
Beginning of year	69,892,388	353,248	-	-	-	-	-	70,245,636
End of year	\$ 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, 2020  
(in thousands)

	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	ELIM	Total
<b>Additions</b>								
Contributions:								
Member contributions	\$ 563,893	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 563,893
Employer contributions	3,727,558	-	-	-	-	-	-	3,727,558
Total contributions	<u>4,291,451</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>4,291,451</u>
Investment income (Note 2):								
Interest income	904,771	5,400	-	-	-	-	-	910,171
Dividend income	956,366	-	-	-	-	-	-	956,366
Net appreciation in fair value of investments	766,682	-	-	-	-	-	-	766,682
Total investment income	<u>2,627,819</u>	<u>5,400</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2,633,219</u>
Less:								
Investment expenses	245,667	-	-	-	-	-	-	245,667
Net income	<u>2,382,152</u>	<u>5,400</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2,387,552</u>
Securities lending transactions:								
Gross securities lending income	24,500	-	-	-	-	-	-	24,500
Less - securities lending fees	2,336	-	-	-	-	-	-	2,336
Net securities lending income	<u>22,164</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>22,164</u>
Net investment income	<u>2,404,316</u>	<u>5,400</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2,409,716</u>
Other - other income	3,317	-	-	-	-	-	-	3,317
Transfer from QPP to:								
VSFs (HPO, HPSO, TPO, TPSO)	-	-	1,662	2,428	3,290	2,731	(10,111)	-
COVSF	-	31,704	-	-	-	-	(31,704)	-
Total additions	<u>6,699,084</u>	<u>37,104</u>	<u>1,662</u>	<u>2,428</u>	<u>3,290</u>	<u>2,731</u>	<u>(41,815)</u>	<u>6,704,484</u>
<b>Deductions</b>								
Benefit payments and withdrawals (Note 1)	5,202,251	100,084	1,662	2,428	3,290	2,731	-	5,312,446
Payments to other retirement systems	9,087	-	-	-	-	-	-	9,087
Transfer from QPP to:								
VSFs (HPO, HPSO, TPO, TPSO)	10,111	-	-	-	-	-	(10,111)	-
COVSF	31,704	-	-	-	-	-	(31,704)	-
Administrative expenses	77,667	-	-	-	-	-	-	77,667
Total deductions	<u>5,330,820</u>	<u>100,084</u>	<u>1,662</u>	<u>2,428</u>	<u>3,290</u>	<u>2,731</u>	<u>(41,815)</u>	<u>5,399,200</u>
Net increase in net position	<u>1,368,264</u>	<u>(62,980)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,305,284</u>
Net position restricted for benefits								
Beginning of year	68,524,124	416,228	-	-	-	-	-	68,940,352
End of year	<u>\$ 69,892,388</u>	<u>\$ 353,248</u>	<u>\$ -</u>	<u>\$ 70,245,636</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, 2021 and 2020**

**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 and City laws). 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, four public benefit corporations, The City University of New York ("CUNY"), and the State. Substantially all employees of The City not covered by one of the other four pension systems are covered by the QPP. Permanent 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 and City laws, which are the basis by which benefit terms and Employer and member contribution requirements are established and amended. The QPP combines features of a defined benefit pension plan with those of a defined contribution pension plan but is considered a defined benefit pension plan for financial reporting purposes.

The 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 20 or more years of service, 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.

## New York City Employees' Retirement System

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2021 and 2020

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 Legislature has reserved to itself and the State, the right and power 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. The System has decided to early implement this pronouncement and has applied the change as of the issuance of this report.

#### **Boards of Trustees**

The QPP's Board of Trustees consists of 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 each have one vote (unless noted otherwise) and consists of the Mayor's representative, the Comptroller, and the Commissioner of Finance. Additional trustees include: for the COVSF, an officer of the New York City Correction Officers' Benevolent Association (1½ vote) and a representative of the Correction Captains employee organization (½ vote). For the HPOVSF, two members of the association, as designated by the HPOVSF Board, are entitled to cast one vote each. For the HPSOVSF, two representatives of the Housing Police Superior Officers recognized employee organization, each of whom are entitled to cast one vote. For the TPOVSF, two members of the association, as designated by the TPOVSF Board, are entitled to cast one vote each. For TPSOVSF, two representatives of the Transit Police Superior Officers recognized employee organization, each of whom are entitled to cast one vote.

At June 30, 2021 (preliminary), June 30, 2020 (preliminary), and June 30, 2019, the QPP's membership consisted of:

	2021	2020	2019
Retirees and beneficiaries receiving benefits	167,934	159,906	157,153
Terminated vested members not yet receiving benefits	25,026	23,034	21,788
Terminated non-vested members/inactives <sup>1</sup>	36,749	32,027	31,273
Active members receiving salary	187,338	191,237	191,501
Total	417,047	406,204	401,715

<sup>1</sup> As of June 30, 2020, 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. Prior to June 30, 2020, represents inactive members who were no longer on payroll but not otherwise classified.

Note that 2019 data is final and supports the most recent actuarial valuation. 2020 and 2021 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, 2021 and 2020

At June 30, 2020 and 2019, the dates of the VSF's most recent actuarial valuations, membership consisted of:

	COVSF		HPOVSF		HPSOVSF		TPOVSF		TPSOVSF	
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Retirees currently receiving payments	8,312	8,257	138	141	201	209	267	282	227	229
Active members	8,988	10,022	-	-	-	-	-	-	-	-
Total	<u>17,300</u>	<u>18,279</u>	<u>138</u>	<u>141</u>	<u>201</u>	<u>209</u>	<u>267</u>	<u>282</u>	<u>227</u>	<u>229</u>

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 and City laws) 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%. 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.

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

**June 30, 2021 and 2020**

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, 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. Certain members also make additional member 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 elect 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 a system on and after April 1, 2012, including NYCERS. In general, these changes, commonly referred to as Tier 6, increase the age requirement to 63 for most non-uniformed employees to retire and receive a full pension, require member contributions for all years of service for non-uniformed employees, institute progressive member contributions for non-uniformed employees, lengthen the FAS period from three to five years, cap FAS for non-uniformed employees to an amount equal to the Governor's salary, extend and harmonize the Tier 3 benefits for POLICE and FIRE to other uniformed forces and to District Attorney ("DA") Investigators, and offer an optional defined-contribution plan to certain non-represented employees. Note that the 22-year retirement plans for Correction, Sanitation, and DA Investigator members established under Chapter 18/12 are not considered Tier 6 plans.

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 is increased by any Excess of Contributions or reduced by any Deficiency of Contributions, has not been determined for the years ended June 30, 2021 and 2020, 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, 2021 and 2020

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 Year 2000 through Calendar Year 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, 2021 and 2020**

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, 2021 and 2020*****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, 2021 and 2020**

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, 2021 and 2020

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, 2021 and 2020

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, 2021 and 2020

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 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 Funds' 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 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.

**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, 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, 2021 and 2020, 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, 2021 and 2020**

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, 2021 and 2020 was \$10.1 billion and \$5.9 billion, respectively. Cash collateral received related to securities lending as of June 30, 2021 and 2020 was \$10.2 billion and \$6.0 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.

**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 objectives, develops 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.

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2021 and 2020

The asset allocation targeted for the Funds in Fiscal Years 2021 and 2020 included the securities in the following categories:

	<u>2021</u>	<u>2020</u>
Domestic equities	27.0%	27.0%
International equity fund	17.0	17.0
Debt/fixed income	36.5	36.5
Alternative investments	<u>19.5</u>	<u>19.5</u>
Total	<u>100.0%</u>	<u>100.0%</u>

**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, 2021 and 2020

**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, 2021 and 2020, are as follows:

Investment Type June 30, 2021 (In percent)	Moody's Quality Ratings													Caa & Below Caa1	No 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%	3.58%	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%	0.00%	0.01%	0.07%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.21%	26.60%	
Discount notes and T-bills	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	3.76%	3.76%
Pooled fund	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	3.88%	3.88%
Commercial paper	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	3.10%	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%	

Investment Type June 30, 2020 (In percent)	Moody's Quality Ratings													Caa & Below Caa1	No Rated	Total				
	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3				B1	B2	B3	
Corporate bonds	40.24%	0.25%	0.27%	0.32%	0.61%	1.91%	2.26%	2.70%	3.61%	3.12%	1.59%	2.05%	2.86%	2.50%	2.58%	1.81%	1.89%	7.81%	78.39%	
U.S. government	10.92%	-%	-%	-%	-%	-%	-%	-%	0.01%	-%	-%	-%	-%	-%	-%	-%	-%	-%	0.07%	11.00%
Discount notes and T-bills	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	6.64%	6.64%
Pooled fund	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	2.93%	2.93%
Commercial paper	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	-%	1.03%	1.03%
Percent of rated portfolio	51.16%	0.25%	0.27%	0.32%	0.61%	1.91%	2.26%	2.70%	3.62%	3.12%	1.60%	2.05%	2.86%	2.50%	2.58%	1.81%	1.89%	18.48%	100.00%	

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2021 and 2020

The quality ratings of the COVSF investments, by percentage of the rated portfolio, as described by nationally recognized statistical rating organizations, at June 30, 2021 and 2020, are as follows:

COVSF June 30, 2021	Moody's Quality Ratings								Total
	Aaa	Aa1	Ba3	B1	B2	B3	Caa & Below Caa 1	Not Related	
Investment Type (In percent)									
Pooled funds	-%	-%	-%	-%	-%	-%	-%	100.00%	100.00%
Percent of rated portfolio	-%	-%	-%	-%	-%	-%	-%	100.00%	100.00%
COVSF June 30, 2020	Moody's Quality Ratings								Total
Investment Type (In percent)	Aaa	Aa1	Ba3	B1	B2	B3	Caa & Below Caa 1	Not Related	
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, 2021 and 2020

**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, 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%	27.94%
U.S. government	26.60	0.02	14.53	5.88	6.17
Discount notes and T-bills	3.76	3.76	-	-	-
Pooled fund	3.88	3.88	-	-	-
Commercial paper	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>34.11%</u>
Years to Maturity Investment Type June 30, 2020 (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	78.39%	0.99%	23.90%	19.84%	33.66%
U.S. government	11.00	0.07	10.93	-	-
Discount notes and T-bills	6.64	6.64	-	-	-
Pooled fund	2.93	2.93	-	-	-
Commercial paper	1.03	1.03	-	-	-
Percent of rated portfolio	<u>100.00%</u>	<u>11.67%</u>	<u>34.83%</u>	<u>19.84%</u>	<u>33.66%</u>

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2021 and 2020

The length of investment maturities (in years) of the COVSF investments, as shown, by the percent of the rated portfolio, at June 30, 2021 and 2020, are as follows:

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%	-%	-%	-%
Years to Maturity Investment Type June 30, 2020 (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, 2021 and 2020**

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, 2021 and 2020, are as follows (amounts in thousands of U.S. dollars):

Trade Currency	2021	2020
Euro Currency	\$ 5,072,081	\$ 3,747,236
Japanese Yen	1,896,299	1,806,453
Hong Kong Dollar	1,533,666	317,471
Pound Sterling	1,516,684	1,187,635
Swiss Franc	979,757	761,103
South Korean Won	915,570	883,378
New Taiwan Dollar	752,851	836,974
Indian Rupee	692,919	629,708
Canadian Dollar	548,016	367,165
Australian Dollar	478,009	321,880
Danish Krone	419,619	339,878
Swedish Krona	284,905	195,659
Brazilian Real	256,528	286,846
South African Rand	170,265	232,083
Singapore Dollar	167,275	110,233
Norwegian Krone	118,564	81,864
Chinese Yuan Renminbi	106,095	2
Yuan Renminbi	104,090	-
Polish Zloty	76,164	50,268
Indonesian Rupiah	71,803	99,690
Mexican Peso	71,379	107,720
Thailand Baht	67,368	116,391
Malaysian Ringgit	56,014	103,679
Hungarian Forint	38,372	23,108
New Israeli Shekel	26,560	24,174
Russian Ruble	26,205	-
Turkish Lira	22,265	59,092
UAE Dirham	21,377	32,251
Philippine Peso	19,089	38,014
Chilean Peso	17,988	31,205
New Zealand Dollar	13,169	12,828
Qatari Riyal	13,095	29,230
Czech Koruna	11,686	6,062
Kuwaiti Dinar	7,722	-
Colombian Peso	3,851	9,361
Romanian Leu	3,434	-
Egyptian Pound	623	-
Pakistan Rupee	413	-
Moroccan Dirham	1	4,535
Peruvian Nouveau Sol	-	564
Total	<u>\$ 16,581,771</u>	<u>\$ 12,853,740</u>

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

**June 30, 2021 and 2020**

**Securities Lending Transactions**

**Credit Risk** - The quality ratings of investments held as collateral for Securities Lending of the QPP at June 30, 2021 and 2020, are as follows:

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 10.00%

Money market 13.52%

Cash or cash equivalent 28.75%

Uninvested 0.42%

Total 6.75%

Percent of securities lending portfolio -%

Percent of securities lending portfolio -%

100.00%

Investment Type and  
Fair Value of Securities  
Lending Transactions  
June 30, 2020  
(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	\$ -	\$ 150,000	\$ 299,054	\$ 1,307,562	\$ 138,228	\$ -	\$ -	\$ -	\$ -	\$ 2,905,087	\$ 4,799,931
Money market	508,452	-	-	-	-	-	-	-	-	73,430	581,882
U.S. agency	-	-	-	-	-	-	-	-	-	23,034	23,034
Cash or cash equivalent	-	600,708	-	-	-	-	-	-	-	-	600,708
Uninvested	-	-	-	-	-	-	-	-	-	1,751	1,751
<b>Total</b>	<b>\$ 508,452</b>	<b>\$ 750,708</b>	<b>\$ 299,054</b>	<b>\$ 1,307,562</b>	<b>\$ 138,228</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,003,302</b>	<b>\$ 6,007,306</b>

Short term:

Reverse repurchase agreements 12.50%

Money market 4.98%

U.S. agency 21.77%

Cash or cash equivalent 2.30%

Uninvested -%

Total 8.46%

Percent of securities lending portfolio -%

Percent of securities lending portfolio -%

100.00%

**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**  
**June 30, 2021 and 2020**

**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, 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%	-%	-%	-%

Years to Maturity Investment Type June 30, 2020 (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	\$ 4,799,930	\$ 4,799,930	\$ -	\$ -	\$ -
Money market	581,882	581,882	-	-	-
U.S. agency	23,034	23,034	-	-	-
Cash or cash equivalents	600,709	600,709	-	-	-
Uninvested	1,751	1,751	-	-	-
<b>Total</b>	<b>\$ 6,007,306</b>	<b>\$ 6,007,306</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, 2021 and 2020, the annual money-weighted rate of return on investments, net of investment expense, for the Plan was as follows:

	2021	2020
QPP	26.65%	3.64%
COVSF	0.09%	1.56%

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, 2021 and 2020

The Funds categorizes 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, 2021 and June 30, 2020:

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

	2021			Total
	Level 1	Level 2	Level 3	
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
<b>Total investments</b>	<b>\$ 42,162,979</b>	<b>\$ 30,981,818</b>	<b>\$ 14,945,548</b>	<b>\$ 88,091,585</b>

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2021 and 2020

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

	2020			
	Level 1	Level 2	Level 3	Total
Short-term investments:				
Commercial paper	\$ -	\$ 254,826	\$ -	\$ 254,826
Short-term investment fund	-	1,070,092	-	1,070,092
U.S. Treasury bills and agencies	-	1,638,571	-	1,638,571
Debt (fixed income) securities:				
Bank loans	-	396,722	11,969	408,691
Corporate and other	-	7,442,077	117,052	7,559,129
Mortgage debt securities	-	3,965,822	454	3,966,276
Treasury inflation-protected securities	-	2,714,217	-	2,714,217
U.S. government and agency	-	6,474,964	-	6,474,964
Equity securities:				
Domestic equity	21,785,236	-	8,830	21,794,066
International equity	11,846,314	-	1,003	11,847,317
Collective trust funds:				
Bank loans	-	598,684	26,283	624,967
Corporate and other	-	14,051	-	14,051
Domestic equity	-	-	1,253	1,253
Mortgage debt securities	-	167,775	296,392	464,167
Opportunistic-fixed income	6,541	203,678	9,358	219,577
Alternative investments:				
Infrastructure	-	-	785,629	785,629
Opportunistic-fixed income	-	-	2,145,127	2,145,127
Private equity	9,476	-	4,651,505	4,660,981
Private real estate	-	-	3,802,066	3,802,066
Hedge fund investment measured at NAV	-	-	-	3,735
Total investments	<u>\$ 33,647,567</u>	<u>\$ 24,941,479</u>	<u>\$ 11,856,921</u>	<u>\$ 70,449,702</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 these securities are priced by the issuers or industry groups for these securities. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by the 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, 2021 and 2020

**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. 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. The assets in our alternative investment program are classified as Level 3 assets. A more detailed explanation of the Level 3 valuation methodologies follows:

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. For the immediate time period following a transaction, the determination of fair value for equity securities, in which no liquid trading market exists, can generally be approximated based on the transaction price (absent any significant developments).

Thereafter, or in the interim, if significant developments relating to such portfolio company or industry occur which may suggest a material change in value, the GP should value each investment by applying generally accepted valuation methods including: (1) the market approach (such as market transaction and comparable public company multiples, which are based on a measurement of the company's historical and projected financial performance with typical metrics including enterprise value/latest 12 months earnings before interest, taxes, depreciation, and amortization ("EBITDA") or projected fiscal year EBITDA); or (2) the income or discounted cash flow approach.

In the market approach, valuation multiples that are relevant to the industry and company in the investments held should be considered and relied upon. Valuation multiples should be assessed and may be adjusted on a go-forward basis based on the business risk associated with the subject company in which the investment is held. In addition, the implied entry multiples should be considered as benchmarks in valuing unlisted equity. In circumstances where no financial performance metrics are available, the GP should rely on other non-financial related metrics applicable to relevant progress from the original investment date to the valuation date. In the income or discounted cash flow approach, forecasted cash flows that may be generated by the subject company are discounted to present value at an appropriate discount rate. These methodologies can be utilized to determine an enterprise value (Enterprise Valuation Methodologies) from which net debt is subtracted to estimate equity value.

The determination of fair value using these methodologies should take into consideration a range of factors, including, but not limited to, the price at which the investment was acquired, the nature of the investment, local market conditions, trading values on public exchanges for comparable securities, current and projected operating performance, and financing transactions subsequent to the acquisition of the investment. 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. These financial instruments have been classified as Level 3 in the fair value hierarchy.

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.

**New York City Employees' Retirement System****NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED****June 30, 2021 and 2020****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 2021 and 2020, the QPP was required to transfer approximately \$2.5 million and \$2.4 million, respectively. With respect to the benefits payable from TPSOVSF for Fiscal Years 2021 and 2020, the QPP was required to transfer approximately \$2.8 million and \$2.6 million, respectively. With respect to the benefits payable from HPOVSF for Fiscal Years 2021 and 2020, the QPP was required to transfer approximately \$1.7 million and \$1.5 million, respectively. With respect to the benefits payable from TPOVSF for Fiscal Years 2021 and 2020, the QPP was required to transfer approximately \$3.3 million and \$3.1 million, respectively.

With respect to the COVSF, 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. For Fiscal Year 2020, 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 June 30, 2020.

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, 2021 and 2020

A comparison of the APB as calculated by the Actuary, with the net position restricted for pensions for the COVSF, HPOVSF, HPSOVSF, TPOVSF, and TPSOVSF as of June 30, 2020 and June 30, 2019, follows (in millions):

	COVSF		HPOVSF		HPSOVSF		TPOVSF		TPSOVSF		Total	
	2020 <sup>1</sup>	2019	2020 <sup>1</sup>	2019	2020 <sup>1</sup>	2019	2020 <sup>1</sup>	2019	2020 <sup>1</sup>	2019	2020 <sup>1</sup>	2019
Actuarial present value of accumulated plan benefits	\$1,056.3	\$1,066.4	\$11.3	\$12.2	\$17.0	\$18.5	\$22.7	\$25.0	\$19.0	\$20.1	\$1,126.3	\$1,142.2
Retirees currently receiving benefits	271.9	276.4	-	-	-	-	-	-	-	-	271.9	276.4
Active members	\$1,328.2	\$1,342.8	\$11.3	\$12.2	\$17.0	\$18.5	\$22.7	\$25.0	\$19.0	\$20.1	\$1,398.2	\$1,418.6
Total actuarial present value of accumulated plan benefits	353.2	416.2	-	-	-	-	-	-	-	-	353.2	416.2
Net position held in trust for benefits	\$975.0	\$926.6	\$11.3	\$12.2	\$17.0	\$18.5	\$22.7	\$25.0	\$19.0	\$20.1	\$1,045.0	\$1,002.4
Unfunded actuarial present value of accumulated plan benefits												

<sup>1</sup> Preliminary.

