

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

#### COMPREHENSIVE ANNUAL FINANCIAL REPORT

# FOR THE FISCAL YEARS ENDED JUNE 30, 2016 AND JUNE 30, 2015

**Prepared by:** The Finance Division of the

**New York City Employees' Retirement System** 

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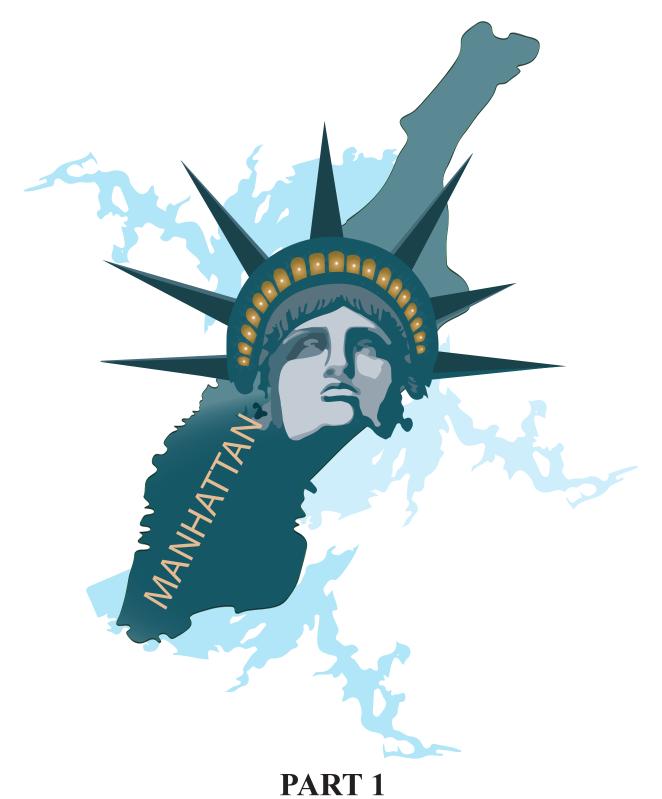
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#### NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR THE FISCAL YEARS ENDED JUNE 30, 2016 AND JUNE 30, 2015

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INTRODUCTORY SECTION

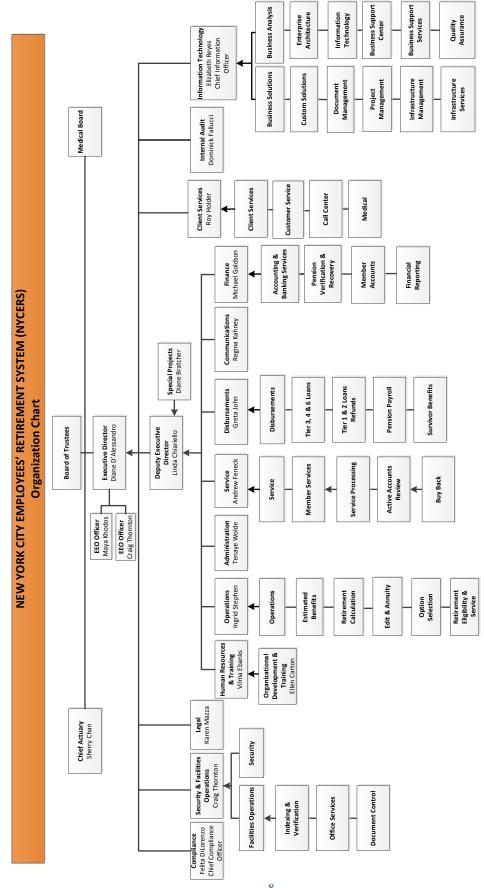


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Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

# New York City Employees' Retirement System New York

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2015

Executive Director/CEO



# **Public Pension Coordinating Council**

# Public Pension Standards Award For Funding and Administration 2016

Presented to

### New York City Employees' Retirement System

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

Presented by the Public Pension Coordinating Council, a confederation of

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

> Alan H. Winkle Program Administrator

Clan Helingle



December 31, 2016

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

We are pleased to submit the Comprehensive Annual Financial Report (CAFR) of the New York City Employees' Retirement System (Plan) for the fiscal year ended June 30, 2016. The CAFR consists of five sections:

- 1. The *Introductory Section* which 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* which contains the opinion of the independent certified public accountant, 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* which contains a report on investment policies and activity, investment results, and various investment schedules.
- 4. The *Actuarial Section* which contains the Plan's actuarial certification letter and various actuarial tables.
- 5. The *Statistical Section* which contains various statistical tables consisting of significant data pertaining to the Plan.