For purposes of the June 30, 2020 and June 30, 2019 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, 2021 and 2020

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, 2020 and June 30, 2019:

	June 30, 2020 <sup>1</sup>	June 30, 2019
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.	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.
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.	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.
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.

**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.

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2021 and 2020

**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 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.

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, 2021, based on an actuarial valuation as of June 30, 2019, was \$3.763 billion, and the Statutory Contribution for the year ended June 30, 2020, based on an actuarial valuation as of June 30, 2018, was \$3.727 billion. The Statutory Contributions for Fiscal Years 2021 and 2020 were 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, 2021 and 2020

**NOTE 6 - NET PENSION LIABILITY**

The components of the net pension liability of the Employer at June 30, 2021 and 2020, for the Funds, were as follows:

	(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%
<b>June 30, 2020</b>							
Total pension liability	\$ 89,884,946	\$ 1,419,858	\$ 12,129	\$ 18,552	\$ 25,048	\$ 20,043	\$ 91,380,576
Fiduciary net position <sup>1</sup>	69,897,439	403,710	37	63	84	52	70,301,385
Employers' net pension liability	\$ 19,987,507	\$ 1,016,148	\$ 12,092	\$ 18,489	\$ 24,964	\$ 19,991	\$ 21,079,191
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%

<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, 2021 and 2020

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

The total pension liability as of June 30, 2021 and 2020 were determined by actuarial valuations as of June 30, 2020 (Updated Preliminary) and June 30, 2019 (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.

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.

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."

The June 30, 2020 total pension liability was calculated from the Preliminary June 30, 2019 actuarial valuation, which was based on 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 Entry Age Normal ("EAN") cost method of funding is utilized by the Funds' Actuary to calculate the contribution required of the Employer.

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

**New York City Employees' Retirement System****NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED****June 30, 2021 and 2020**

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 2021 and Fiscal Year 2020 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 an ongoing 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 TPISOVSF, and the COVSF (referred to collectively as the "NYCERS VSFs"), which are recognized through the Liability Valuation Method.

Under this method, the PV of Future SKIM from the Plan to the NYCERS VSFs is included directly as an actuarial liability of the Plan. SKIM is all or a portion of the excess earnings on equity securities of the Plan which are transferrable to the NYCERS VSFs. The Present Value of Future SKIM is computed as the excess, if any, of the PV of benefits of each individual NYCERS VSF offset by the AVA of that individual NYCERS VSF, respectively. Under the EAN cost method, a portion of the PV of Future SKIM 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, 2021 and 2020

**Expected Rate of Return on Investments**

The long-term expected rate of return on the Plan's 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 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:

<u>Asset Class</u>	<u>Target Asset Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Public Markets:		
U.S. public market equities	27.0%	7.1%
Developed public market equities	12.0%	7.2%
Emerging public market equities	5.0%	9.0%
Debt (fixed income)	30.5%	1.8%
Private Markets (Alternative Investments):		
Private equity	8.0%	11.3%
Private real estate	7.5%	6.9%
Infrastructure	4.0%	6.0%
Opportunistic-fixed income	6.0%	7.1%
Total	<u>100.0%</u>	

**Discount Rate**

The discount rate used to measure the total pension liability as of both June 30, 2020 and 2019 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.

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.

(In thousands) Employer Net Pension Liability - June 30, 2021	1% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)
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	<u>\$ 16,828,636</u>	<u>\$ 6,413,630</u>	<u>\$ (2,422,829)</u>

**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**  
**June 30, 2021 and 2020**

**NOTE 7 - MEMBER LOANS**

In general, members are permitted to borrow up to 75% of their own contributions, including accumulated interest. The balance of member loans receivable at June 30, 2021 and 2020 was \$1.08 billion and \$1.12 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.

**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 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 2020, total non-investment expenses attributable to the QPP were approximately \$88 million, of which \$77.7 million was paid from the assets of the QPP and \$10.3 million was incurred on behalf of the QPP by other City agencies.

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. For Fiscal Year 2020, investment expenses, exclusive of fees related to securities lending transactions, were \$246.5 million, of which \$245.7 million was charged to the investment earnings of the QPP, and \$0.8 million was incurred by the Comptroller's Office.

During 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. During the Fiscal Year ended June 30, 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. The future minimum rental payments required under this operating lease are shown in the table on the next page.

Rent expenses under the lease agreement for each of the fiscal years ended June 30, 2021 and 2020 were approximately \$4.2 million and \$4.5 million, respectively.

During 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 agreement expired in 2016, and the Plan exercised the option to renew the agreement through November 2021. The Plan is currently in negotiations to continue at this location, with rent expenses after November 2021 pending final execution.

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2021 and 2020

Rent expenses under the lease agreement for the fiscal years ended June 30, 2021 and 2020 were approximately \$1.3 million each.

Fiscal Years Ending	Headquarters		Business Recovery Site	
	Minimum Rental Payments		Minimum Rental Payments	
		Fiscal Year Ending		
2022	\$	4,535,336	2022*	\$ 549,807
2023	\$	4,535,336		\$ -

\*Rent payment of \$549,807 is from July 2021 to November 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 and City laws 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 2020 and Fiscal Year 2019 Employer contributions do not take into account OTB's filing. The Fiscal Year 2020 and Fiscal Year 2019 Employer contributions, and the allocation to OTB, assumed that OTB was a going concern. Any amounts due but unpaid by OTB for Fiscal Year 2020 and Fiscal Year 2019 are treated as a receivable that is expected to be paid in full.

**New York City Employees' Retirement System**  
**NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED**  
**June 30, 2021 and 2020**

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

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

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

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 to March 31 to January 1 to 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

## New York City Employees' Retirement System

### NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2021 and 2020

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 the Enhanced Disability Benefits. Members electing or mandated into this benefit will pay an extra 0.8% of wages.

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, 2021 and 2020

#### 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

- Eligible 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 89 of the Laws of 2020 provides death benefits to statutory beneficiaries of members whose death was a result of or was contributed to by the coronavirus disease ("COVID-19"). This law provides an Accidental Death Benefit to the Eligible Beneficiaries of a Member who died on or before December 31, 2020, or a Retiree who retired between March 1, 2020 and June 30, 2020 and died prior to September 29, 2020, where the Member/Retiree reported for work outside their home and contracted COVID-19 within 45 days after their last day of work, and whose death was caused by COVID-19 or where COVID-19 contributed to the Member/Retiree's death. Amounts payable are reduced by payments of any Ordinary Death Benefits or option benefit paid to another statutory beneficiary.

**COVID-19** - The outbreak of the 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

## New York City Employees' Retirement System

## NOTES TO COMBINING FINANCIAL STATEMENTS - CONTINUED

June 30, 2021 and 2020

emergency in New York State on June 24, 2021, 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.

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.

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 2021 and 2020 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; and

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.

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, 2021  
(In thousands)

	QPP*	COVSF	HPOVSF	HPSOVSF	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.

## 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, 2020  
(In thousands)

	QPP*	COVSF	HPOVSF	HPSVSF	TPOVSF	TPSOVSF	TOTAL
Total pension liability:							
Service cost	\$ 2,017,384	\$ 20,315	\$ -	\$ -	\$ -	\$ -	\$ 2,037,699
Interest	5,984,643	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.

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, 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.

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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, 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.

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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, 2017  
(In thousands)

	QPP*	COVSF	HPOVSF	HPSVSF	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	(59,671)
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%

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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, 2016  
(In thousands)

	QPP*	COVSF	HPOVSF	HPSOVSF	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	\$ 24,286,822
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 RATIOS

June 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.

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 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.

See Report of Independent Certified Public Accountants.

**New York City Employees' Retirement System**  
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**QUALIFIED PENSION PLAN**  
**SCHEDULES OF EMPLOYER CONTRIBUTIONS**

Years ended June 30, 2012-2021  
(In thousands)

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
1. Actuarially determined contribution	\$ 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	\$ 3,017,004
2. Actual/funding contributions made	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	3,017,004
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	24.611%	24.789%	25.463%	26.313%	26.508%	27.279%	25.662%	25.561%	25.486%	25.540%
5. Receivable contributions	(1,366)	13,733	10,964	-	-	-	-	-	-	-
6. Accounting contributions (2. + 5.)	\$ 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	\$ 3,017,004
7. Contribution deficiency (excess) Accounting contributions basis (1. - 6.)	1,366	(857)	1,654	-	-	-	-	-	-	-
8. Covered payroll <sup>1</sup>	\$ 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	\$ 11,813,062
9. Contributions as a percentage of covered payroll <sup>1</sup> accounting contributions basis	24.602%	24.881%	25.539%	26.313%	26.508%	27.279%	25.662%	25.561%	25.486%	25.540%

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

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 EMPLOYER 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, 2019		June 30, 2018		June 30, 2017		June 30, 2016		June 30, 2015	
	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:										
2010 ERI	13 years (closed)	NA	14 years (closed)	NA	15 years (closed)	NA	16 years (closed)	NA	17 years (closed)	1 year (closed)
2011 actuarial gain/losses	7 years (closed)		8 years (closed)		9 years (closed)		10 years (closed)		11 years (closed)	11 years (closed)
2012 actuarial gain/losses	8 years (closed)		9 years (closed)		10 years (closed)		11 years (closed)		12 years (closed)	12 years (closed)
2013 actuarial gain/losses	9 years (closed)		10 years (closed)		11 years (closed)		12 years (closed)		13 years (closed)	13 years (closed)
2014 actuarial gain/losses	10 years (closed)		11 years (closed)		12 years (closed)		13 years (closed)		14 years (closed)	14 years (closed)
2015 actuarial gain/losses	11 years (closed)		12 years (closed)		13 years (closed)		14 years (closed)		15 years (closed)	NA
2016 actuarial gain/losses	12 years (closed)		13 years (closed)		14 years (closed)		15 years (closed)		NA	NA
2017 actuarial gain/losses	13 years (closed)		14 years (closed)		15 years (closed)		NA		NA	NA
2017 method change	18 years (closed)		19 years (closed)		20 years (closed)		NA		NA	NA
2017 assumption change	3 years (closed)		4 years (closed)		5 years (closed)		NA		NA	NA
2017 census data update	13 years (closed)		14 years (closed)		15 years (closed)		NA		NA	NA
2017 OTB payments	14 years (closed)		15 years (closed)							
2018 actuarial gains/losses	15 years (closed)									
2019 actuarial gains/losses	20 years (closed)									
2019 method change	20 years (closed)									
2019 assumption change										
Actuarial asset valuation method <sup>1</sup>	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.	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.

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 EMPLOYER CONTRIBUTIONS

Valuation Dates	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015
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 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	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 terminated vesteds	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	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.

New York City Employees' Retirement System

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

Valuation Dates	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.			
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 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
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.
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.

<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.

**New York City Employees' Retirement System**  
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**QUALIFIED PENSION PLAN**  
**SCHEDULE OF INVESTMENT RETURNS**

**June 30, 2021, 2020, 2019, 2018, 2017, 2016, 2015 and 2014**

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

<u>Fiscal Years Ended</u>	<u>QPP</u>	<u>COVSF</u>
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.



**Additional Supplementary Information**  
**SCHEDULE OF INVESTMENT EXPENSES**  
**Year Ended June 30, 2021**

**Investment Expenses Paid from the Investment Earnings of the Plan**

Fees Paid to Investment Managers for FY 2021 Services <sup>1</sup>	\$ 233,274,751
Fees Paid to Investment Consultants <sup>1</sup>	2,719,344
Investment-related Legal Fees <sup>1</sup>	657,091
	<hr/>
<b>Fees Paid to Investment Managers and Consultants</b>	<b>236,651,186</b>
Private Equity Organizational Costs	19,164,904
Real Estate Partnership & Infrastructure Organizational Costs	10,681,552
Alternative Opportunity & Global Fixed Organizational Costs	1,757,891
Foreign Taxes Withheld	37,899,297
Reimbursement to NYC Comptroller's Office for Investment Expenses Paid	4,260,376
Miscellaneous Investment Expenses	2,810,534
	<hr/>
<b>Total Investment Expenses Paid Directly by the Plan</b>	<b>313,225,740</b>
Fees Related to Securities Lending Transactions	2,148,481
	<hr/>
<b>Total Investment Expenses and Fees Paid Directly by the Plan</b>	<b>315,374,221</b>
Total Paid by the NYC Comptroller's Office	1,307,048
	<hr/>
<b>Total Investment Expenses and Fees</b>	<b>316,681,269</b>

Note:

1) For details, see Schedule of Fees Paid to Investment Managers and Consultants beginning on Page 155.

**Additional Supplementary Information**  
**SCHEDULE OF ADMINISTRATIVE EXPENSES**  
 Year Ended June 30, 2021

<b>Personal Services</b>	Employee Compensation	<b>\$ 48,693,043</b>
	Consultants <sup>1</sup>	12,617,740
<b>Professional Services</b>	Medical Board and Medical Consultants	1,364,872
	Steno for Medical and Trustees Boards	76,363
		<b>14,058,975</b>
	Telephone	855,402
<b>Communication</b>	Postage	320,930
	Printing	114,214
		<b>1,290,546</b>
<b>Rentals</b>	Office and Storage Space	<b>6,617,040</b>
	Software, Licenses, and Support	11,382,533
	Office Supplies and Services	1,739,941
<b>Other</b>	Office and Data Processing Equipment	1,621,034
	Facilities Services	1,378,006
	Equipment Maintenance	631,820
		<b>16,753,334</b>
<b>NYCERS' Direct Expenses</b>		<b>87,412,938</b>
	Financial Information Services	5,206,122
	Office of the Actuary	2,057,032
<b>Incurred by Other City Agencies</b>	Office of the Comptroller	829,279
	Law Department	1,541,139
	Office of Management and Budget	174,456
	Office of Payroll Administration	744,965
		<b>10,552,993</b>
<b>Total Administrative Expenses</b>		<b>97,965,931</b>

Note:

1) For details, see Schedule of Payments to Consultants on next page.

Additional Supplementary Information  
**SCHEDULE OF PAYMENTS TO CONSULTANTS**  
Year Ended June 30, 2021

Nature of Service	Firm	Fees
	Gartner Inc	\$ 2,230,816
	Linea Solutions Inc	624,080
	CWI Coaching and Consulting	163,875
	CDW Government Inc	96,792
	CEM Benchmarking	70,000
	Arthur J Gallagher Risk Management Services	70,000
	Mourad Ibrahim	60,000
	Rutter Associates LLC	57,020
	Groom Law Group Chartered	50,552
	DAS	39,000
	Ocean Computer Group Inc	31,017
<b>Consultant Services</b>	IBM Corporation	26,329
	Planview Inc	20,000
	Ice Miller LLP	19,955
	MethodHub	19,200
	Michael J Park Organization Consulting	12,500
	Frink-Hamlett Legal Solutions Inc	9,460
	Yorkson Legal Inc	8,563
	Jean North Brewer	8,525
	Arlette E Belgrave	5,100
	LogRhythm Inc	5,000
	Regina Kahney	2,800
	Mary Ann Espinoza	310
	InfoPeople Corporation	1,088,158
	Accenture LLP	926,341
	Blue Hill Data Services	772,800
	Rangam Consultants Inc	642,386
	Spruce Technology Inc	635,618
	Universal Technologies LLC	378,546
	Computer Management Resources Corp	362,064
	CMA Consulting Services	336,277
	GCOM Software LLC	251,267
	Diaspark Inc	245,410
	P&L Consulting Services Corp	240,000
	QED National	232,764
	ZebraEdge Inc	222,410
	Data Pro Group Inc	213,179
	Elegant Enterprise Wide Solutions Inc	197,112
<b>Computer Services</b>	Network Experts of New York	188,843
	Msquare Systems Inc	177,609
	Infojini Inc	170,760
	Integrated Technology Solutions & Services Inc	164,454
	UTC Associates Inc	162,345
	Experis US Inc	161,931
	CNC Consulting Inc	159,864
	Optima Global Solutions Inc	156,625
	22nd Century Technologies Inc	151,522
	Zolon Tech Inc	150,299
	Innoeve Consulting LLC	141,747
	Tech Valley Talent	136,246
	Software Information Resource Corp	134,333
	Granwood Inc	126,948
	Geomatrix Software Services Inc	92,960
	enChoice	(33,972)
<b>Total Payment to Consultants</b>		<b>12,617,740</b>





**PART 3**  
**INVESTMENT SECTION**

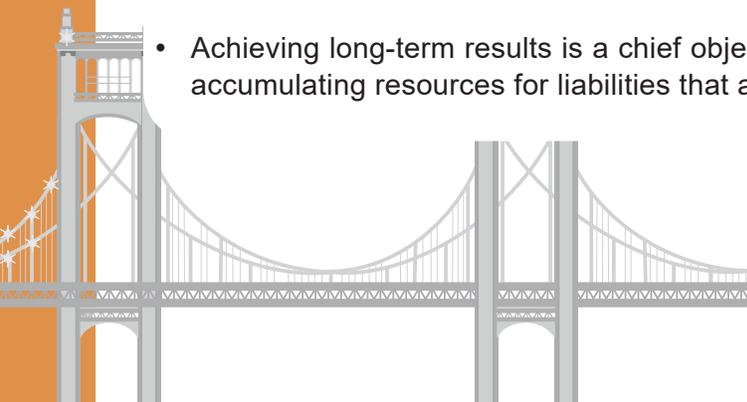
## REPORT ON INVESTMENT ACTIVITY AND POLICIES

### 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 eleven 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 2021, 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 2021 the net investment income earned by the portfolio, including interest and dividends, contributed \$18.3 billion to the Plan's revenue, which was an increase from the \$2.4 billion in net investment income that the portfolio earned in Fiscal Year 2020. The Table of Revenue by Source 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, 2021 was \$86 billion. The detailed asset allocation is shown in the Investment Summary on page 149. The total return on the investment portfolio during Fiscal Year 2021 was 26.63%, which is higher than the NYCERS' Policy Benchmark of 26.34%.

Domestic equities, which comprise 29.4% of the total portfolio, returned 45.14%, higher than the Russell 3000 Index of 44.16%. 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 13% of the portfolio, returned 39.97%, higher than the World ex USA Custom Benchmark of 34.82%. The emerging markets portion, constituting 5.7% of the portfolio, returned 51.24%, higher than the NYCERS Custom EM Index of 49.44%.

The total fixed-income segment, constituting 36.8% of the portfolio, returned 5.26%. The structured fixed-income segment returned -0.09%, as compared to the NYC Custom Structured Index-ERS of -0.39%. The high-yield fixed-income segment returned 15.08% as compared to the High Yield Custom Benchmark of 15.34%.

The alternative investment segment accounted for 13.9% of the investment portfolio. This segment is comprised primarily of private equity, which returned 49.61%, and private real estate, which returned 7.75%. The corresponding index performance relating to these components is published in the Schedule of Investment Results on page 154.

The asset allocation used above was derived from the Plan's Performance Overview as of June 30, 2021 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)

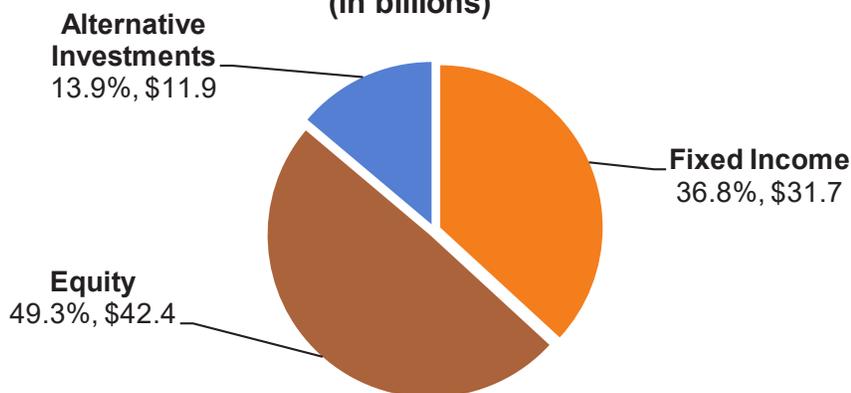
June 30, 2021

Type of Investment	Fair Value (in millions)	Percent of Total Fair Value
<b>Fixed Income</b>	<b>\$ 31,673</b>	<b>36.8%</b>
<b>Equity</b>		
US Equities	25,264	29.4%
Total World ex USA (Non-US Equities/EAFE)	11,148	13.0%
Emerging Markets	4,919	5.7%
Other Equities	1,061	1.2%
<b>Total Equity</b>	<b>42,392</b>	<b>49.3%</b>
<b>Alternative Investments</b>		
Private Equity	6,538	7.6%
Private Real Estate	4,373	5.1%
Other Private Holdings	998	1.2%
<b>Total Alternative Investments</b>	<b>11,909</b>	<b>13.9%</b>
<b>Total Investments</b>	<b>85,974</b>	<b>100.0%</b>

Source: Performance Overview report as of June 30, 2021 provided by the NYC Comptroller's Office, which reports time-weighted fund performance returns at the fund level.

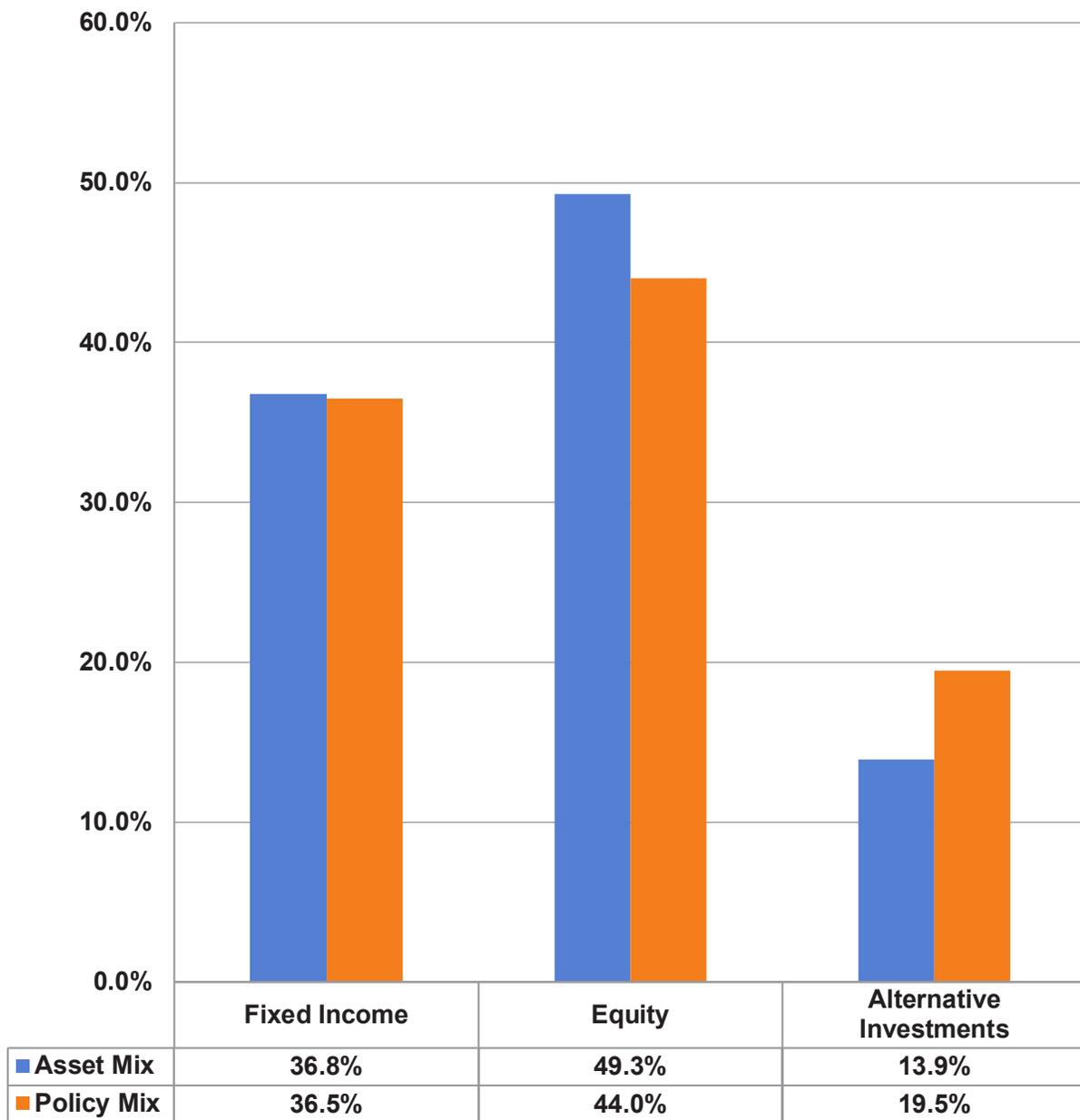
### TOTAL INVESTMENT ASSET ALLOCATION

June 30, 2021  
(in billions)



## COMPARISON OF ASSET ALLOCATION AND POLICY MIX

June 30, 2021

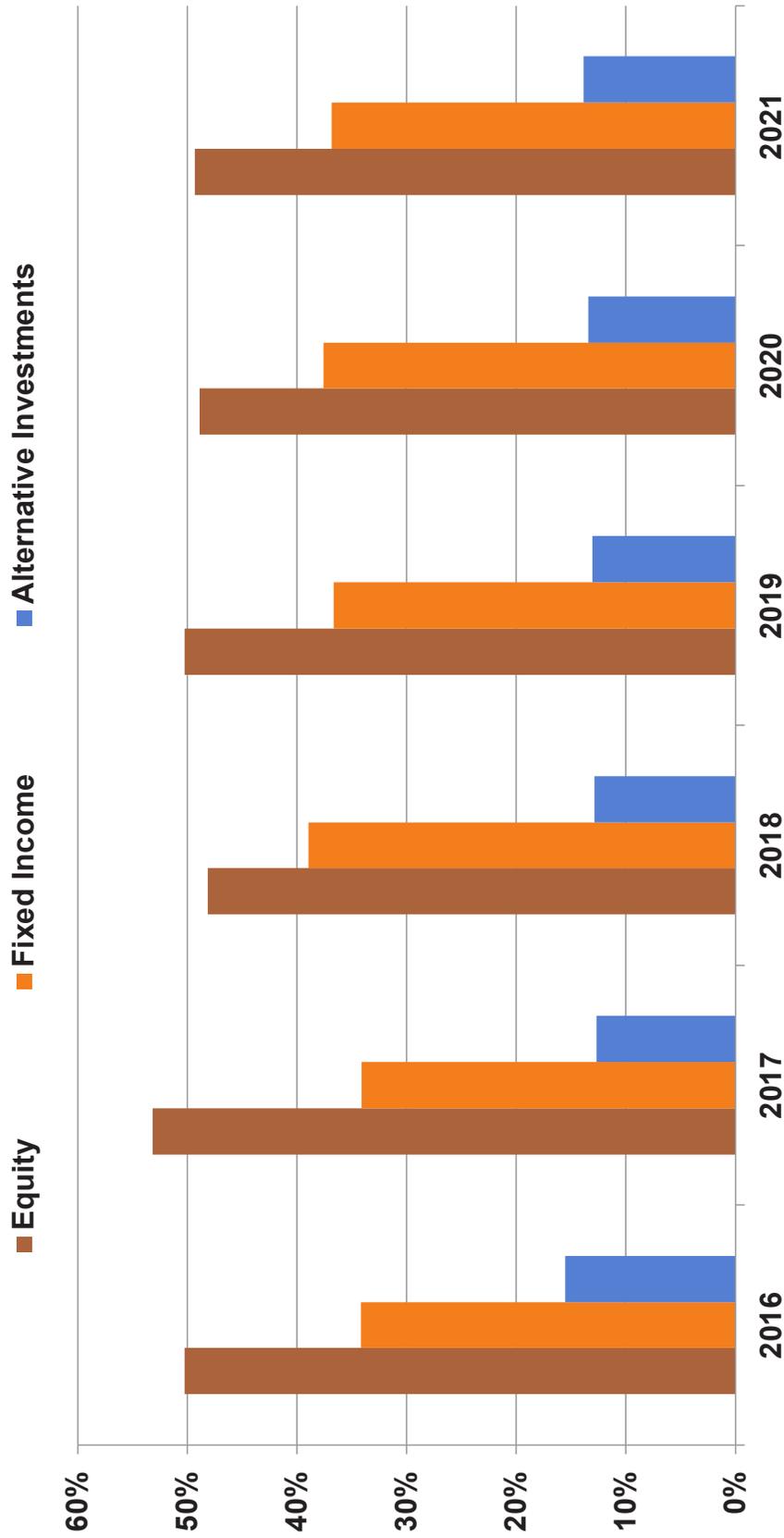


Source: NYC Comptroller's Office.



## ASSET ALLOCATION

June 30, 2016 - June 30, 2021



Source: NYC Comptroller's Office.

**LIST OF LARGEST EQUITY HOLDINGS**  
(at Fair Value)  
June 30, 2021

	Security	Shares	Fair Value	Percent of Domestic Equities
1	Apple Inc.	7,851,696	\$ 1,075,368,284	3.97%
2	Microsoft Corporation	3,588,203	972,044,193	3.59%
3	Amazon.com Inc.	198,584	683,160,733	2.52%
4	Alphabet Inc.	275,718	681,458,834	2.52%
5	Facebook Inc.	1,082,836	376,512,906	1.39%
6	Johnson & Johnson Company	1,500,495	247,191,546	0.91%
7	Berkshire Hathaway Inc.	865,236	240,466,389	0.89%
8	Tesla Inc.	348,167	236,649,110	0.87%
9	BlackRock Inc.	781,416	226,299,339	0.84%
10	J.P. Morgan Chase & Company	1,382,758	215,074,179	0.79%
11	NVIDIA Corporation	268,423	214,765,242	0.79%
12	Pfizer Inc.	5,348,174	209,434,494	0.77%
13	Bank of America Corporation	3,534,390	196,971,576	0.73%
14	Wells Fargo & Company	2,893,461	196,468,932	0.73%
15	UnitedHealth Group Inc.	457,938	183,376,693	0.68%
16	MercadoLibre Inc.	117,400	182,884,546	0.68%
17	Procter & Gamble Company	1,343,201	181,238,111	0.67%
18	Visa Inc.	764,582	178,774,563	0.66%
19	Mastercard Inc.	450,778	164,574,540	0.61%
20	Home Depot Inc.	494,987	157,846,404	0.58%
21	The Walt Disney Company	878,165	154,355,062	0.57%
22	PayPal Holdings Inc.	527,352	153,712,561	0.57%
23	Cisco Systems Inc.	2,882,323	152,763,119	0.56%
24	Exxon Mobil Corporation	2,378,212	150,017,613	0.55%
25	Verizon Communications Inc.	2,626,944	147,187,672	0.54%
26	Intel Corporation	2,540,572	142,627,712	0.53%
27	Walmart Inc.	983,968	138,759,167	0.51%
28	AbbVie Inc.	1,176,812	132,556,104	0.49%
29	Amgen Inc.	543,196	132,404,025	0.49%
30	Adobe Inc.	226,010	132,360,496	0.49%
31	Wix.com Ltd	451,362	131,021,361	0.48%
32	Qualcomm Inc.	910,743	130,172,497	0.48%
33	Gilead Sciences Inc.	1,859,187	128,023,617	0.47%
34	Comcast Corporation	2,208,225	125,912,990	0.46%
35	Merck & Company Inc.	1,588,260	123,518,980	0.46%
36	PepsiCo Inc.	823,931	122,081,856	0.45%
37	Taiwan Semiconductor Manufacturing Company Limited	1,015,771	122,055,043	0.45%
38	Target Corporation	450,305	108,856,731	0.40%
39	Salesforce.com Inc.	618,474	106,887,273	0.39%
40	Nike Inc.	668,413	103,263,124	0.38%
	Total		9,459,097,617	34.91%

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, 2021

Security Description	Fair Value	Percent of Long Term Fixed Income
1 U.S. Treasury Securities	\$ 10,898,759,083	39.78%
2 FNMA Securities	2,854,933,258	10.42%
3 GNMA Securities	1,479,940,762	5.40%
4 Federal Home Loan Mortgage Corporation	750,622,323	2.74%
5 AFL-CIO Housing Investment Trust	351,158,495	1.28%
6 J.P. Morgan Chase & Subsidiaries	240,096,293	0.88%
7 Bank of America Corporation	193,513,939	0.71%
8 Wells Fargo & Company	155,625,263	0.57%
9 Morgan Stanley	141,227,676	0.52%
10 Banco Santander SA	125,798,749	0.46%
11 Citigroup & Subsidiaries	119,804,148	0.44%
12 AT&T Inc.	114,759,320	0.42%
13 Goldman Sachs Group	112,268,799	0.41%
14 Ford Motor Company	111,415,799	0.41%
15 Community/Economic Development Bonds	107,257,697	0.39%
16 Charter Communications Inc.	100,804,870	0.37%
17 Verizon Communications Inc.	100,399,475	0.37%
18 AbbVie Inc.	95,686,758	0.35%
19 Barclays PLC	88,476,277	0.32%
20 The Tennessee Valley Authority	84,825,906	0.31%
21 T-Mobile US Inc.	71,295,234	0.26%
22 CVS Health Corporation	68,350,873	0.25%
23 British American Tobacco PLC	63,798,298	0.23%
24 Centene Corporation	63,330,111	0.23%
25 United Airlines Holdings Inc.	62,708,194	0.23%
26 HSBC Holdings PLC	59,702,337	0.22%
27 Anheuser-Busch InBev SA/NV	59,114,797	0.22%
28 Occidental Petroleum Corporation	55,446,532	0.20%
29 Apple Inc.	55,339,033	0.20%
30 Capital One Financial Corporation	55,007,127	0.20%
31 PG&E Corporation	52,609,829	0.19%
32 Comcast Corporation	52,605,901	0.19%
33 DISH Network Corporation	52,556,703	0.19%
34 Oracle Corporation	51,581,347	0.19%
35 Boeing Company	51,578,376	0.19%
36 Cheniere Energy Inc	50,718,750	0.19%
37 BX Trust	50,638,396	0.18%
38 Western Digital Corporation	50,013,169	0.18%
39 Next Alt S.à.R.L.	49,331,604	0.18%
40 Expedia Group Inc.	48,359,020	0.18%
Total	19,351,460,521	70.65%

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>		
	2021	2020	2019	3 Years	5 Years	10 Years
Total Portfolio	26.63%	3.58%	7.13%	12.28%	11.76%	9.34%
NYCERS' Policy Benchmark	26.34%	3.70%	7.73%	12.17%	11.44%	9.46%
<b><i>Managed by Outside Advisors</i></b>						
US Equity	45.14%	4.25%	8.37%	17.98%	17.37%	14.23%
Russell 3000 Index	44.16%	6.53%	8.98%	18.73%	17.89%	14.70%
Total World ex USA (Non-US Equities/EAFE)	39.97%	0.49%	0.57%	12.49%	14.20%	8.13%
World ex USA Custom BM	34.82%	-5.11%	0.16%	8.62%	10.77%	6.33%
Emerging Markets	51.24%	-11.51%	4.06%	11.98%	12.08%	4.31%
NYCERS Custom EM Index	49.44%	-11.27%	4.05%	11.33%	11.52%	3.84%
Total Fixed Income	5.26%	7.61%	7.21%	6.81%	5.00%	4.85%
Fixed Income - Structured	-0.09%	12.34%	8.45%	6.82%	4.06%	4.48%
NYC Custom Structured Index - ERS	-0.39%	14.00%	9.51%	7.54%	4.31%	4.44%
Fixed Income - High Yield	15.08%	0.27%	7.29%	7.71%	7.37%	6.57%
High Yield Custom Benchmark	15.34%	0.00%	7.48%	7.42%	7.19%	6.41%
Private Equity	49.61%	1.83%	14.66%	21.47%	19.72%	14.70%
NYC R3000 + 3% Lagged Index	67.21%	-6.37%	12.01%	20.59%	20.09%	17.30%
Private Real Estate	7.75%	1.81%	8.47%	6.54%	8.38%	11.40%
NCREIF NFI-ODCE NET + 100 BP Index	8.15%	2.34%	6.51%	5.64%	6.68%	9.68%
<b><i>In-House Portfolio</i></b>						
Short-term Investments	0.15%	1.44%	2.36%	1.31%	1.23%	0.84%

## Notes:

- 1) For Fiscal Years 2021, 2020, and 2019, the investment returns are reported net of fees.
- 2) For trailing 3, 5, and 10 years, the investment returns are reported gross of fees.

**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
**Year Ended June 30, 2021**

Entity Name	Assets under Management (in thousands)	Fees (in dollars)
<b>Investment Managers' Fees</b>		
<b>Fixed Income</b>		
Advent (Convertible Bonds)	\$ 987,400	\$ 3,975,283
AFL-CIO (Mortgage Sector)	351,158	1,112,687
Bain Bank Loans (Fixed Income)	6,330	194,875
Barrow, Hanley, Mewhinney & Strauss (Credit Sector)	-	409,074
BlackRock (Corporate)	743,185	313,311
BlackRock (Government Sector)	1,125,716	472,886
BlackRock (Mortgage)	2,720,298	1,159,706
BlackRock - TIPS Managers	848,852	450,620
Eaton Vance Management Inc (Enhanced Yield)	340,571	975,187
GIA Partners LLC (Core Plus)	204,091	455,510
Invesco BL MTA 161 (Fixed Income)	6,854	366,041
LM Capital-MTA (Core Plus)	359,333	516,273
MackKay Shields LLC (Enhanced Yield)	375,774	919,871
Neuberger Berman - Credit (Credit Sector)	1,573,933	532,140
Neuberger Berman (Enhanced Yield)	498,201	1,519,003
Neuberger Berman (Mortgage)	10	51,635
Nomura Management Inc (Enhanced Yield)	363,622	1,068,719
Oaktree (Enhanced Yield)	465,198	1,474,511
PIMCO Mortgage (Mortgage Sector)	1,448,359	1,009,070
Pinebridge (High Yield)	397,133	1,209,244
Prudential (Corporate)	885,876	652,406
Pugh-CorePlus (Corporate Sector)	52,579	106,357
Shenkman Capital Management (Enhanced Yield)	427,910	1,430,039
SSGA 1-3 Treasury Inde (Gov't)	2,067,657	104,286
SSGA Int Gov Bond Inde (Gov't)	2,724,431	211,238
SSGA-LT Treasury 10Y Plus (Gov't)	654,012	14,779
State Street Bank and Trust Co (Gov't)	1,248,967	662,917
State Street Global Advisors (TIPS)	2,208,805	103,094
Stone Harbor (Enhanced Yield)	5,168	8,940
T. Rowe Price (Corporate)	2,631,821	2,685,621
T. Rowe Price (Enhanced Yield)	531,659	1,687,922
Taplin Canida & Habacht (Corporate)	-	139,548
Victory (Convertible Bonds)	577,746	1,459,918
Wellington Mortgages (Mortgage)	571,443	194,371
<b>Total Fixed Income</b>	<b>27,404,092</b>	<b>27,647,082</b>
<b>Domestic Equity</b>		
BlackRock Inst R 1000 CORE	18,615,010	356,620
BlackRock Inst R 2000 (Growth)	8,928	3,438
BlackRock Inst R 2000 VAL	178,900	7,830
Cooke & Bieler - US SCV	117,013	994,052
Legal & General US LMCE	2,238,938	1,429,632
LEG - Altravue - SCV	31,733	141,590
LEG - Ballast - SCV	17,606	14,396
LEG - Bowling - SCV	-	25,339
LEG - Bridge City - SCG	21,209	122,609
LEG - Dean - SCV	39,754	212,008
LEG - Essex - SCG	27,852	144,404