#### ACCOUNTING SYSTEM AND REPORTS

This CAFR 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 CAFR is the responsibility of the Plan's management. The accrual basis of accounting is used to record assets and liabilities, and revenue and expenses. Revenues for the system are 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 benefits to be derived. The objective of a system of internal accounting control is to provide management with reasonable, but not necessarily absolute, assurance that assets are safeguarded against loss from unauthorized use or disposition. It 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 generally accepted accounting principles.

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

In fiscal year 2015, the Plan adopted 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 also requires additional related note disclosures. There was no material impact on the Plan's financial statement as a result of the implementation of Statement No. 72.

#### **AWARDS**

The GFOA awarded a Certificate of Achievement for Excellence in Financial Reporting to NYCERS for its CAFR for the fiscal year ended June 30, 2015. In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized CAFR, 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 30 years.

A Certificate of Achievement is valid for a period of one year only. We believe our CAFR for the fiscal year ended June 30, 2016 continues to conform to the Certificate of Achievement Program requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

The Public Pension Coordinating Council (PPCC) awarded a Public Pension Standards Award for Funding and Administration to NYCERS for 2016. This is the seventh year that NYCERS has applied for and received this prestigious award. In order to be awarded a Public Pension Standards Award, a public pension program must meet professional standards for plan design, administration, and 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, 2014, the date of the Plan's most recent actuarial valuation, the Plan's membership included 184,762 members in active pay status, 142,095 retirees and beneficiaries receiving benefits, 9,674 terminated vested members who are not yet receiving benefits, and 16,527 members who are no longer on payroll, but not otherwise classified.

#### **INITIATIVES**

NYCERS has embarked on a multi-year project to modernize our business processes and related technology. The principal objective of this initiative is to replace our legacy data processing environment and establish a new Pension Administration System that will transform the way we do business and interact with our members, pensioners, and various stakeholders such as employers and other City agencies. The intended outcome is to provide streamlined services in a modern context using up-to-date technologies that are flexible and provide value in an ever-changing environment.

#### **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 of joining the system upon appointment or at anytime 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 188 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 Corrections, 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 later of 25 years of service or until they retire, except DA Investigator members who must contribute 3% of gross wages until they retire.

Employer contributions are determined annually by the Chief Actuary of the system.

#### **REVENUES**

As mentioned previously, the funds needed to finance retirement benefits are accumulated from a combination of employer contributions, employee contributions, and through income on investments. Contributions and investment income for fiscal year 2016 totaled \$5.0 billion, an increase of \$219 million from \$4.8 billion for fiscal year 2015. As discussed further in the Management Discussion and Analysis in the Financial Section, the slight increase in revenue is primarily the result of the increased employer contributions in fiscal year 2016. The Table of Revenue by Source on page 202 presents figures for the last 10 years.

#### **EXPENSES**

The primary expenses of a retirement system relate to the purpose that the system was created - to pay 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 204 and the Table of Changes in Fiduciary Net Position on page 203 present the details of the different expenses over the last 10 years.

#### **FUNDING**

One of the most important measures for 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, 2014, the Plan's most recent actuarial valuation date, the Plan's funded ratio is 68.1%. 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, 2016, the fiduciary net position represents 69.57% of total pension liability for NYCERS and the 5 VSFs.

#### **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 32.6% in Domestic Equities, 16.9% in an International Equity fund, 33.5% in Domestic Fixed Income, and 17.0% in Alternative Investments.

For the one-year period that ended on June 30, 2016, the Plan's rate of return on investments was 1.52%, lower than the 3.11% return experienced during the year ending June 30, 2015. 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 134 and 135. Although this CAFR does not include a full list of the Plan's investment securities, such information is available upon request.