*Continued on next page*

**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
**Year Ended June 30, 2021**

Entity Name	Assets under Management (in thousands)	Fees (in dollars)
LEG - Lisanti - SCG	\$ 30,568	\$ 163,508
LEG - Nicholas Investment US - SCG	10,373	8,146
LEG - Transtion US - SCG	1	11,558
PanAgora US SCC	199,090	667,453
Pzena-US SCV	130,056	804,039
RAFI Enhanced Large Companies	2,586,769	2,515,508
T. Rowe Price US SCV	89,962	651,939
Wasatch-US SCG	270,955	2,172,533
Wellington SCV (Small Cap Value)	387,284	2,510,157
William Blair-US SCG	262,085	1,755,544
<b>Total Domestic Equity</b>	<b>25,264,086.00</b>	<b>14,712,303</b>
<b>Private Equity</b>		
Acon Equity Partners III LP	229	1,559
Altaris Health Partners III LP	13,656	119,589
American Securities Partners VII LP	84,724	773,703
Ampersand 2011 LP	682	102,910
Apax Partners IX LLP	202,816	1,367,352
Apax Partners X	23,846	1,410,752
Apollo Investment Fd VII	7,696	49,423
Apollo Investment Fund VIII	122,109	527,152
Apollo Investment Fund IX	130,797	2,505,005
Ardian-ASF VI	11,460	149,167
Ardian-ASF VII	47,752	434,386
Ardian-ASF VIII B	54,042	1,740,000
Ares Corp Opportunities Fund IV	71,918	275,595
Ares Corp Opportunities Fund V	87,574	783,108
BC European Capital IX	159,738	894,288
BC European Capital X	113,706	1,079,360
BC European Capital X Co Investment SC	66,530	366
BC Partners XI	-	300,820
BDCM Opportunity Fd III	54,108	520,689
Blackstone Capital Partners VI	75,360	429,777
Blackstone Capital Partners VIII	13,260	1,964,353
Bridgepoint Europe IV	4,803	26,069
Bridgepoint Europe V	71,784	407,183
Bridgepoint EUR V Co Investment SC	21,100	365
Bridgepoint Europe VI	64,749	1,871,274
Bridgepoint Europe VI Co Investment	20,581	31,165
Carlyle Partners V	8,378	2,925
Carlyle Partners VI	89,769	227,582
Catterton Partners VI	14,473	160,504
Centerbridge Cap III	25,813	258,337
Clearlake Capital Partners VI	25,418	616,306
Credit Suisse Emerging Market Domestic Mgrs Fund	70,217	693,877
Crestview Partners II	27,817	251,411
Crestview Partners III	50,381	765,898
Crestview Partners IV	16,667	994,000
CVC Capital Partners VI	150,461	1,013,132
CVC Capital Partners VII	126,703	2,206,581
EQT VI LP	32,053	299,757

*Continued on next page*

**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
**Year Ended June 30, 2021**

<b>Entity Name</b>	<b>Assets under Management (in thousands)</b>	<b>Fees (in dollars)</b>
EQT VII LP	\$ 190,270	\$ 1,804,975
EQT VIII Co-Invest	31,462	84,920
EQT VIII LP	122,394	1,390,270
EQT IX,USD	32,250	721,843
Fairview Capl Ptnrs III	20,641	85,589
Fairview Emerging Managers I	2,345	37,888
Fairview Emerging Managers II	44,894	90,031
FS Equity Partners VI	12,813	40,116
FT Ventures Fd III	6,113	33,539
FTV Capital IV	20,177	191,244
FTV Capital V	46,860	369,897
FTV Capital VI	15,617	416,978
Grain Communications Opportunity Fund III	1,577	235,820
Grain Fund II	18,096	315,000
Green Equity Investors VI	144,118	556,766
Green Equity Investors VII	125,218	866,379
Green Equity Investors VIII	41,920	1,433,662
Grey MT Ptnrs Fund III	1,741	38,441
Halyard Capital II	5,925	30,976
Heartwood Partners II	5,092	81,541
Heartwood Partners III	11,419	239,678
Hg Genesis 9 A	4,122	466,194
ICV Partners IV LP	8,544	360,000
Incline Equity Partners III LP	2,893	73,477
J.P. Morgan Fleming Trache B	31,224	166,996
J.P. Morgan Investment Management	11,044	7,067
KKR Americas Fund XII LP	215,385	1,659,000
KKR Asian Fund IV	8,660	270,375
KKR Europe V	48,518	809,376
Landmark Equity Ptnrs XIV	16,447	187,868
Landmark Equity Ptnrs XV	35,389	750,000
Lexington Capital Partners VII	9,859	109,300
Lexington Capital Partners VIII	79,503	784,240
Lexington Capital Partners IX LP	48,436	1,119,387
Lincolnshire Equity Fund III	18,114	285,097
Lincolnshire Equity Fund IV	7,911	98,833
Lindsay Goldberg V LP	17,584	715,740
Midocean Partners III	7,647	6,765
Mill City Capital	8,144	110,173
Montreux Equity Partners IV	16,324	210,973
Nautic Ptnrs VI	6,924	(8,697)
New Mainstream Capital II	4,791	79,925
New Mountain Partners III	74,526	447,614
NGN BioMed Opportunity II	9,414	46,445
NMS Fund III	9,927	158,176
Olympus Growth Fund VI	61,079	176,908
One Rock Capital Partners III LP	8,366	261,584
Onex Partners III	16,594	141,301
Paladin Homeland Security III	38,642	132,379
Palladium EQ Partners IV	49,403	452,761
Palladium EQ Partners V	18,938	587,374

*Continued on next page*

**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
Year Ended June 30, 2021

Entity Name	Assets under Management (in thousands)	Fees (in dollars)
Patriot Financial Partners II	\$ 4,856	\$ 110,525
Patriot Financial Partners III	14,767	271,250
PCGAM Clean Energy & Tech Fund	9,684	37,537
Pegasus Partners V LP	16,965	129,332
Platinum Equity Capital Partners V	53,905	1,627,993
Platinum Equity Small Cap I	19,791	313,620
Quaker BioVentures II LP	3,325	43,324
Raine Partners II	48,611	232,175
Raine Partners III	18,164	650,000
Reverence Capital Partners Opportunities Fund II	10,202	360,000
Riverstone/Carlyle GLB EP IV	1,042	31,191
RLJ Equity Partners Fund 1	7,883	21,241
SCP Vitalife Partners II	5,188	133,967
Siris Capital Group LLC	22,398	464,928
Siris Partners IV	51,238	1,001,250
Snow Phipps Group II	16,678	244,774
Starvest Partners II	11,339	117,788
Stellex Capital Management LP	14,677	150,922
Terra Firma Capital Partner III	211	14,445
The Resolute Fund V	-	315,000
Thomas, McNerney & Partners II	2,163	714
Trident V LP A160	72,086	558,229
Trilantic Capital Partners V	42,332	335,603
Trilantic Capital Partners VI	15,682	728,811
US Power Fund II	7,705	112,808
US Power Fund III	17,223	179,597
Valor Equity Partners III	17,769	76,485
Valor Equity Partners IV	48,818	426,112
Valor Equity Partners V	15,120	876,368
Vista Equity Partners III	2,488	30,320
Vista Equity Partners IV	65,882	408,310
Vista Equity Partners V	160,739	1,201,820
Vista Equity Partners VI	228,485	2,423,171
Vista Equity Partners VII	118,511	2,662,500
Vista Foundation Fund II	15,135	188,949
Vistria Fund III	12,862	270,000
Warburg Pincus Global Growth	90,734	1,364,822
Warburg Pincus PE	107,884	1,110,396
Warburg Pincus PE XI	62,190	247,161
Warburg Pincus PE XII	265,560	1,609,896
Webster Capital Management LLC	13,614	133,868
Wellspring Capital Partners V	12,883	59,095
Welsh Carson Anderson & Stowe XI	11,035	14,714
Welsh Carson Anderson & Stowe XII (WCAS XII)	104,992	589,904
Welsh Carson Anderson & Stowe XIII	23,084	1,234,876
Yucaipa American Alliance Fund I	823	(159,879)
<b>Total Private Equity</b>	<b>5,825,187</b>	<b>67,943,816</b>
<b>Private Equity-Opport. &amp; Global Fixed Income</b>		
400 Capital Centre Street	20,996	288
Angelo Gordon CT ST Partners	233,712	1,508,541

*Continued on next page*

**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
**Year Ended June 30, 2021**

<b>Entity Name</b>	<b>Assets under Management (in thousands)</b>	<b>Fees (in dollars)</b>
Apollo Centre St. Partnership LP	\$ 259,086	\$ 2,077,734
Ares Centre Street Partnership	225,407	2,163,100
Brightwood Capital Fund III LP	11,468	373,229
Brightwood Capital Fund IV LP	74,983	1,071,473
Contrarian C A LLC	106,432	563,276
FCO MA Centre Street II ER	75,439	966,155
FCO MA Centre Street II EXP ER	10,432	37,838
Fortress CTR ST Partners	149,716	1,092,205
GCM Grosvenor Emerging OFI Manager	47,865	60,120
Golden Tree OD MTA 111	257,436	1,697,522
ICG Centre St Partnership	93,707	955,152
KKR SP-OFI(KKR-NYC Credit B)	198,471	1,415,076
KKR-NYC Credit C	12,284	28,732
Lone Star Fund VIII	21,859	118,694
Maranon Centre Street Parnership	105,594	443,102
Marathon CTR ST Partners	387,932	2,152,753
Oak Hill Ctr. St. Partners	377,071	2,169,383
Oaktree OPP FD IX	66,026	1,115,568
Torchlight Debt Opp V	15,905	192,475
Torchlight Debt Opp VI	82,717	840,000
Torchlight Debt Opp VII	18,069	660,000
<b>Total Private Equity-Opport. &amp; Global Fixed Income</b>	<b>2,852,607</b>	<b>21,702,416</b>
<b>Private Real Estate</b>		
Aermont Capital Real Estate Fund IV	18,906	774,617
Almanac Realty Securities VII	34,167	375,947
Almanac Realty Securities VII-SideCar	9,685	22,140
Almanac Realty Securities VIII	15,228	636,622
Almanac Realty Securities VIII-SideCar	11,822	37,946
American Value Ptnrs I	1,514	63,463
Artemis Co-Investment (Artemis Mach II LLC)	54,678	484,658
Artemis Income & Growth	24,810	403,181
Avanath Capital (Avanath Aff Housing II)	10,531	98,042
Big Real Estate Fund I	15,411	136,856
Blackstone RE Europe IV	49,397	401,980
Blackstone RE PTN EUR III	5,751	34,014
Blackstone Real Estate Ptnrs VI	35,759	1,238,712
Blackstone Real Estate Ptnrs VII	65,274	538,318
Blackstone Real Estate Ptnrs VIII	116,360	1,027,898
Blackstone Real Estate Ptnrs IX	83,472	1,909,000
Brookfield Premier Real Estate Partners	207,867	909,875
Brookfield Strategic RE Partners I	49,694	150,470
Brookfield Strategic Real Estate Partner III	102,407	1,444,797
Capri Urban Investors	11,594	66,885
Carlyle Fund VII	30,110	178,736
Carlyle Property Investors	122,120	462,436
Carlyle R.P. Fd V	3,925	3,904
Carlyle R.P. Fd VI	5,251	32,707
Clarion Partners LLC (Lion Industrial Trust)	151,481	876,187
Cortland Partners	113,910	416,735
DivcoWest Fund IV	3,166	28,708

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**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
**Year Ended June 30, 2021**

Entity Name	Assets under Management (in thousands)	Fees (in dollars)
DivcoWest Fund V	\$ 42,195	\$ 692,954
DivcoWest Fund VI A	9,171	799,025
DRA Advisors LLC	41,939	733,949
DRA Growth and Income Fund X	15,084	237,422
Exeter Core Fund II	34,791	217,424
Exeter Core Fund III	40,454	90,271
Exeter Value Fund IV	39,726	310,131
Exeter Value Fund V	18,747	281,750
GCM Grosvenor	48,568	944,000
GreenOak Asia USD III	29,391	1,505,692
H/2 Spec Opportunity Fd II	731	18,190
H/2 Spec Opportunity Fd III	18,606	236,196
H/2 Spec Opportunity Fd IV	103,467	865,702
Harrison St Core Prop Fd	98,710	662,256
Harrison St Core Prop SideCar	30,814	113,220
Heitman America RE Trust	252,766	(383,235)
Heitman Credit	55,197	237,530
Jamestown Premier Fund	40,657	192,068
J.P. Morgan Chase SP Fund	147,992	1,761,238
J.P. Morgan Chase SS Fund	138,665	2,115,318
KKR Real Estate Credit Opp Prtnrs Agg I	100,840	1,088,104
KKR Real Estate Partners Americas II LP	89,281	1,126,507
KKR Real Estate Partners Europe II USD	2,634	526,360
LaSalle US Property Fund	155,073	857,616
Lone Star RE Fd III	3,564	7,499
Metlife Core Property	63,812.00	348,039
NYC Asset #1 - Vanbarton (Emmes)	35,178	232,485
NYC Asset #2 - Related (fka Sandy)	52,731.00	547,656
NYC Asset #3 - Hudson	37,519	363,713
PGIM Real Estate Capital VII	5,761.00	51,807
Pramerica VI LP	33,206	386,641
Prisa	124,362	999,904
Prisa II	216,371	2,019,378
Prisa III	194,762	3,103,234
Prologis Targeted US Logistics Fd	57,609	213,466
PW Real Estate Fund III LP	54,446	315,936
Rialto Real Estate Fund IV - Debt	17,371	2,082,962
RREEF America REIT II	156,948	1,191,009
Silverpeak Legacy Partners III	2,557	10,629
Stockbridge Real Estate Fd III A	16,591	44,623
Taconic NYC Inv Fd LP	3,405	36,411
Tristan European Property Inv	46,555	528,347
UBS Trumbull Property Fund (TPF)	107,910	801,772
USAA Eagle Real Estate Feeder 1	107,061	567,011
Walton St Real Estate Fund VI	16,397	164,962
Westbrook Real Estate VII LP	8,569	59,376
Westbrook Real Estate VIII LP	7,087	59,278
Westbrook RE Fund X CO-INVEST	17,976	262,193
Westbrook RE Fund XI	8,217	814,708
<b>Total Private Real Estate</b>	<b>4,279,561</b>	<b>43,197,561</b>

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**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
**Year Ended June 30, 2021**

Entity Name	Assets under Management (in thousands)	Fees (in dollars)
<b>Infrastructure</b>		
Actis Energy 4	\$ 51,408	\$ 675,894
Ardian Infrastructure Fund V	9,634	620,933
ASF VII Infrastructure	45,037	701,248
Axium Infrastructure Canada II	45,527	12,330
Axium Infrastructure US Country	26,981	132,371
Basalt Infrastructure Partners III A	8,819	1,154,367
Brookfield Infra Fund II	83,662	382,579
Brookfield Infra Fund III	56,717	494,900
Brookfield Infra Fund IV B	58,197	1,043,699
EIG Energy Partners	19,968	172,351
EQT Infrastructure III	76,892	626,439
EQT Infrastructure IV	69,171	1,329,499
EQT Infra IV Co-Inv F SCSP Connect	9,704	9
EQT Infra IV Co-Inv Saber	9,350	26
Global Energy & Power Infra Fund II	26,230	211,777
Global Energy & Power Infra Fund III	33,801	661,787
Global Infrastructure Partners III	94,506	1,790,878
Global Infrastructure Partners IV	12,232	1,553,632
IFM Global Infrastructure	128,534	1,108,585
KKR Global Infrastructure Investment II	55,050	727,612
KKR Global Infrastructure Investment III	34,618	875,000
Stonepeak Infrastructure Fund IV LP	-	1,441,328
<b>Total Infrastructure</b>	<b>956,038</b>	<b>15,717,244</b>
<b>International Equity</b>		
Acadian (Emerging Markets)	880,077	2,516,736
Acadian (Small Cap)	647,099	1,715,985
Algert EAFE SC	156,024	484,514
AQR-EM SCC	223,950	887,402
Aubrey-EM ACG - Xponance	32,106	22,413
Baillie Gifford Overseas (Emerging Markets)	1,118,316	5,862,768
Baillie Gifford-WorldxUS LMCC	2,352,086	5,668,425
BIV - Arga Investment Management	42,320	334,942
BIV - Bailard Inc	141	274,815
BIV - Blackcrane Capital LLC	10,765	82,654
BIV - Dundas Partners LLP	44,561	352,052
BIV - Global Alpha Capital Management	10,472	70,142
BIV - Radin Capital Partners Inc	9,263	59,644
BIV - Redwood-EM ACV	10,526	4,637
BIV - RVX-EM ACC	10,234	4,569
BIV - Smith International	38,129	258,287
BIV - Transition - WorldxUS	-	7,430
BlackRock MSCI - EM Core	819,691	348,462
Causeway-WorldxUS LMCC	1,536,284	4,821,083
DFA (Emerging Markets)	633,129	2,968,275
Fierra Canada Corporation	419,814	2,066,521
FIS - Arga Investment Management	31,952	78,663
FIS - Ativo Capital Management	71	3,307
FIS - Change Global Investments	17	46,586
FIS - Denali Advisors	51	1,521

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**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
**Year Ended June 30, 2021**

<b>Entity Name</b>	<b>Assets under Management (in thousands)</b>	<b>Fees (in dollars)</b>
FIS - Dundas Global Investors	\$ 22,903	\$ 87,275
FIS - Foresight Global Investors	26,242	84,953
FIS - Martin Investment Management	23,827	67,816
FIS - Metis Global Partners	21	879
FIS - Osmosis Investment Management	24,360	79,510
FIS - Redwood Investments	20,382	80,286
FIS - Transition	36	24,788
LEI - Applied Research International	32,000	187,294
LEI - Ativo Capital Management	33,125	202,292
LEI - Blackcrane Capital LLC	27,450	178,095
LEI - Haven	28,619	166,720
LEI - Henry James International Management	49,942	307,296
LEI - Herndon Capital Management	-	3,546
LEI - John Hsu	-	7,134
LEI - Redwood Investments	48,976	288,390
LEI - Transition	-	435
North of South-EM ACV - Xponence	24,791	18,000
Parametric-EM	203	123
Pzena-EM ACV	361,843	682,986
RBC Global Asset Management (EM ACG)	279,270	192,255
Sands Capital Management LLC (EM LCG)	300,441	415,867
Sprucegrove (LMCC)	1,882,723	3,418,944
SSGA - WorldxUS LMC MSCI Core	1,732,021	221,396
SSGA MSCI EAFE Small Cap Index MTA	886,471	233,753
UBS Asset Management (EM ACC)	301,832	151,658
Walter Scott EAFE Large Cap	1,955,373	5,293,516
<b>Total International Equity</b>	<b>17,089,929</b>	<b>41,337,040</b>
<b>Mutual Fund - Mortgages</b>		
Access Capital Strategies RBC	169,114	305,003
<b>Total Mutual Fund - Mortgages</b>	<b>169,114</b>	<b>305,003</b>
<b>Mutual Fund - Fixed Income Bank Loan</b>		
Babson Capital Management MTA	1,334	339,675
Credit Suisse BL MTA	951	372,611
<b>Total Mutual Fund - Fixed Income Bank Loan</b>	<b>2,285</b>	<b>712,286</b>
<b>Total For All Investment Managers</b>	<b>83,842,899</b>	<b>233,274,751</b>
<b>Consultant Fees</b>		
Aksia		266
Burgiss		52,527
Callan Associates Inc		535,000
CDP		511
Ernst & Young		(16,500)
Foley & Lardner LLP		73,599
Institutional Shareholders Services		83,972
Meketa Investment Group		170,683
MSCI BARRA LLC		336,131
Stepstone Group LLC		1,483,155
<b>Total Consultant Fees</b>		<b>2,719,344</b>

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**SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS**  
**Year Ended June 30, 2021**

Entity Name	Assets under Management (in thousands)	Fees (in dollars)
<b>Legal Fees</b>		
Cox, Castle & Nicholson LLP		\$ 54,930
Daypitney LLP		48,466
Foster Gravey PC		93,309
Foster, Pepper PLLC		(1,650)
Hitchcock Law Firm		550
Morgan, Lewis & Bockius LLP		138,466
Phillsbury Winthrop Shaw Pittman LLP		224,205
Reinhart Boerner Van Deuren		104,892
Seward Kissel		<u>(6,077)</u>
<b>Total Legal Fees</b>		<b>657,091</b>
<b>Total Fees FY 2021</b>		<b>236,651,186</b>

Note: Investment managers' fees are paid out of investment income.

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**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2021

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
ABEL NOSER	165,645	\$ 0.05	\$ 8,061
ABG SECURITIES LIMITED	90	0.03	3
ABN AMRO CLEARING BANK NV	264,115	0.02	5,450
ACTINVER CASA DE BOLSA SA DE CV	8,887	0.00	40
ALLEN & COMPANY LLC	56,602	0.03	1,499
AMBIT CAPITAL PRIVATE LIMITED	97,570	0.04	4,087
ANAND RATHI SHARE AND STOCK BKR LTD	36,990	0.01	402
ARQAAM CAPITAL LIMITED	360,649	0.00	468
ARQAAM SECURITIES LLC	4,578,955	0.00	6,500
AUTREPAT DIV RE	19,145	0.04	706
B RILEY & CO LLC	35,475	0.02	815
BAADER BANK AG	1,592	0.08	125
BANCO DE INVESTIMENTOS CREDIT	87,300	0.01	1,125
BANCO ITAU SA	2,697,638	0.00	10,940
BANCO MODAL SA	127,210	0.01	661
BANCO PACTUAL SA	2,682,788	0.01	16,784
BANCO SANTANDER (BRASIL) SA	497,700	0.01	3,837
BANCO SANTANDER CENTRAL HISPANO	1,142,792	0.00	2,451
BANCO SANTANDER CHILE	932,790	0.00	1,173
BANCO SANTANDER MEXICANO SA	211,217	0.00	462
BANCROFT CAPITAL LLC	9,151	0.02	183
BANK OF AMERICA CORPORATION	559,406	0.03	19,296
BANK OF NOVA SCOTIA USA	111,147	0.00	103
BANQUE PICTET ET CIE SA	269,687	0.02	5,313
BARCLAYS CAPITAL	2,840,219	0.01	32,328
BARCLAYS CAPITAL INC	363,870	0.00	732
BARCLAYS CAPITAL INC LE	434,265	0.01	3,311
BARCLAYS CAPITAL LE	2,803,562	0.01	31,176
BARRINGTON RESEARCH ASSOCIATES	5,779	0.03	201
BCS PRIME BROKERAGE LTD	2,950	0.01	36
BERNSTEIN AUTONOMOUS LLP	24,436,786	0.01	125,398
BHF-BANK AKTIENGESELLSCHAFT	5,250	0.03	158
BMO CAPITAL MARKETS	759,109	0.03	22,071
BMO NESBITT BURNS INC	5,300	0.03	134
BNDSS BONY DSS	621	0.03	16
BNP PARIBAS	213,614	0.01	2,160
BNP PARIBAS PRIME BROKERAGE INC	149,485	0.01	1,195
BNP PARIBAS SECURITIES HUNGARY BRANCH	37,290	0.01	519
BNP PARIBAS SECURITIES INDIA PRIVATE LIM	60	0.10	6
BNP PARIBAS SECURITIES SERVICES	17,543,555	0.00	80,587

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**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2021

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
BNP PARIBAS SECURITIES SERVICES SA	44,869,650	\$ 0.00	\$ 29,962
BOFA SECURITIES INC	89,470,084	0.00	335,969
BRDESCO SA CTVM	23,750,887	0.00	65,886
BROADCORT CAPITAL CORP	3,200	0.03	80
BTG PACTUAL CASA DE BOLSA	7,322,840	0.00	6,529
BTG PACTUAL CHILE SA CORREDORES DE BOL	89,380,279	0.00	11,867
BTIG LLC	1,375,936	0.03	41,090
CABRERA CAPITAL MARKETS	227,599	0.02	5,438
CABRERA CAPITAL MARKETS LLC	23,590	0.06	1,456
CANACCORD GENUITY (AUSTRALIA) LIMITED	4,682	0.00	11
CANACCORD GENUITY CORP	4,550	0.03	133
CANACCORD GENUITY INC	183,989	0.03	6,345
CANADIAN IMPERIAL BANK OF COMMERCE	573,034	0.01	7,940
CANTOR CLEARING SERVICES	128	0.02	3
CANTOR FITZGERALD & CO	458,155	0.02	10,206
CAPITAL GUARDIAN BROKER	148,687	0.01	1,486
CARNEGIE AS	308,775	0.03	8,617
CARNEGIE INVESTMENT BANK AB	12,509	0.12	1,454
CASTLEOAK SECURITIES LP	10,960	0.02	247
CGS-CIMB SECURITIES (HONG KONG) LTD	372,680	0.00	501
CHINA INTERNATIONAL CAPITAL CO	15,328,072	0.00	31,848
CIBC MELLON	4,459	0.01	34
CIBC WORLD MARKETS INC	330,701	0.02	5,543
CIMB GK SECURITIES PTE LTD	9,842,900	0.00	5,345
CIMB SECURITIES LTD KOREA BRANCH	6,029	0.21	1,273
CITADEL SECURITIES INSTITUTIONAL LLC	752,254	0.01	3,795
CITATION GROUP	3,338	0.04	117
CITIBANK MEXICO	131,600	0.00	363
CITIBANK NA	200	0.31	62
CITIBANK OF COLOMBIA	3,006,677	0.00	9,332
CITIBANK SOUTH AFRICA	236,541	0.00	617
CITIGROUP GLOBAL MARKETS AUSTRALIA PTY	405,331	0.00	389
CITIGROUP GLOBAL MARKETS EUROPE AG	2,276,086	0.02	38,294
CITIGROUP GLOBAL MARKETS INC	48,388,993	0.00	67,484
CITIGROUP GLOBAL MARKETS INDIA	2,996,193	0.00	11,042
CITIGROUP GLOBAL MARKETS KOREA SECS LTD	2,648,719	0.02	48,780
CITIGROUP GLOBAL MARKETS LIMITED	37,267,449	0.00	110,187
CITIGROUP GLOBAL MARKETS TAIWAN	59,006,562	0.00	37,136
CL SECURITIES TAIWAN COMPANY LIMITED	12,793,348	0.00	42,393
CLSA AMERICAS	39,017	0.04	1,482

*Continued on next page*

**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2021

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
CLSA AUSTRALIA PTY LTD	1,672,424	\$ 0.00	\$ 2,305
CLSA SECURITIES KOREA LTD	5,677,001	0.02	107,937
CLSA SECURITIES MALAYSIA SDN BHD	5,480,296	0.00	2,837
CLSA SINGAPORE PTE LTD	97,095,511	0.00	106,662
CLSA UK	445,866	0.00	558
COL FINANCIAL GROUP INC	86,880	0.01	622
COMMERCIAL BANK OF QATAR LTD	3,126,255	0.00	4,673
CONCORDIA SA CVMCC	157,700	0.00	669
CORNERSTONE MACRO LLC	37,957	0.03	1,209
COWEN AND COMPANY LLC	2,342,417	0.02	35,803
COWEN EXECUTION SERVICES LLC	29,471,435	0.01	184,665
CRAIG HALLUM	259,334	0.04	9,435
CREDICORP CAPITAL COLOMBIA SA	630,081	0.00	1,609
CREDIT INDUSTRIEL ET COMMERCIAL	459	0.05	22
CREDIT LYONNAIS SECURITIES (ASIA)	384,249,057	0.00	221,426
CREDIT LYONNAIS SECURITIES (USA) INC	365,700	0.00	1,090
CREDIT LYONNAIS SECURITIES INDIA	26,877,046	0.00	73,060
CREDIT MUTUEL CIC BANQUES	610	0.12	71
CREDIT SUISSE FIRST BOSTON	16,502,000	0.00	18,865
CREDIT SUISSE FIRST BOSTON (EUROPE)	1,577,820	0.01	16,758
CREDIT SUISSE FIRST BOSTON SA CTVM	2,214,073	0.00	5,565
CREDIT SUISSE INTERNATIONAL	473,976	0.03	13,543
CREDIT SUISSE SECURITIES (EUROPE) LTD	391,711,687	0.00	97,152
CREDIT SUISSE SECURITIES (INDIA) PRIVATE LTD	5,682,552	0.01	33,491
CREDIT SUISSE SECURITIES (USA) LLC	165,833,159	0.00	182,226
CREDIT SUISSE SECURITIES CANADA INC	141,365	0.01	1,219
CS FIRST BOSTON (HONG KONG) LIMITED	428,700	0.00	1,303
CSFB AUSTRALIA EQUITIES LTD	1,843,842	0.00	1,259
CUTTONE & CO INC	15,687	0.01	157
DA DAVIDSON & COMPANY	68,780	0.03	1,953
DAIWA CAPITAL MARKETS AMERICA INC	2,854,064	0.02	64,413
DAIWA SBCM EUROPE	91,000	0.13	11,610
DAIWA SECURITIES (HK) LTD	393,100	0.00	1,392
DAIWA SECURITIES COMPANY LTD	39,833	0.04	1,439
DANARESKA SECURITIES PT	5,779,200	0.00	197
DANSKE BANK AS	436,233	0.01	2,929
DAVY STOCKBROKERS	426,210	0.02	10,092
DBS VICKERS (HONG KONG) LIMITED	133,500	0.00	388
DBS VICKERS SECURITIES (SINGAPORE)	32,075,314	0.00	14,961
DEN NORSKE BANK	180,259	0.00	580

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**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2021

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
DEUTSCHE BANK AG	18,091	\$ 0.05	\$ 977
DEUTSCHE SECURITIES ASIA LIMITED	20,900	0.00	2
DNB MARKETS CUSTODY A BUSINESS UNIT OF DNB BANK ASA OSLO	4,265	0.02	98
DOUGHERTY & COMPANY LLC	46,913	0.04	1,877
DSP MERRILL LYNCH LTD	15,265,713	0.00	64,360
EFG EUROBANK SECURITIES SA	56,535	0.00	159
ERSTE GROUP BANK AG	80	0.06	5
EVERCORE ISI	444,752	0.02	8,075
EXANE SA	6,269,117	0.01	55,445
FEDERATED MANAGED GROWTH INCOME	6,700	0.03	168
FIDELITY CAPITAL MARKETS	27,043	0.01	401
FIDELITY CLEARING CANADA ULC	4,244,871	0.01	33,866
FINANCIAL BROKERAGE GROUP (FBG)	1,112,092	0.00	2,394
FLOW CORRETORA DE MERCADORIAS LTDA	8,390,584	0.00	23,511
GK GOH OMETRACO PT	28,940,100	0.00	4,064
GOLDMAN SACHS (ASIA) LLC	72,792,568	0.00	57,060
GOLDMAN SACHS (INDIA)	10,246,946	0.01	72,572
GOLDMAN SACHS & CO NEW YORK	5,500	0.04	210
GOLDMAN SACHS AUSTRALIA PTY LTD	1,017,790	0.00	906
GOLDMAN SACHS CO INTL	14,700	0.00	54
GOLDMAN SACHS CO LLC	174,268,012	0.00	285,860
GOLDMAN SACHS DO BRASIL CORRETORA	962,757	0.01	6,033
GOLDMAN SACHS INTERNATIONAL	5,132,400	0.01	54,484
GUGGENHEIM CAPITAL MARKETS LLC	15,649	0.03	404
GUZMAN & COMPANY	149,267	0.00	498
HAITONG INTERNATIONAL SECURITIES COMPANY LIMITED	20,729,660	0.00	59,826
HANWHA SECURITIES SEOUL	315,812	0.02	4,883
HEIGHT SECURITIES LLC	17,437	0.02	349
HILLTOP SECURITIES INC	1,248,882	0.04	47,311
HONGKONG AND SHANGHAI BANKING CORP LTD	154,700	0.00	108
HSBC BANK PLC	50,866,195	0.00	150,368
HSBC BANK USA	62,296	0.00	306
HSBC BROKERAGE (USA) INC	9,831	0.00	49
HSBC MEXICO S A INSTITUCION DE BANCA MLT	1,751,220	0.00	1,387
HSBC SECURITIES	1,917,723	0.00	3,710
HSBC SECURITIES (USA) INC	158,920,220	0.00	85,605
HSBC SECURITIES INDIA HOLDINGS	4,384,976	0.00	19,911
HYUNDAI SECURITIES	4,750	0.21	1,014
ICHIYOSHI SECURITIES CO LTD	1,300	0.01	19
ICICI BROKERAGE SERVICES	11,899,362	0.00	44,910

*Continued on next page*

**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2021

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
IM TRUST SA CORREDORES DE BOLSA	7,794,548	\$ 0.00	\$ 6,710
INSTINET	21,093,765	0.01	123,092
INSTINET AUSTRALIA CLEARING SRVC PTY LTD	15,375,606	0.00	17,461
INSTINET EUROPE LIMITED	2,669	0.04	117
INSTINET LLC	43,452,296	0.00	93,943
INSTINET PACIFIC LIMITED	376,560,835	0.00	168,350
INSTINET SINGAPORE SERVICES PT	5,109,448	0.00	2,623
INSTINET UK LTD	68,971,541	0.00	315,158
INTERNATIONAL STRATEGY AND INVESTMENT GROUP LLC	99	0.15	15
INTESA SANPAOLO SPA	761	0.03	22
INTL FCSTONE FINANCIAL INC	73,590	0.03	1,897
INTL TRADING INC	5,491	0.01	39
INVESTEC BANK PLC	19,848	0.01	261
INVESTEC MARKETS (PROPRIETARY) LIMITED	2,622,348	0.00	11,849
INVESTMENT TECHNOLOGY GROUP INC	1,117,615	0.02	22,726
IS YATIRIM MENKUL DEGERLER AS	26,037	0.01	276
ITG AUSTRALIA LTD	123,395,430	0.00	61,003
ITG CANADA	167,769	0.00	673
ITG INC	682,477	0.00	1,341
JANNEY MONTGOMERY SCOTT INC	185,240	0.03	5,016
JEFFERIES HONG KONG LIMITED	363,432	0.00	810
JEFFERIES INDIA PRIVATE LIMITED	20,426,254	0.01	116,380
JEFFERIES INTERNATIONAL LTD	156,381,252	0.00	103,934
JEFFERIES LLC	11,224,662	0.01	106,576
JM FINANCIAL INSTITUTIONAL SECURITIES LIMITED	2,078,320	0.01	24,905
JMP SECURITIES	26,959	0.02	539
JOH BERENBERG GOSSLER & CO KG	1,300,218	0.03	34,228
JONESTRADING INSTITUTIONAL SERVICES LLC	1,801,276	0.02	31,953
JP MORGAN INDIA PRIVATE LTD	8,151,215	0.00	37,334
JP MORGAN SECURITIES (ASIA PACIFIC) LTD	119,310,470	0.00	120,510
JP MORGAN SECURITIES (FAR EAST) LTD SEOUL	1,362,016	0.02	20,708
JP MORGAN SECURITIES (TAIWAN) LTD	48,186,397	0.00	44,378
JP MORGAN SECURITIES AUSTRALIA LTD	2,956,949	0.00	3,467
JP MORGAN SECURITIES INC	44,332,219	0.00	47,612
JP MORGAN SECURITIES LIMITED	436,541	0.03	14,517
JP MORGAN SECURITIES LLC	10,493,907	0.01	146,469
JP MORGAN SECURITIES PLC	2,620,748,352	0.00	193,898
JP MORGAN SECURITIES SINGAPORE	14,569,600	0.00	6,107
JUPITER SECURITIES SDN BHD	5,821,200	0.00	6,024
KALLPA SECURITIES SAB	2,635	0.07	193

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**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2021

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
KB SECURITIES NV	63	\$ 0.06	\$ 4
KEEFE BRUYETTE WOODS INC	508,346	0.03	14,924
KEMPEN & CO NV	1,491	0.02	23
KEPLER CHEUVREUX	27,085	0.04	1,050
KEYBANC CAPITAL MARKETS INC	443,725	0.03	11,294
KIM ENG SECURITIES (HK) LTD	1,781,797	0.00	419
KOREA INVESTMENT AND SECURITIES CO LTD	45,475	0.18	8,238
KOTAK SECURITIES LTD	238,786	0.02	5,657
LARRAIN VIAL	21,431,080	0.00	4,981
LEERINK PARTNERS LLC	99,716	0.03	2,866
LIBERUM CAPITAL INC	1,033,820	0.01	5,636
LIQUIDNET CANADA INC	110,951	0.01	685
LIQUIDNET EUROPE LIMITED	411,639	0.04	16,484
LIQUIDNET INC	2,935,852	0.02	44,231
LOOP CAPITAL MARKETS	5,568,430	0.02	92,695
LOOP CAPITAL MARKETS LLC	1,606,646	0.00	8,030
LUMINEX TRADING AND ANALYTICS	73,846	0.00	369
LUMINEX TRADING AND ANALYTICS LLC	168,219	0.00	841
MACQUARIE BANK LIMITED	38,394,395	0.00	41,030
MACQUARIE CAPITAL (EUROPE) LTD	113,871	0.00	75
MACQUARIE CAPITAL SECURITIES S	108,170,443	0.00	83,744
MACQUARIE SECURITIES (INDIA) PVT LTD	78,495	0.01	507
MACQUARIE SECURITIES (NZ) LTD	130,352	0.00	89
MACQUARIE SECURITIES (SINGAPORE)	257,000	0.00	269
MACQUARIE SECURITIES (USA) INC	200	0.03	5
MACQUARIE SECURITIES KOREA LIMITED	713,759	0.04	26,490
MACQUARIE SECURITIES LIMITED	730,000	0.00	3,335
MANDARIN SECURITIES CORP	1,570,420	0.00	875
MAXIM GROUP	33,345	0.03	1,000
MERRILL LYNCH CANADA INC	8,089	0.03	243
MERRILL LYNCH CORREDORES DE BOLSA SPA	216,076	0.05	10,188
MERRILL LYNCH EQUITIES (AUSTRALIA)	4,951,250	0.00	7,735
MERRILL LYNCH INTERNATIONAL	1,253,580,167	0.00	250,477
MERRILL LYNCH PIERCE FENNER AND SMITH	4,671,100	0.00	6,936
MERRILL LYNCH PROFESSIONAL CLEARING CORP	62,173	0.02	1,386
MILLA ECO SIM SPA	2,200	0.05	99
MIRABAUD SECURITIES LLP	7,785	0.10	799
MIRAE ASSET DAEWOO CO LTD	99,147	0.10	10,324
MIRAE ASSET SEC USA	21,255	0.03	636
MISCHLER FINANCIAL GROUP	514,987	0.03	17,453

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**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2021

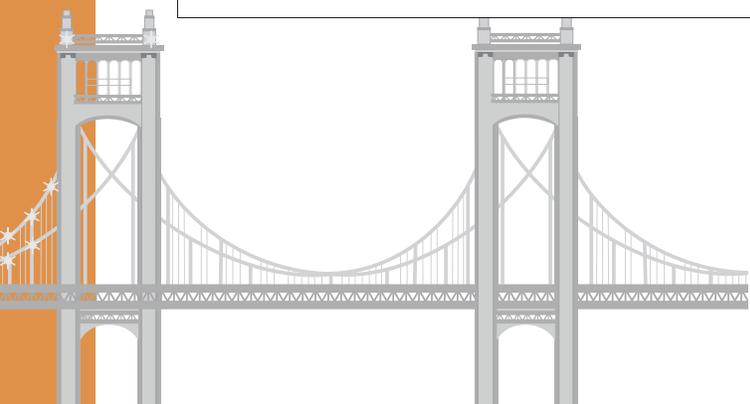
Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
MISCHLER FINANCIAL GROUP INC EQUITIES	203,834	\$ 0.02	\$ 5,075
MITSUBISHI UFJ SECURITIES (USA)	164,995	0.03	5,466
MIZUHO SECURITIES USA INC	374,739	0.04	15,799
MKM PARTNERS LLC	53,563	0.03	1,443
ML PROFESSIONAL CLEARING CORP	101,197	0.01	1,016
MORGAN STANLEY AND CO INTERNATIONAL	1,164,799	0.02	27,516
MORGAN STANLEY AND CO INTERNATIONAL PLC	51,202,057	0.00	117,089
MORGAN STANLEY CO INCORPORATED	136,872,085	0.00	294,137
MORGAN STANLEY DEAN WITTER AUSTRALIA	507,222	0.00	1,095
MORGAN STANLEY INDIA COMPANY PVT LTD	1,709,976	0.00	7,305
MORGAN STANLEY TAIWAN LIMITED	27,511,969	0.00	43,116
NATIONAL FINANCIAL SERVICES CORPORATION	239,221	0.03	6,059
NEEDHAM & COMPANY	249,218	0.04	9,471
NESBITT BURNS	17,342	0.03	520
NEWBERG SECURITIES	2,300	0.03	58
NH INVESTMENT AND SECURITIES CO LTD	23,980	0.12	2,833
NOMURA FINANCIAL ADVISORY & SEC INDIA	5,088,430	0.00	18,590
NOMURA FINANCIAL INVESTMENT KOREA CO LTD	912,873	0.01	12,032
NORTH SOUTH CAPITAL LLC	23,981	0.02	516
NORTHLAND SECURITIES INC	62,393	0.03	1,991
NUMIS SECURITIES INC	27,226	0.01	218
ODDO ET CIE	7,683	0.04	276
OPPENHEIMER & CO INC	264,348	0.03	8,847
PAREL	827,724	0.00	2,244
PAVILION GLOBAL MARKETS LTD	544,845	0.03	14,556
PENSERRA SECURITIES	4,578,675	0.02	73,006
PENSERRA SECURITIES LLC	2,613,969	0.00	3,692
PERSHING LIMITED	93,392	0.02	1,915
PERSHING LLC	40,319,936	0.01	309,901
PERSHING SECURITIES CANADA LIMITED	15,717	0.02	389
PERSHING SECURITIES LIMITED	4,751,177	0.01	53,936
PICTET CANADA LP	33,318	0.01	333
PIPER JAFFRAY & CO	21,221,052	0.01	131,345
PIPER JAFFRAY AND HOPWOOD	848,298	0.01	5,178
RAYMOND JAMES AND ASSOCIATES INC	407,406	0.03	13,970
RAYMOND JAMES LTD	29,229	0.03	877
RBC CAPITAL MARKETS LLC	50,975,663	0.00	24,149
RBC DOMINION SECURITIES CORPORATION	25,373	0.03	761
RBC DOMINION SECURITIES INC	1,180,205	0.01	6,647
REDBURN (EUROPE) LIMITED	7,755,687	0.01	65,837