#### ECONOMIC CONDITIONS

The City's economy, as measured by the change in real gross city product, grew 3.1% in fiscal year 2016, lower than the 3.5% growth in fiscal year 2015, but higher than the nation's 1.7%.

The unemployment rate fell to 5.3% in fiscal year 2016, the lowest level since fiscal 2008. The labor force grew by 18,100, rising to a record level of almost 4.2 million. All five boroughs within the city enjoyed a broad decline in the unemployment rate during the fiscal year.

The City added 98,100 private sector jobs, a gain of 2.7%, in fiscal year 2016, less than the 3.8% added in fiscal year 2015, but better than the nation's 2.2%. About 47% of those new jobs were in the low-wage sector (below \$60,000 per year); with the remainder evenly split between the middle-wage sector (\$60,000 to \$119,000) and the high-wage sector (over \$119,000).

Strong job gains during fiscal year 2016 have pushed wages higher in the city overall. On a year-over-year basis, wages in New York City grew 0.6% in the first three quarters of the fiscal year. This wage growth was offset by a decline in wages of 6.5% in the securities industry. Excluding this decline, wages in the City would have grown by 2.5%

#### PROFESSIONAL SERVICES

The opinion of the independent certified public accounting firm on the Plan's financial statements is included in this CAFR. 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 137. A listing of brokerage firms, and the amounts paid to such firms, can be found in the Schedule of Brokers' Commissions on page 144. Other consultant services are shown in the Financial Section's Schedule of Payments to Consultants on page 124 Actuarial services are provided to the Plan by the Chief Actuary employed by the Board of Trustees. The City's Corporation Counsel provides legal services to the Plan.

#### ACKNOWLEDGMENTS

The compilation of this CAFR 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 to the many people who have worked diligently to ensure the continued successful operation of the system.

Respectfully submitted,

Aine L'aleman

Diane D'Alessandro

Michael A. Goldson

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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 or any of the following uniformed forces:

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

Service in one of the above-mentioned uniformed forces must have been rendered immediately prior to becoming a member of the uniformed force of the NYC Department of Correction to count as Allowable Correction Service.

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 or any of the following uniformed forces:

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

Service in one of the above-mentioned uniformed forces must have been rendered immediately prior to becoming a member of the uniformed force of the NYC Department of Sanitation to count as Allowable Sanitation Service.

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:

- 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 (not purchased service) while employed by the New York City Transit Authority in a Career and Salary title or Transit Operating Force title.

#### Annuity

Payments made for the life of a Tier 1 or Tier 2 retired derived from his or her Accumulated Deductions. These payments are typically based on the contributions the employee made to NYCERS throughout his or her 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, purchased Military Service, up to six months of Purchased Service, provided such service was continuous and immediately preceded membership prior to January 1, 1968, or Pension Enhancement Service.

#### **Credited Service**

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

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

#### Designated Beneficiary

The person(s) nominated by a member or retiree to receive an Ordinary Death Benefit or Post-Retirement Death Benefit, respectively, upon his or her 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 Tier 1 or Tier 2 uniformed worker of the NYC Department of Sanitation may subsequently remarry and still retain the Accidental Death Benefit.)
- o dependent child up to age 18 for Tiers 1 and 2 members
- o dependent child up to age 25 for Tiers 3, 4 and 6 members
- o dependent parents, or for Tiers 3, 4 and 6 members only, any person up to age 21 who qualified as a dependent on the member's final Federal income tax return.
- 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.

#### **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 his or her 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 his or her 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 or 22-Year Plan 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 him or her 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 Tier 2, 3, 4 and 6 members. 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.