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**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2021

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
ROBERT W BAIRD CO INCORPORATED	2,008,787	\$ 0.02	\$ 39,620
ROTH CAPITAL PARTNERS LLC	27,876	0.04	1,186
ROYAL BANK OF CANADA EUROPE LTD	2,174,930	0.03	58,301
SAMSUNG SECURITIES CO LTD	65,581	0.18	11,551
SANFORD C BERNSTEIN AND CO LLC	49,169,991	0.00	53,026
SANTANDER INVESTMENT SECURITIES INC	29,883	0.07	1,950
SB EQUITIES INCORPORATED	56,300	0.00	253
SBI SECURITIES (HONG KONG) LIMITED	157,700	0.04	5,906
SBICAP SECURITIES LIMITED	3,125	0.07	225
SCOTIA CAPITAL (USA) INC	383,157	0.01	2,704
SCOTIA CAPITAL INC	301,200	0.01	1,649
SG AMERICAS SECURITIES LLC	2,310,512	0.00	1,700
SG ASIA SECURITIES (INDIA) PVT LTD	10,193,426	0.00	28,188
SG SECURITIES (HK) LIMITED	112,190,156	0.00	57,640
SG SECURITIES (LONDON) LTD	35,611,976	0.00	17,278
SHENYIN WANGUO SECURITIES (HK) LTD	4,347,200	0.00	15,651
SIDOTI & COMPANY LLC	40,743	0.03	1,343
SINOPAC SECURITIES CORPORATION	618,000	0.01	7,713
SKANDINAVISKA ENSKILDA BANKEN	10,020	0.01	136
SKANDINAVISKA ENSKILDA BANKEN LONDON	4,821	0.01	60
SMBC NIKKO CAPITAL MARKETS LIMITED	696,700	0.09	59,807
SMBC SECURITIES INC	508,957	0.01	4,121
SOCIETE GENERALE	25,301,937	0.00	31,053
SSB CUSTODIAN	750	0.02	15
STATE STREET GLOBAL MARKETS LLC	51,915	0.03	1,557
STEPHENS INC	499,493	0.03	14,961
STIFEL NICOLAUS & CO INC	738,076	0.03	24,019
STIFEL NICOLAUS EUROPE LIMITED	579	0.12	72
STRATEGAS SECURITIES LLC	13,665	0.04	532
STUART FRANKEL & CO INC	10,300	0.01	103
STURDIVANT AND CO INC	115,310	0.04	4,570
SUNTRUST CAPITAL MARKETS INC	106,570	0.04	3,920
SVENSKA HANDELSBANKEN	4,807	0.03	149
TD SECURITIES INC	700	0.01	5
TELSEY ADVISORY GROUP	316,104	0.04	14,140
TELSEY ADVISORY GROUP LLC	1,942	0.03	49
THE BANK OF NEW YORK MELLON	293,772	0.00	802
THE HONGKONG AND SHANGHAI BANK	101,896	0.04	4,029
TORONTO DOMINION SECURITIES INC	1,139,800	0.01	6,261
TOURMALINE PARTNERS	1,666,581	0.01	15,364

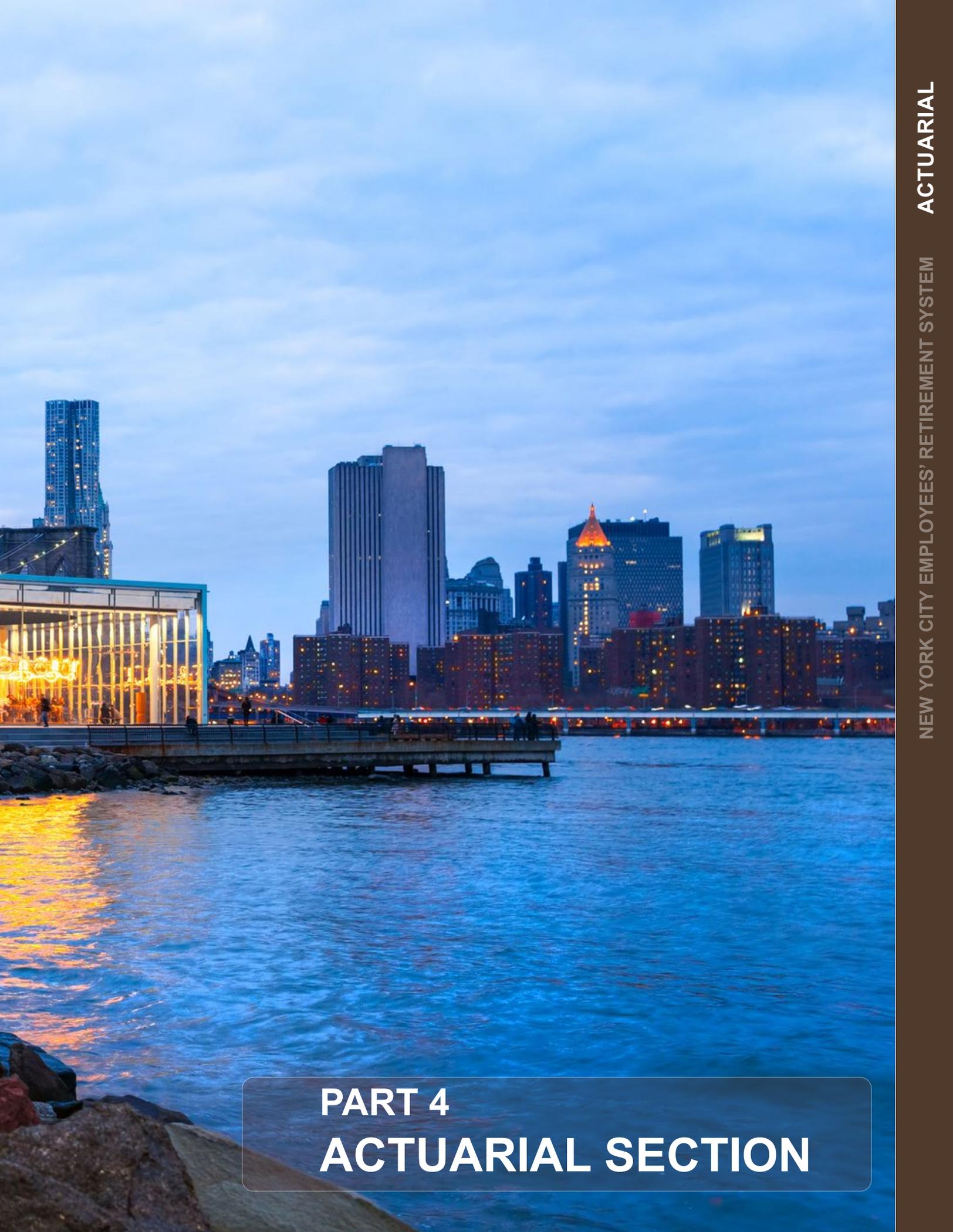
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**SCHEDULE OF BROKERS' COMMISSIONS**  
Year Ended June 30, 2021

Brokerage Firm	Number of Shares Traded	Commission Per Share	Total Commissions
UBS AG	171,502,292	\$ 0.00	\$ 314,001
UBS AG LONDON BRANCH	1,231,276	0.03	35,155
UBS SECURITIES ASIA LTD	116,058,872	0.00	95,520
UBS SECURITIES CANADA INC	1,339,429	0.01	8,004
UBS SECURITIES INDIA PRIVATE LTD	2,570,721	0.01	22,349
UBS SECURITIES LLC	4,866,537	0.01	45,627
UBS SECURITIES PTE LTD	6,267,312	0.00	21,739
UBS SECURITIES PTE LTD SEOUL	1,417,498	0.03	42,143
UBS SWITZERLAND AG	1,531,956	0.01	8,268
UBS WARBURG AUSTRALIA EQUITIES	645,138	0.00	874
UOB KAY HIAN PTE LIMITED	230,000	0.00	251
VIRTU AMERICAS LLC	2,193,491	0.02	42,015
VIRTU ITG EUROPE LIMITED	5,283,404	0.00	17,070
VTB BANK EUROPE PLC	10,824	0.01	144
WALL STREET ACCESS	31,048	0.01	238
WEDBUSH MORGAN SECURITIES INC	12,701	0.03	320
WEDBUSH SECURITIES INC	4,887	0.02	122
WELLS FARGO SECURITIES LLC	512,852	0.03	13,799
WILLIAM BLAIR & COMPANY LLC	335,746	0.05	16,154
WILLIAM O NEIL AND CO INC/BCC CLRG	38,047	0.03	1,141
WILLIAMS CAPITAL GROUP LP (THE)	535,772	0.03	14,396
WOLFE TRAHAN SECURITIES	2,100	0.03	53
WOOD GUNDY INC	8,949	0.01	67
XP INVESTIMENTOS CCTVM SA	7,807,100	0.00	14,114
YUANTA SECURITIES CO LTD	805,890	0.00	3,407
<b>TOTAL</b>	<b>8,414,109,971</b>		<b>8,743,652</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

**SHERRY S. CHAN**  
CHIEF ACTUARY

December 1, 2021

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, 2021

Dear Members of the Board of Trustees:

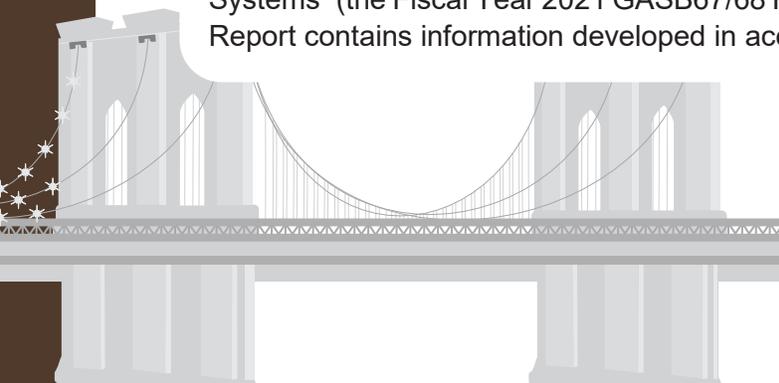
The financial objective of the New York City Employees' Retirement System (NYCERS or the Plan) is to fund members' retirement benefits during their active service by establishing employer normal contribution rates that, expressed as a percentage of active member annualized covered payroll, would remain 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, 2019 (Lag) actuarial valuation is used to determine the Fiscal Year 2021 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 2021, 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 24, 2021, the Office of the Actuary published the "Fiscal Year 2021 GASB67/68 Report for the City of New York and the New York City Retirement Systems" (the Fiscal Year 2021 GASB67/68 Report). Appendix A of the Fiscal Year 2021 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, 2019 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 meet the parameters set forth by the Actuarial Standards of Practice (ASOPs).

### **Benefits, Financial Information, and Census Data**

The June 30, 2019 (Lag) and June 30, 2018 (Lag) 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, 2019 (Lag) actuarial valuation is included in this ACFR. A summary of the census data used in the June 30, 2018 (Lag) actuarial valuation of the Plan is available in the Fiscal Year 2020 Comprehensive Annual Financial Report.

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

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

### **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.

### **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, 2019 (Lag) Actuarial Valuation.
- Summary of Active Member Valuation Data.
- Number and Salary of Active Members by Occupational Position as of the June 30, 2019 (Lag) Actuarial Valuation.
- Number of Active Members by Occupational Position and Age as of the June 30, 2019 (Lag) Actuarial Valuation.
- Number of Active Members by Occupational Position and Years of Service as of the June 30, 2019 (Lag) 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.



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

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

GASB Statement No. 98 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.

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 Mr. Michael J. Samet, Mr. Edward Hue, or me.

Board of Trustees  
New York City Employees' Retirement System  
December 1, 2021  
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### **Acknowledgement of Qualification**

I, Sherry S. Chan, am the Chief Actuary for, and independent of, the New York City Retirement Systems and Pension Funds. I am a Fellow of the Society of Actuaries, an Enrolled Actuary under the Employee Retirement Income and Security Act of 1974, a Member of the American Academy of Actuaries, and a Fellow of the Conference of Consulting 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,



Sherry S. Chan, FSA, EA, MAAA, FCA  
Chief Actuary

SSC/eh

Att.

cc: Mr. Charles Barkley - New York City Employees' Retirement System  
Ms. Melissa Chacko - New York City Office of the Actuary  
Mr. Frankie Chen - New York City Office of the Actuary  
Mr. Craig Chu - New York City Office of the Actuary  
Ms. Chun Gong - New York City Employees' Retirement System  
Mr. Edward Hue - New York City Office of the Actuary  
Mr. Michael Samet - New York City Office of the Actuary  
Keith Snow, Esq. - New York City Office of the Actuary  
Ms. Melanie Whinnery - New York City Employees' Retirement System  
Mr. Gregory Zelikovsky - New York City Office of the Actuary



## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2019 (LAG) 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 terminated 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, 2019 (LAG) 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 Auto COLA 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 (Lag) 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 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, 2019 (LAG) 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, 2019 (LAG) 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, 2019 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, 2019 (LAG) 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.

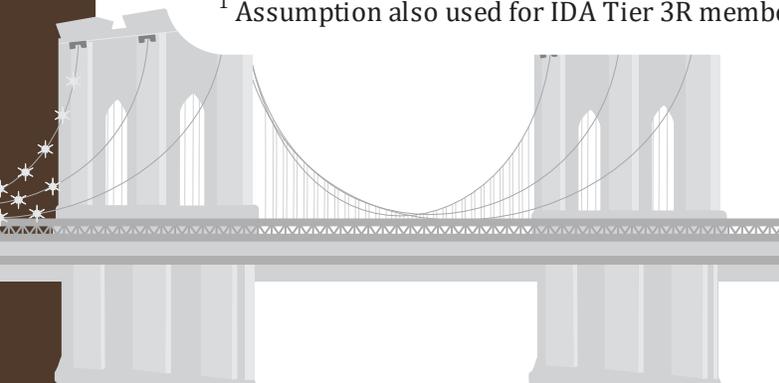
<sup>2</sup> 30.00% for Tiers 1-4 members and 8.00% for Tier 6 members.

<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, 2019 (LAG) 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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)**

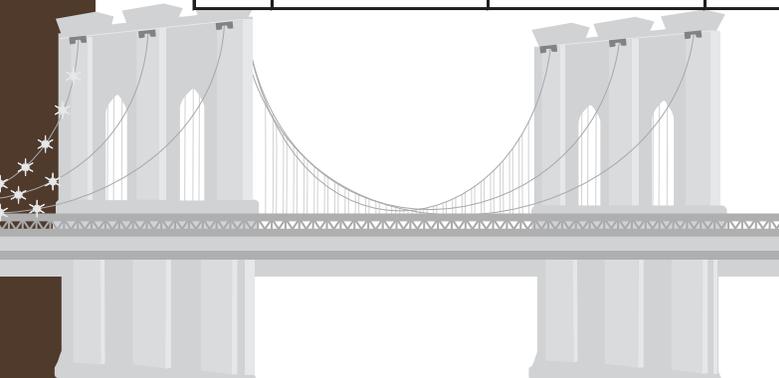
Table 1 (Cont'd)				
PROBABILITIES OF SERVICE RETIREMENT: SANITATION				
	Reduced Service Retirement Tiers 1-4		Reduced Service Retirement Tier 3R	
	Age	Rate	Service	Rate
	≤ 54	0.00%	≤ 19	0.00%
	55	4.00%	20	5.00%
	56	4.00%	21	2.00%
	57	4.00%	22	5.00%
	58	4.00%	23	2.00%
	59	6.00%	24	2.00%
	60	8.00%	≥ 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, 2019 (LAG) 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%
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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, 2019 (LAG) 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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)**

Table 2					
PROBABILITIES OF TERMINATION					
Probabilities of Termination					
Years of Service	General	Correction	Sanitation	TBTA	Transit
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, 2019 (LAG) 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, 2019 (LAG) 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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)**

Table 3 (Cont'd)				
PROBABILITIES OF DISABILITY FOR ACTIVE MEMBERS: OTHERS				
	TBTA		Transit	
Age	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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)**

Table 4 PROBABILITIES OF MORTALITY FOR ACTIVE MEMBERS: CORRECTION AND SANITATION						
	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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)**

Table 4 (Cont'd)						
PROBABILITIES OF MORTALITY FOR ACTIVE MEMBERS: PLAN GROUPS OTHER THAN CORRECTION AND SANITATION						
	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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 5a					
PROBABILITIES OF MORTALITY FOR SERVICE RETIREES: PLAN GROUPS OTHER THAN HOUSING POLICE AND TRANSIT POLICE BASE TABLE					
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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)**

Table 5a (Cont'd)					
PROBABILITIES OF MORTALITY FOR SERVICE RETIREES: HOUSING POLICE AND TRANSIT POLICE BASE TABLE					
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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 5b					
PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: GENERAL PLANS					
BASE TABLE					
Age	Males	Females	Age	Males	Females
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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)**

Table 5b (Cont'd)					
PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: CORRECTION BASE TABLE					
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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 5b (Cont'd)					
PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: SANITATION BASE TABLE					
Age	Males	Females	Age	Males	Females
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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)**

Table 5b (Cont'd)					
PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: TRANSIT AND TBTA					
BASE TABLE					
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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)**

Table 5b (Cont'd)					
PROBABILITIES OF MORTALITY FOR DISABLED RETIREES: HOUSING POLICE AND TRANSIT POLICE BASE TABLE					
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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)**

Table 5c					
PROBABILITIES OF MORTALITY FOR BENEFICIARIES: ALL PLAN GROUPS					
BASE TABLE					
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, 2019 (LAG) 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>								
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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)**

<b>Table 7</b>		
<b>OVERTIME ASSUMPTION: GROUPS OTHER THAN CORRECTION</b>		
<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, 2019 (LAG) ACTUARIAL VALUATION (Cont'd)**

Table 7 (Cont'd)		
NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM		
OVERTIME ASSUMPTION: CORRECTION		
	Correction	
Years of Service	Baseline and Dual Service	Dual Disability
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

Table 8				
ACTIVE MEMBER VALUATION DATA				
June 30 (Lag) Actuarial Valuation	Number	Annual Salary	Average Annual Salary	Percentage Increase/ (Decrease) In Avg. Salary
2010	184,982	12,101,416,579	65,419	2.6%
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%

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

**NUMBER AND SALARY OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION  
AS OF THE JUNE 30, 2019 (LAG) ACTUARIAL VALUATION**

<p><b>Table 9</b></p> <p>NUMBER AND SALARY OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION AS OF JUNE 30, 2019 (LAG) ACTUARIAL VALUATION</p>			
Occupation – Main Groups	Number	Annual Payroll	Average Annual Salary
General	134,108	\$ 9,951,369,936	\$ 74,204
Transit Operating	38,336	3,203,935,658	83,575
MTA Bridges and Tunnels	1,252	122,885,470	98,151
Sanitation	7,783	761,232,957	97,807
Correction	<u>10,022</u>	<u>942,037,154</u>	<u>93,997</u>
Total	191,501	\$ 14,981,461,175	\$ 78,232



**NUMBER OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION AND AGE  
AS OF THE JUNE 30, 2019 (LAG) ACTUARIAL VALUATION**

<b>Table 10</b>						
NUMBER OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION AND AGE AS OF JUNE 30, 2019 (LAG) ACTUARIAL VALUATION						
Age	Total	General	Transit Operating	MTA Bridges & Tunnels	Sanitation	Correction
Under 20	40	6	34	0	0	0
20 - 24	1,814	1,227	298	7	48	234
25 - 29	10,139	7,109	1,252	33	371	1,374
30 - 34	18,565	12,340	3,087	71	1,050	2,017
35 - 39	22,224	14,673	4,003	121	1,464	1,963
40 - 44	23,262	15,445	4,443	195	1,588	1,591
45 - 49	24,550	16,411	5,254	268	1,368	1,249
50 - 54	28,763	19,757	6,936	203	989	878
55 - 59	29,760	21,753	6,724	198	594	491
60 - 64	21,075	16,393	4,162	104	236	180
65 - 69	8,083	6,350	1,591	39	63	40
70 +	<u>3,226</u>	<u>2,644</u>	<u>552</u>	<u>13</u>	<u>12</u>	<u>5</u>
Total	191,501	134,108	38,336	1,252	7,783	10,022

**NUMBER OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION AND YEARS  
OF SERVICE AS OF THE JUNE 30, 2019 (LAG) ACTUARIAL VALUATION**

<b>Table 11</b>						
<b>NUMBER OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION AND YEARS OF SERVICE AS OF JUNE 30, 2019 (LAG) 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	54,313	38,137	10,510	210	1,576	3,880
5 - 9	35,979	25,310	7,017	233	1,598	1,821
10 - 14	33,361	22,750	6,375	312	1,684	2,240
15 - 19	25,489	16,723	5,427	244	1,798	1,297
20 - 24	16,820	11,280	4,305	115	665	455
25 - 29	12,978	9,690	2,764	74	272	178
30 - 34	9,140	7,282	1,535	48	158	117
35 - 39	2,743	2,328	348	14	23	30
40 +	<u>678</u>	<u>608</u>	<u>55</u>	<u>2</u>	<u>9</u>	<u>4</u>
Total	191,501	134,108	38,336	1,252	7,783	10,022



## ACTIVE MEMBER VALUATION DATA BY PARTICIPATING EMPLOYERS

Table 12				
ACTIVE MEMBER VALUATION DATA BY PARTICIPATING EMPLOYERS				
	June 30, 2019 (Lag)		June 30, 2010 (Lag)	
Employer	Number of Employees	Annual Salary	Number of Employees	Annual Salary
City of New York	106,134	\$ 8,195,418,420	96,393	\$ 6,260,211,155
NYC Transit Authority	40,765	3,448,860,890	38,707	2,780,338,978
NYC Housing Authority	8,831	606,251,360	10,596	614,886,362
NYC Health and Hospitals Corporation	29,830	2,319,668,594	31,982	2,042,771,011
MTA Bridges and Tunnels	1,252	122,885,470	1,649	130,849,935
NYC Off-Track Betting Corporation	0	0	1057	40,929,398
NYC School Construction Authority	66	8,460,122	73	7,321,195
NYC Housing Development Corporation	92	9,943,129	81	7,497,973
City University of New York – Senior Colleges	4,520	268,785,885	4,425	215,012,099
New York State Courts	0	0	8	572,036
NYC Municipal Water Authority	<u>11</u>	<u>1,187,305</u>	<u>11</u>	<u>1,026,437</u>
<b>Total</b>	<b>191,501</b>	<b>\$ 14,981,461,175</b>	<b>184,982</b>	<b>\$ 12,101,416,579</b>

## SUMMARY OF PLAN MEMBERSHIP DATA

As of the June 30, 2019 (Lag) and June 30, 2018 (Lag) actuarial valuations, the Plan's membership consisted of the following:

<b>Table 13</b>		
SUMMARY OF PLAN MEMBERSHIP		
Group	June 30, 2019 (Lag)	June 30, 2018 (Lag)
Active members	191,501	190,572
Active off payroll <sup>1</sup>	31,273	28,483
Terminated vested members not yet receiving benefits	21,788	21,389
Retirees and beneficiaries currently receiving benefits	<u>157,153</u>	<u>154,116</u>
Total	401,715	394,560

<sup>1</sup>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 (Lag) 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>2</sup>			
2010	6,997	201,129,110	5,541	72,297,965	132,487	3,192,685,832	4.2%	24,098	
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	

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

<sup>2</sup> Allowances shown are those used in the actuarial valuation as of the Year End date and are not adjusted for anticipated changes due to finalization of benefit calculations or contract settlements.

## ACTUARIAL AND STATUTORY CONTRIBUTION HISTORY

Table 15			
ACTUARIAL AND STATUTORY CONTRIBUTION HISTORY			
Fiscal Year Ended June 30	Actuarial Contribution Certified	Statutory Contribution Contributed <sup>1</sup>	Employer Rate of Contribution <sup>2</sup>
2012	\$ 3,017,004,318	\$ 3,017,004,318	25.5%
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%

<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

<b>Table 16</b>						
FUNDED STATUS BASED ON ENTRY AGE NORMAL COST METHOD (\$ Thousands)						
June 30 (Lag) Valuation Date	(1) Actuarial Value of Assets (AVA)	(2) Accrued Liability (AL) <sup>1</sup>	(3) Unfunded AL (UAL) (2) - (1)	(4) Funded Ratio (1) / (2)	(5) Covered Payroll	(6) UAL as a % of Covered Payroll (3) / (5)
2010	40,433,344	62,935,267	22,501,923	64.2%	12,101,417	185.9%
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%

<sup>1</sup> AL includes the accrued liabilities attributable to the Variable Supplements Funds, net of their AVA, if any.

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

**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 (Lag) Valuation Date	Accrued Liabilities for				Actuarial Value of Assets (D)	Percentage of Accrued Liabilities Funded by Actuarial Value of Assets		
	Accumulated Member Contributions (A)	Current Retirees and Beneficiaries (B)	Active Members' Employer-Financed Portion (C)	Actuarial Value of Assets (D)		(A)	(B)	(C)
						100%	100%	8%
2010	\$6,712,979	\$31,446,478	\$28,431,003	\$40,433,344	100%	100%	8%	
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	

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 (Lag) valuation, the Accrued Liabilities were calculated under the Projected Unit Credit actuarial cost method. Beginning with the June 30, 2019 (Lag) 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 (Lag) valuation used to compute the Employer Contributions for Fiscal Year 2021 and in the June 30, 2017 (Lag) 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.

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NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM  
DATA USED IN THE JUNE 30, 2019 (LAG) ACTUARIAL VALUATION  
FOR DETERMINING FINAL FISCAL YEAR 2021 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	40	0	0	0	0	0	0	0	0	40
20 TO 24	1,807	7	0	0	0	0	0	0	0	1,814
25 TO 29	9,194	909	36	0	0	0	0	0	0	10,139
30 TO 34	11,588	5,697	1,265	15	0	0	0	0	0	18,565
35 TO 39	9,082	7,060	5,181	886	15	0	0	0	0	22,224
40 TO 44	6,820	5,796	6,186	3,818	629	13	0	0	0	23,262
45 TO 49	5,302	4,918	5,798	5,086	2,710	706	30	0	0	24,550
50 TO 54	4,479	4,318	5,366	5,399	4,445	3,492	1,221	43	0	28,763
55 TO 59	3,400	3,653	4,674	4,800	4,472	4,509	3,652	588	12	29,760
60 TO 64	1,844	2,346	3,076	3,462	2,927	2,924	2,932	1,397	167	21,075
65 TO 69	603	960	1,302	1,427	1,145	970	937	498	241	8,083
70 & UP	154	315	477	596	477	364	368	217	258	3,226
<b>TOTAL</b>	<b>54,313</b>	<b>35,979</b>	<b>33,361</b>	<b>25,489</b>	<b>16,820</b>	<b>12,978</b>	<b>9,140</b>	<b>2,743</b>	<b>678</b>	<b>191,501</b>

*SALARIES (IN THOUSANDS):*

UNDER 20	1,972	0	0	0	0	0	0	0	0	1,972
20 TO 24	89,687	326	0	0	0	0	0	0	0	90,013
25 TO 29	525,880	60,247	3,143	0	0	0	0	0	0	589,270
30 TO 34	728,535	429,789	103,539	1,598	0	0	0	0	0	1,263,461
35 TO 39	600,433	556,514	443,939	81,957	1,637	0	0	0	0	1,684,480
40 TO 44	457,023	457,591	523,128	351,192	59,608	1,237	0	0	0	1,849,779
45 TO 49	364,884	385,311	482,931	451,137	256,072	64,918	2,955	0	0	2,008,208
50 TO 54	304,740	328,681	435,142	455,346	399,089	326,631	119,129	4,681	0	2,373,439
55 TO 59	233,678	273,249	367,249	392,582	384,681	406,006	350,677	59,630	1,201	2,468,953
60 TO 64	128,571	172,389	234,938	277,930	246,459	257,272	269,962	136,133	16,130	1,739,784
65 TO 69	43,789	69,513	98,561	113,850	95,454	82,347	84,283	47,351	24,441	659,589
70 & UP	9,664	21,652	34,660	45,788	38,791	29,891	29,839	18,839	23,389	252,513
<b>TOTAL<sup>1</sup></b>	<b>3,488,856</b>	<b>2,755,262</b>	<b>2,727,230</b>	<b>2,171,380</b>	<b>1,481,791</b>	<b>1,168,302</b>	<b>856,845</b>	<b>266,634</b>	<b>65,161</b>	<b>14,981,461</b>

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

UNDER 20	49,300	0	0	0	0	0	0	0	0	49,300
20 TO 24	49,633	46,571	0	0	0	0	0	0	0	49,621
25 TO 29	57,198	66,278	87,306	0	0	0	0	0	0	58,119
30 TO 34	62,870	75,441	81,849	106,533	0	0	0	0	0	68,056
35 TO 39	66,112	78,826	85,686	92,502	109,133	0	0	0	0	75,796
40 TO 44	67,012	78,949	84,566	91,983	94,766	95,154	0	0	0	79,519
45 TO 49	68,820	78,347	83,293	88,702	94,492	91,952	98,500	0	0	81,801
50 TO 54	68,038	76,119	81,092	84,339	89,784	93,537	97,567	108,860	0	82,517
55 TO 59	68,729	74,801	78,573	81,788	86,020	90,043	96,023	101,412	100,083	82,962
60 TO 64	69,724	73,482	76,378	80,280	84,202	87,986	92,074	97,447	96,587	82,552
65 TO 69	72,619	72,409	75,700	79,783	83,366	84,894	89,950	95,082	101,415	81,602
70 & UP	62,753	68,737	72,662	76,826	81,323	82,118	81,084	86,816	90,655	78,274
<b>TOTAL</b>	<b>64,236</b>	<b>76,580</b>	<b>81,749</b>	<b>85,189</b>	<b>88,097</b>	<b>90,022</b>	<b>93,747</b>	<b>97,205</b>	<b>96,108</b>	<b>78,232</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, 2019 (LAG) ACTUARIAL VALUATION  
 FOR DETERMINING FINAL FISCAL YEAR 2021 EMPLOYER CONTRIBUTIONS  
 SUMMARY OF PENSIONERS BY CAUSE AND GENDER

ALL FILES (ALL BENEFITS)

AGE	MALE			FEMALE			BOTH MALE & FEMALE		
	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
<i>SERVICE RETIREMENT:</i>									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	0	0	0	0	0	0
35 TO 39	0	0	0	0	0	0	0	0	0
40 TO 44	14	952,002	68,000	19	1,229,167	64,693	33	2,181,169	66,096
45 TO 49	296	18,514,131	62,548	172	11,924,884	69,331	468	30,439,015	65,041
50 TO 54	1,606	97,272,024	60,568	777	47,519,809	61,158	2,383	144,791,833	60,760
55 TO 59	5,667	301,889,207	53,271	2,416	108,611,264	44,955	8,083	410,500,471	50,786
60 TO 64	10,150	451,555,282	44,488	6,332	215,863,532	34,091	16,482	667,418,814	40,494
65 TO 69	15,754	631,803,057	40,104	10,394	319,038,637	30,695	26,148	950,841,694	36,364
70 TO 74	15,518	576,542,036	37,153	10,747	301,944,905	28,096	26,265	878,486,941	33,447
75 TO 79	12,474	420,704,510	33,727	7,879	202,151,526	25,657	20,353	622,856,036	30,603
80 TO 84	8,354	252,308,253	30,202	5,308	117,440,810	22,125	13,662	369,749,063	27,064
85 TO 89	4,615	127,008,803	27,521	3,171	60,842,815	19,187	7,786	187,851,618	24,127
90 & UP	2,947	76,922,439	26,102	2,929	47,952,999	16,372	5,876	124,875,438	21,252
<b>TOTAL</b>	<b>77,395</b>	<b>2,955,471,744</b>	<b>38,187</b>	<b>50,144</b>	<b>1,434,520,348</b>	<b>28,608</b>	<b>127,539</b>	<b>4,389,992,092</b>	<b>34,421</b>
<i>ORDINARY DISABILITY:</i>									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	1	7,346	7,346	0	0	0	1	7,346	7,346
35 TO 39	11	251,783	22,889	5	97,255	19,451	16	349,038	21,815
40 TO 44	36	965,477	26,819	48	976,872	20,352	84	1,942,349	23,123
45 TO 49	142	3,654,847	25,738	97	1,833,516	18,902	239	5,488,363	22,964
50 TO 54	418	9,761,925	23,354	313	6,509,263	20,796	731	16,271,188	22,259
55 TO 59	904	21,112,539	23,355	702	13,649,574	19,444	1,606	34,762,113	21,645
60 TO 64	1,151	24,952,434	21,679	827	15,671,338	18,950	1,978	40,623,772	20,538
65 TO 69	1,046	21,399,474	20,458	718	12,788,783	17,812	1,764	34,188,257	19,381
70 TO 74	1,049	20,653,616	19,689	488	7,826,533	16,038	1,537	28,480,149	18,530
75 TO 79	740	14,848,401	20,065	300	4,419,484	14,732	1,040	19,267,885	18,527
80 TO 84	341	6,591,556	19,330	154	1,946,060	12,637	495	8,537,616	17,248
85 TO 89	119	2,131,471	17,912	61	703,738	11,537	180	2,835,209	15,751
90 & UP	62	1,277,967	20,612	30	332,616	11,087	92	1,610,583	17,506
<b>TOTAL</b>	<b>6,020</b>	<b>127,608,836</b>	<b>21,197</b>	<b>3,743</b>	<b>66,755,032</b>	<b>17,835</b>	<b>9,763</b>	<b>194,363,868</b>	<b>19,908</b>
<i>ACCIDENTAL DISABILITY:</i>									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	8	361,909	45,239	5	139,368	27,874	13	501,277	38,560
35 TO 39	50	2,706,674	54,133	9	442,224	49,136	59	3,148,898	53,371
40 TO 44	118	6,457,726	54,726	33	1,705,280	51,675	151	8,163,006	54,060
45 TO 49	202	10,733,937	53,138	70	3,429,649	48,995	272	14,163,586	52,072
50 TO 54	420	20,745,884	49,395	126	5,094,467	40,432	546	25,840,351	47,327
55 TO 59	567	25,889,492	45,660	145	5,528,353	38,127	712	31,417,845	44,126
60 TO 64	497	20,021,099	40,284	108	4,019,035	37,213	605	24,040,134	39,736
65 TO 69	518	19,982,346	38,576	70	1,832,278	26,175	588	21,814,624	37,100
70 TO 74	624	20,468,956	32,803	53	1,235,791	23,317	677	21,704,747	32,060
75 TO 79	513	15,438,760	30,095	41	738,160	18,004	554	16,176,920	29,200
80 TO 84	238	7,339,160	30,837	32	498,731	15,585	270	7,837,891	29,029
85 TO 89	124	3,533,024	28,492	14	219,315	15,665	138	3,752,339	27,191
90 & UP	79	2,275,797	28,808	10	160,822	16,082	89	2,436,619	27,378
<b>TOTAL</b>	<b>3,958</b>	<b>155,954,764</b>	<b>39,402</b>	<b>716</b>	<b>25,043,473</b>	<b>34,977</b>	<b>4,674</b>	<b>180,998,237</b>	<b>38,724</b>

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM  
 DATA USED IN THE JUNE 30, 2019 (LAG) ACTUARIAL VALUATION  
 FOR DETERMINING FINAL FISCAL YEAR 2021 EMPLOYER CONTRIBUTIONS  
 SUMMARY OF PENSIONERS BY CAUSE AND GENDER

ALL FILES (ALL BENEFITS)

AGE	MALE			FEMALE			TOTAL		
	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
<i>ACCIDENTAL DEATH:</i>									
UNDER 30	1	33,779	33,779	1	37,953	37,953	2	71,732	35,866
30 TO 34	2	3,474	1,737	1	1,733	1,733	3	5,207	1,736
35 TO 39	3	80,021	26,674	3	107,226	35,742	6	187,247	31,208
40 TO 44	2	17,401	8,701	3	71,972	23,991	5	89,373	17,875
45 TO 49	2	13,958	6,979	15	686,488	45,766	17	700,446	41,203
50 TO 54	4	197,813	49,453	22	1,282,870	58,312	26	1,480,683	56,949
55 TO 59	2	110,665	55,333	23	1,399,315	60,840	25	1,509,980	60,399
60 TO 64	1	37,651	37,651	31	1,385,349	44,689	32	1,423,000	44,469
65 TO 69	1	36,725	36,725	34	1,601,705	47,109	35	1,638,430	46,812
70 TO 74	2	71,753	35,877	27	1,350,076	50,003	29	1,421,829	49,029
75 TO 79	3	119,427	39,809	23	1,032,880	44,908	26	1,152,307	44,320
80 TO 84	0	0	0	8	204,135	25,517	8	204,135	25,517
85 TO 89	0	0	0	4	108,578	27,145	4	108,578	27,145
90 & UP	0	0	0	4	99,911	24,978	4	99,911	24,978
<b>TOTAL</b>	<b>23</b>	<b>722,667</b>	<b>31,420</b>	<b>199</b>	<b>9,370,191</b>	<b>47,086</b>	<b>222</b>	<b>10,092,858</b>	<b>45,463</b>
<i>OTHER BENEFICIARIES:</i>									
UNDER 30	90	1,213,586	13,484	117	1,658,023	14,171	207	2,871,609	13,873
30 TO 34	74	884,139	11,948	95	1,293,727	13,618	169	2,177,866	12,887
35 TO 39	100	1,249,337	12,493	125	1,470,590	11,765	225	2,719,927	12,089
40 TO 44	122	1,691,238	13,863	202	2,616,988	12,955	324	4,308,226	13,297
45 TO 49	135	1,508,500	11,174	242	3,059,148	12,641	377	4,567,648	12,116
50 TO 54	154	1,633,485	10,607	365	5,042,904	13,816	519	6,676,389	12,864
55 TO 59	174	1,733,014	9,960	551	8,365,022	15,182	725	10,098,036	13,928
60 TO 64	170	1,709,095	10,054	863	15,124,260	17,525	1,033	16,833,355	16,296
65 TO 69	187	2,215,127	11,846	1,230	24,800,902	20,163	1,417	27,016,029	19,066
70 TO 74	166	1,971,743	11,878	1,637	31,626,671	19,320	1,803	33,598,414	18,635
75 TO 79	146	1,952,046	13,370	1,895	35,820,432	18,903	2,041	37,772,478	18,507
80 TO 84	114	1,453,143	12,747	1,861	32,327,259	17,371	1,975	33,780,402	17,104
85 TO 89	76	759,749	9,997	1,764	29,328,296	16,626	1,840	30,088,045	16,352
90 & UP	72	800,224	11,114	2,228	30,575,685	13,723	2,300	31,375,909	13,642
<b>TOTAL</b>	<b>1,780</b>	<b>20,774,426</b>	<b>11,671</b>	<b>13,175</b>	<b>223,109,907</b>	<b>16,934</b>	<b>14,955</b>	<b>243,884,333</b>	<b>16,308</b>
<i>ALL PENSIONERS AND BENEFICIARIES:</i>									
UNDER 30	91	1,247,365	13,707	118	1,695,976	14,373	209	2,943,341	14,083
30 TO 34	85	1,256,868	14,787	101	1,434,828	14,206	186	2,691,696	14,471
35 TO 39	164	4,287,815	26,145	142	2,117,295	14,911	306	6,405,110	20,932
40 TO 44	292	10,083,844	34,534	305	6,600,279	21,640	597	16,684,123	27,947
45 TO 49	777	34,425,373	44,305	596	20,933,685	35,124	1,373	55,359,058	40,320
50 TO 54	2,602	129,611,131	49,812	1,603	65,449,313	40,829	4,205	195,060,444	46,388
55 TO 59	7,314	350,734,917	47,954	3,837	137,553,528	35,849	11,151	488,288,445	43,789
60 TO 64	11,969	498,275,561	41,631	8,161	252,063,514	30,886	20,130	750,339,075	37,275
65 TO 69	17,506	675,436,729	38,583	12,446	360,062,305	28,930	29,952	1,035,499,034	34,572
70 TO 74	17,359	619,708,104	35,700	12,952	343,983,976	26,558	30,311	963,692,080	31,793
75 TO 79	13,876	453,063,144	32,651	10,138	244,162,482	24,084	24,014	697,225,626	29,034
80 TO 84	9,047	267,692,112	29,589	7,363	152,416,995	20,700	16,410	420,109,107	25,601
85 TO 89	4,934	133,433,047	27,044	5,014	91,202,742	18,190	9,948	224,635,789	22,581
90 & UP	3,160	81,276,427	25,720	5,201	79,122,033	15,213	8,361	160,398,460	19,184
<b>TOTAL</b>	<b>89,176</b>	<b>3,260,532,437</b>	<b>36,563</b>	<b>67,977</b>	<b>1,758,798,951</b>	<b>25,873</b>	<b>157,153</b>	<b>5,019,331,388</b>	<b>31,939</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 - 231	<ul style="list-style-type: none"> <li>Revenue by Source</li> <li>Changes in Fiduciary Net Position</li> <li>Benefit Payments by Type</li> <li>Benefit Payments (VSF)</li> <li>Benefits Paid</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 232 - 237	<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 2020, 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 238 - 239	<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 240 - 241	<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 242 - 243	<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, 2021  
(in thousands)