# LEGISLATION ENACTED DURING FISCAL YEAR 2016 (July 1, 2015 – June 30, 2016)

Laws of 2015 (enacted between July 1, 2015 and December 31, 2015)

#### Chapter 23 of the Laws of 2015

Chapter 23 of the Laws of 2015 increases the salary used in the computation of the special accidental death benefit provided under Section 208-f of the NYS General Municipal Law by 3% if the date of death was before 2015. The beneficiaries of the following NYCERS members are covered: uniformed members of the New York City Housing Authority and the New York City Transit Authority, uniformed members of the New York City Department of Correction, Emergency Medical Technicians and Triborough Bridge and Tunnel Authority (TBTA) members. The benefit is payable to the widow, widower, or the children of the deceased (under 18 years of age or under 23 if the child is a student) if the widow or widower is deceased. Chapter 23 is deemed to have been in full force and effect on July 1, 2015.

#### Chapter 510 of the Laws of 2015

An act to amend the New York State Retirement and Social Security Law, to clarify in Tier 6 the definition of multiple employers for the purpose of exclusion of wages, and to change the plan year for contributions for the New York city retirement systems from plan year April 1 to March 31 to plan year January 1 to December 31. Signed November 20, 2015.

Laws of 2016 (enacted between January 1, 2016 and June 30, 2016)

#### Chapter 41 of the Laws of 2016

Chapter 41 of the Laws of 2016 allows active NYCERS members to purchase up to three years of military service credit, regardless of when or where the military service was performed. Chapter 41 is deemed to have been in full force and effect on May 31, 2016.

#### **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

#### FIFTY-FIVE YEAR INCREASED Service Fraction Plan (Plan B)

#### SERVICE RETIREMENT

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

#### **VESTED RETIREMENT**

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

#### **DISABILITY RETIREMENT**

- Ordinary must have 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

- 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

- 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 x 1/100 for each year of service that would have been completed upon reaching age 55 for eligibility for service retirement x Final Compensation, up to 25% of Final Compensation; or, if greater:
  - 2 x 1/100 for each year of actual service completed to date x Final Compensation
  - Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation for same injury
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met.

- 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 he/ she 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% 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
- 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% x Final Salary for each year after June 30, 1968;
     1.20% x Final Salary for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit=Service Retirement Benefit
  - Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- Heart Presumption: Heart ailments resulting in disability presumed line-ofduty; 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

- 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 he/ she 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% 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 Renefit
  - 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% x 1.67% x Final Compensation x Credited Service on or after 09/30/51
  - 55% x 1.67% x Final Compensation x Credited Service prior to 10/1/51

#### VESTED RETIREMENT

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

#### **DISABILITY RETIREMENT**

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

- 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, his or her benefit will be paid as a Maximum Retirement Allowance payable in monthly installments throughout his or her life, with all payments ceasing at death.

#### **OPTION 1:**

#### UNMODIFIED AND MODIFIED INITIAL RESERVE

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

#### **OPTION 2:**

#### 100% JOINT-AND-SURVIVOR

The pensioner receives a reduced monthly lifetime allowance. When the pensioner 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 pensioner receives a reduced monthly lifetime allowance. When the pensioner 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 pensioner receives a reduced monthly lifetime allowance under either a 100% or 50% joint-and-survivor arrangement, but if the beneficiary dies before the pensioner, the pensioner'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 pensioner receives a reduced monthly lifetime allowance with the provision that when he or she dies, the beneficiary receives a limited lump-sum payment specified by the pensioner at the time he or she chose this option. More than one beneficiary can be named and the beneficiary(ies) can be changed at any time.

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

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#### **OPTION 4:**

#### FIVE-YEAR CERTAIN, TEN-YEAR CERTAIN

The pensioner receives a reduced monthly lifetime benefit. If the pensioner 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 pensioner, then upon the death of the pensioner the unexpended benefit will be paid in a lump sum divided equally to the surviving contingent beneficiaries. If all beneficiaries predecease the pensioner, the unexpended benefit will be paid in a lump sum to the pensioner's estate. If the pensioner dies later than five years (or ten years) following the effective retirement date, all retirement allowance payments will cease.

The pensioner may change the beneficiary(ies) any time within the five or ten-year period.

#### OPTION 4: CONTINUING BENEFIT

The pensioner receives a reduced monthly lifetime benefit with the provision that when he or she dies, 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 pensioner receives a reduced monthly lifetime benefit with the provision that when he or she dies, 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 pensioner, the pensioner'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.