	NYCERS	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	TOTAL
Cash Balance July 1, 2020	\$ 80,415	\$ 4,459	\$ 37	\$ 63	\$ 84	\$ 52	\$ 85,110
<b>Receipts</b>							
Member Contributions	579,259	-	-	-	-	-	579,259
Employer Contributions	3,816,325	-	-	-	-	-	3,816,325
Member Loan Payments	370,393	-	-	-	-	-	370,393
Interest and Dividends	1,759,090	524	-	-	-	-	1,759,614
Investments Redeemed	176,587,827	102,003	-	-	-	-	176,689,830
Transfers to Variable Supplements Funds	-	109,563	1,728	2,504	3,307	2,824	119,926
Miscellaneous	3,312	-	-	-	-	-	3,312
<b>Total Cash Receipts</b>	<b>183,116,206</b>	<b>212,090</b>	<b>1,728</b>	<b>2,504</b>	<b>3,307</b>	<b>2,824</b>	<b>183,338,659</b>
<b>Total Cash Available</b>	<b>183,196,621</b>	<b>216,549</b>	<b>1,765</b>	<b>2,567</b>	<b>3,391</b>	<b>2,876</b>	<b>183,423,769</b>
<b>Disbursements</b>							
Benefit Payments and Withdrawals	5,522,995	101,048	1,603	2,389	3,250	2,710	5,633,995
Transfers to other Retirement Systems	4,938	-	-	-	-	-	4,938
Transfers to Variable Supplements Funds	17,926	102,000	-	-	-	-	119,926
Loans to Members	332,418	-	-	-	-	-	332,418
Investments Purchased	176,863,465	8,086	-	-	-	-	176,871,551
Investment Expenses	247,640	-	-	-	-	-	247,640
Administrative Expenses	83,006	-	-	-	-	-	83,006
Miscellaneous	1,535	4	1	3	2	2	1,547
<b>Total Cash Disbursements</b>	<b>183,073,923</b>	<b>211,138</b>	<b>1,604</b>	<b>2,392</b>	<b>3,252</b>	<b>2,712</b>	<b>183,295,021</b>
<b>Cash Balance June 30, 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>

**TABLE OF REVENUE BY SOURCE (QPP & VSF)**  
 Fiscal Years 2012 through 2021  
 (in thousands)

Fiscal Year Ended June 30	Member Contributions	Employer Contributions	Net Investment Income (QPP)	Net Investment Income (VSF)	Net Investment Income (QPP+VSF)	Other Income	Total Revenue
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
2012	403,641	3,017,004	578,893	n/a	578,893	4,772	4,004,310

Note: Effective 2013 and thereafter, the financial statements include the Variable Supplements Funds.

**TABLE OF CHANGES IN FIDUCIARY NET POSITION (QPP & VSF)<sup>1</sup>**  
 Fiscal Years 2012 through 2021  
 (in thousands)

Fiscal Year Ended June 30	Additions to Fiduciary Net Position <sup>2</sup>	Deductions from Plan Net Position				Net Change in Fiduciary Net Position	
		Benefit Payments <sup>3</sup>	Refunds	Payments to Other Pension Systems and Funds	Administrative Expenses		Total Deductions
2021	\$ 22,608,092	\$ 5,585,336	\$ 93,713	\$ 5,671	\$ 87,413	\$ 5,772,133	\$ 16,835,959
2020	6,704,484	5,232,445	80,001	9,087	77,667	5,399,200	1,305,284
2019	8,682,006	5,168,846	89,960	9,769	82,073	5,350,648	3,331,358
2018	9,059,500	4,897,216	89,493	9,055	59,689	5,055,453	4,004,047
2017	10,827,125	4,573,176	75,765	8,087	59,671	4,716,699	6,110,426
2016	5,025,794	4,382,120 <sup>4</sup>	72,135	7,440	56,683	4,518,378 <sup>4</sup>	507,416
2015	4,806,636	4,259,018	66,738	7,142	54,635	4,387,533	419,103
2014	11,477,429	3,973,698	66,747	7,228	50,431	4,098,104	7,379,325
2013	8,456,748	3,803,312	60,179	5,250	48,666	3,917,407	4,539,341
2012	4,004,310	3,642,520	59,151	17,418	51,385	3,770,474	233,836

Notes:

- 1) Breakout between the QPP and each VSF for FY 2020 and FY 2021 is included in the Combining Statement of Changes in Fiduciary Net Position.
- 2) Per Table of Revenue by Source.
- 3) Per Table of Benefit Payments by Type. Includes payments from Variable Supplements Funds. For details, please refer to Table of Benefit Payments (VSF).
- 4) 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 & VSF)**  
 Fiscal Years 2012 through 2021  
 (in thousands)

Fiscal Year Ended June 30	Total Retirement Benefits (QPP)	Total Benefit Payments (VSF)	Total Retirement Benefits (QPP+VSF)	Total Death Benefits	Change in Accrued Benefits Payable	Total Benefit Payments
2021	\$ 5,310,281	\$ 112,674	\$ 5,422,955	\$ 121,718	\$ 40,663	\$ 5,585,336
2020	5,113,823	110,195	5,224,018	102,527	(94,100)	5,232,445
2019	4,884,580	106,218	4,990,798	98,297	79,752	5,168,846
2018	4,633,853	104,097	4,737,950	101,419	57,847	4,897,216
2017	4,400,869	13,921	4,414,790	101,907	56,479	4,573,176
2016	4,155,638	51,749	4,207,387	118,379	56,354	4,382,120
2015	4,058,520	90,191	4,148,711	95,068	15,239	4,259,018
2014	3,855,575	50,139	3,905,714	98,532	(30,548)	3,973,698
2013	3,692,992	12,274	3,705,266	85,132	12,914	3,803,312
2012	3,544,078	12,441	3,556,519	85,546	455	3,642,520

**TABLE OF BENEFIT PAYMENTS (VSF)<sup>1</sup>**  
 Fiscal Years 2012 through 2021  
 (in thousands)

Fiscal Year Ended June 30	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	Total
2021	\$ 102,857	\$ 1,572	\$ 2,363	\$ 3,208	\$ 2,674	\$ 112,674
2020	100,084	1,662	2,428	3,290	2,731	110,195
2019	95,729	1,722	2,522	3,446	2,799	106,218
2018	93,200	1,825	2,573	3,612	2,887	104,097
2017	2,624	1,889	2,595	3,830	2,983	13,921
2016	40,224 <sup>2</sup>	1,968	2,648	3,945	2,964	51,749
2015	78,285	2,100	2,686	4,040	3,080	90,191
2014	38,014	2,168	2,797	4,070	3,090	50,139
2013	-	2,188	2,823	4,142	3,121	12,274
2012	-	2,257	2,867	4,160	3,157	12,441

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.

**TABLE OF BENEFITS PAID (QPP & VSF)**Fiscal Years 2012 through 2021  
(in thousands)

Fiscal Year Ended June 30	Retirement Benefits	Member Loans		Refunds	Death Benefits	
		Amount Paid	No. of Loans		In Service	After Retirement
2021	\$ 5,422,955	\$ 331,216	33,355	\$ 93,713	\$ 88,680	\$ 33,038
2020	5,224,018	375,006	39,557	80,001	59,245	43,282
2019	4,990,798	417,795	45,205	89,960	59,493	38,804
2018	4,737,950	406,811	48,478	89,493	63,161	38,259
2017	4,414,790	404,624	47,877	75,765	69,383	32,524
2016	4,207,387	389,619	49,142	72,135	72,354	46,025
2015	4,148,711	381,243	48,449	66,738	60,493	34,575
2014	3,905,714	397,705	51,702	66,747	63,598	34,934
2013	3,705,266	392,580	52,952	60,179	57,590	27,542
2012	3,556,519	359,882	52,461	59,151	58,955	26,591

Note: Retirement benefits per Table of Benefit Payments by Type include payments from Variable Supplements Funds. For details, please refer to Table of Benefit Payments (VSF).

**SERVICE RETIREMENT EXPERIENCE – 10-YEAR HISTORY**  
**TABLE OF AVERAGE ANNUAL BENEFIT PAYMENTS BY YEARS OF SERVICE**  
 Calendar Years 2016 through 2020

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			
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
2016	143	439	376	1,057	1,873	1,134	396	150			5,568
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
2016	7,913	13,123	19,191	40,187	47,836	55,647	64,058	88,142			44,518
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
2016	67,056	64,965	69,281	87,362	88,750	91,375	92,837	81,162			85,447
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%
2016	12%	20%	28%	46%	54%	61%	69%	109%			52%

**SERVICE RETIREMENT EXPERIENCE – 10-YEAR HISTORY (Continued)**  
**TABLE OF AVERAGE ANNUAL BENEFIT PAYMENTS BY YEARS OF SERVICE**  
 Calendar Years 2011 through 2015

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			
2015	152	499	371	949	2,043	1,095	285	171			5,565
2014	134	456	347	1,075	1,884	996	250	189			5,331
2013	149	447	322	1,239	1,709	915	216	204			5,201
2012	176	436	307	1,215	1,609	842	178	182			4,945
2011	174	399	320	1,588	1,643	865	337	209			5,535
2015	\$ 7,649	\$ 13,223	\$ 19,352	\$ 35,501	\$ 46,515	\$ 53,945	\$ 59,082	\$ 81,760	\$	\$	\$ 41,968
2014	7,243	13,312	18,431	35,761	44,660	52,326	61,222	89,189			41,316
2013	6,741	12,536	17,987	34,628	42,273	50,889	59,072	77,790			38,980
2012	6,547	12,200	17,973	35,385	42,797	50,869	60,081	73,829			38,586
2011	6,807	11,839	17,613	35,740	41,525	50,904	62,918	79,151			39,434
2015	\$ 64,281	\$ 64,821	\$ 69,363	\$ 78,541	\$ 86,944	\$ 88,146	\$ 85,010	\$ 77,424	\$	\$	\$ 81,491
2014	60,359	64,622	65,592	79,117	84,265	85,921	87,335	85,512			80,226
2013	58,112	61,601	64,599	76,020	80,120	82,524	80,735	77,442			76,392
2012	54,558	60,396	63,734	75,933	80,597	82,714	78,846	69,914			75,659
2011	56,725	59,195	60,734	76,043	78,349	83,449	79,643	79,951			75,835
2015	12%	20%	28%	45%	54%	61%	70%	106%			52%
2014	12%	21%	28%	45%	53%	61%	70%	104%			52%
2013	12%	20%	28%	46%	53%	62%	73%	101%			51%
2012	12%	20%	28%	47%	53%	62%	76%	106%			51%
2011	12%	20%	29%	47%	53%	61%	79%	99%			52%

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**SERVICE RETIREMENT EXPERIENCE**  
**TABLE OF AVERAGE RETIREMENT ALLOWANCE BY AGE AND YEARS OF SERVICE**  
 Calendar Year 2020

	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			
Number of Retirees	Under 50	0	0	0	224	24	0	0	0	0	248	
	50-54	0	0	0	138	92	90	6	0	0	326	
	55-59	4	47	42	211	444	466	95	2	1,311		
	60-64	19	167	128	375	550	629	349	48	2,265		
	65-69	27	185	140	297	220	208	102	44	1,223		
	70 & Over	13	67	78	138	74	59	35	20	484		
Average Retirement Allowance	Under 50	\$ -	\$ -	\$ -	\$ 63,562	\$ 68,076	\$ -	\$ -	\$ -	\$ -	\$ 63,999	
	50-54	-	-	-	63,410	65,004	77,079	85,648	-	68,043		
	55-59	6,482	14,745	21,344	48,224	56,986	67,836	81,226	84,471	58,421		
	60-64	7,441	16,489	20,313	40,418	53,665	62,033	69,893	75,027	51,735		
	65-69	9,512	15,585	20,589	38,216	48,204	59,519	70,883	85,797	41,997		
	70 & Over	10,183	17,082	21,762	37,416	45,254	59,664	63,476	89,069	39,276		
Average Retirement Allowance as a % of Salary Base	Under 50	0%	0%	0%	50%	55%	0%	0%	0%	51%		
	50-54	0%	0%	0%	51%	55%	62%	67%	0%	56%		
	55-59	12%	21%	28%	47%	53%	60%	66%	73%	54%		
	60-64	13%	21%	28%	44%	54%	62%	69%	75%	54%		
	65-69	13%	21%	29%	43%	54%	63%	70%	81%	48%		
	70 & Over	15%	21%	29%	43%	55%	63%	72%	102%	47%		

**SERVICE RETIREMENT EXPERIENCE  
TABLE OF DISTRIBUTION OF RETIREMENT ALLOWANCE  
BY AGE OF RETIREMENT  
Calendar Year 2020**

<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	7	7	3	18
5,000 - 9,999	-	-	19	52	55	18	144
10,000 - 14,999	-	-	30	89	115	42	276
15,000 - 19,999	-	1	34	97	99	37	268
20,000 - 24,999	-	2	49	113	82	54	300
25,000 - 29,999	-	4	54	132	100	50	340
30,000 - 34,999	2	6	66	139	105	50	368
35,000 - 39,999	2	10	65	175	102	47	401
40,000 - 44,999	-	7	89	161	87	41	385
45,000 - 49,999	19	15	85	189	71	28	407
50,000 - 54,999	37	36	95	152	70	17	407
55,000 - 59,999	52	46	119	165	63	18	463
60,000 - 64,999	40	41	109	144	54	17	405
65,000 - 69,999	30	36	96	132	46	9	349
70,000 - 74,999	25	25	80	126	51	11	318
75,000 - 79,999	17	22	76	108	22	7	252
80,000 - 84,999	9	18	61	65	20	7	180
85,000 - 89,999	5	11	34	53	18	6	127
90,000 - 94,999	1	6	35	35	7	5	89
95,000 - 99,999	1	13	41	40	12	2	109
\$100,000 or more	8	27	73	91	37	15	251
<b>Total</b>	<b>248</b>	<b>326</b>	<b>1,311</b>	<b>2,265</b>	<b>1,223</b>	<b>484</b>	<b>5,857</b>



**SERVICE RETIREMENT EXPERIENCE  
TABLE OF DISTRIBUTION OF RETIREMENT ALLOWANCE  
BY YEARS OF SERVICE  
Calendar Year 2020**

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	15	3	-	-	-	-	-	-	18
5,000 - 9,999	22	115	7	-	-	-	-	-	144
10,000 - 14,999	20	127	124	4	1	-	-	-	276
15,000 - 19,999	5	100	85	72	5	1	-	-	268
20,000 - 24,999	-	74	64	101	54	7	-	-	300
25,000 - 29,999	1	29	56	111	80	57	6	-	340
30,000 - 34,999	-	6	28	128	115	60	30	1	368
35,000 - 39,999	-	5	10	140	123	85	29	9	401
40,000 - 44,999	-	5	5	117	115	99	41	3	385
45,000 - 49,999	-	-	2	113	130	111	39	12	407
50,000 - 54,999	-	-	2	123	135	111	31	5	407
55,000 - 59,999	-	2	2	154	151	116	35	3	463
60,000 - 64,999	-	-	2	101	129	127	38	8	405
65,000 - 69,999	-	-	-	75	96	133	38	7	349
70,000 - 74,999	-	-	1	52	87	132	38	8	318
75,000 - 79,999	-	-	-	36	39	109	60	8	252
80,000 - 84,999	-	-	-	16	43	72	42	7	180
85,000 - 89,999	-	-	-	17	16	55	29	10	127
90,000 - 94,999	-	-	-	4	17	40	26	2	89
95,000 - 99,999	-	-	-	8	26	40	32	3	109
\$100,000 or more	-	-	-	11	42	97	73	28	251
<b>Total</b>	<b>63</b>	<b>466</b>	<b>388</b>	<b>1,383</b>	<b>1,404</b>	<b>1,452</b>	<b>587</b>	<b>114</b>	<b>5,857</b>

**ORDINARY DISABILITY RETIREMENT EXPERIENCE  
TABLE OF AVERAGE ANNUAL BENEFIT PAYMENTS**  
Calendar Years 2011 through 2020

Calendar Year	Number of Retirees	Average Age	Average Years of Service	Average Retirement Benefit	Average Salary Base	Average Retirement Benefit as a % of Salary Base
2020	193 <sup>1</sup>	55	19	\$ 30,999	\$ 83,781	37%
2019	328 <sup>2</sup>	55	18	26,443	73,453	36%
2018	301	55	18	25,370	70,472 <sup>3</sup>	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%
2011	475	54	18	21,687	60,242	36%

Note:

- 1) For 2020, 95 of the 193 ordinary disability retiree cases have been processed and finalized.
- 2) For 2019, 179 of the 328 ordinary disability retiree cases have been processed and finalized.
- 3) This 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 2011 through 2020

Calendar Year	Number of Retirees	Average Age	Average Years of Service	Average Retirement Benefit <sup>1</sup>	Average Salary Base	Average Retirement Benefit as a % of Salary Base
2020	75 <sup>2</sup>	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 <sup>3</sup>	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%
2011	89	49	n/a	62,119	83,945	74%

Notes:

- 1) Certain accidental disability benefits are reduced by amounts awarded by the New York State Workers' Compensation Board.
- 2) For 2020, 46 of the 75 accidental disability retiree cases have been processed and finalized.
- 3) This 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, 2021

Pension Option	Service	Disability (Non-Duty)	Disability and Deaths (Duty)	Total <sup>1</sup>
Single Life	79,306	6,030	4,106	89,442
Joint and Survivor	30,513	968	140	31,621
Lump Sum or Term Certain	12,227	1,840	485	14,552
Advance Payments <sup>2</sup>	7,318	251	69	7,638
Surviving Annuitants	18,060	2,432	352	20,844
<b>Total</b>	<b>147,424</b>	<b>11,521</b>	<b>5,152</b>	<b>164,097</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 2012 through 2021

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
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
2012	110,205	27,292	9,468	17,086	4,583	31,351	16,110	15,339	140,366	25,365

**TABLE OF PENSIONERS AND ACTIVE MEMBERS**  
Fiscal Years 2012 through 2021

Year Ended June 30 <sup>2</sup>	Pensioners		Active Members <sup>1</sup>			Total		
	Counts	Percentage Change	Year Ended June 30 <sup>2</sup>	Counts	Percentage Change	Year Ended June 30 <sup>2</sup>	Counts	Percentage Change
2021	167,934	5.0	2021	249,113	1.1	2021	417,047	2.7
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
2012	137,987	1.9	2012	212,347	1.2	2012	350,334	1.4

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 2019 is final. 2020 and 2021 data is preliminary and may be subject to future adjustments as the data is refined.

## TABLE OF RECIPIENTS (VSF)<sup>1</sup>

Fiscal Years 2012 through 2021

Year Ended June 30	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	TOTAL
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
2012	-	192	246	354	271	1,063

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**

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1-877-6NYCERS  
347-643-3501 - TTY (hearing impaired)

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### **CUSTOMER SERVICE HOURS**

Monday - Friday, 8 am – 5 pm