#### 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

- 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

- 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% x FAS x the years of ACS, plus
  - 75% x 1.67% x Final Compensation x Credited Service on or after 10/01/51

#### **DISABILITY RETIREMENT**

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

#### **DEATH BENEFITS**

- An Ordinary Death Benefit (need not have been on-the-job)
- An Accidental Death Benefit (resulted from an accident on-the-job or while in military service) payable to the Designated Beneficiary(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 x 1/100 for each year of service that would have been completed upon reaching age 62 for eligibility for service retirement x Final Compensation, up to 25% of Final Compensation; or, if greater:
  - 2 x 1/100 for each year of actual service completed to date x Final Compensation
  - Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation for same injury
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met.

- 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 (T-20)

#### SERVICE RETIREMENT

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

#### 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% 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 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% x 1.67% x Final Compensation for each year on or after 09/30/51
  - 55% x 1.67% x Final Compensation x Credited Service prior to 10/1/51
- Not eligible for service retirement with a deficit in Additional Member Contributions (AMCs).

#### VESTED RETIREMENT

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

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

- 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% x 1.67% x Final Compensation for each year on or after 09/30/51
  - 55% x 1.67% x Final Compensation x Credited Service prior to 10/1/51
  - Benefit limited to 30 years

### VESTED RETIREMENT

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

### DISABILITY RETIREMENT

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

### **DEATH BENEFITS**

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary(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% x Final Compensation x Allowable Sanitation Service after first 20 years, plus
  - 1% x Final Compensation x all other service, plus
  - A Pension based on excess Increased-Take-Home-Pay (ITHP) and an Annuity based on Excess Contributions
- The Reduced Service Retirement Benefit is:
  - Same as above except employer portion of the benefit cannot exceed 2% x FAS x years of Credited Service

### VESTED RETIREMENT

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

### **DISABILITY RETIREMENT**

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

- 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% x FAS x each year of Allowable Sanitation Service, plus
  - 1% x Final Compensation x each year of Credited Service

### **DISABILITY RETIREMENT**

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

### **DEATH BENEFITS**

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary(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 (2050)

### SERVICE RETIREMENT

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

### VESTED RETIREMENT

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

### DISABILITY RETIREMENT

- Ordinary must have 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 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

- 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% x Final Salary, plus
  - For each additional year (up to a maximum of 32): 1.70% x 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% x FAS x 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% 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

# 20-YEAR RETIREMENT PLAN FOR DISTRICT ATTORNEY INVESTIGATORS (201DA)

### 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% x 1.67% x Final Compensation x Credited Service on or after September 30, 1951, plus
  - 55% x 1.67% x Final Compensation x 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% 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

- 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-I)

### SERVICE RETIREMENT

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

### VESTED RETIREMENT

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

### DISABILITY RETIREMENT

- Ordinary must have 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 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 additional (if less than 15 years of service). Retirees are eligible for a Post-Retirement Death Benefit.
- Accidental Death Benefit: A Pension equal to 50% of Final Compensation; plus a lump sum of Accumulated Deductions, basic and additional (if less than 15 years of service); plus a lump sum of ITHP; less 100% of Workers' Compensation payments for same injury
- Death Benefit for Vested Members: Need at least 10 years of Credited Service; 50% of death benefit in force at time of separation from service, plus a return of Accumulated Deductions, basic and additional (if less than 15 years of service).
- Eligible Beneficiaries may file for accidental death benefits if member's death deemed in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

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

### SERVICE RETIREMENT

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

### **VESTED RETIREMENT**

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

### **DISABILITY RETIREMENT**

- Ordinary must have 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 FAS for each year after June 30, 1968; 1.20% x FAS for each year before July 1, 1968; plus ITHP; plus Accumulated Deductions; if eligible for service retirement, benefit = Service Retirement Benefit
  - Accidental: 75% of Final Compensation; plus ITHP; plus Accumulated Deductions; less 100% of Workers' Compensation payments for same injury
- Heart Presumption: Diseases of the heart resulting in disability presumed line-of-duty; accidental benefit payable
- HAT Presumption: HIV, tuberculosis or hepatitis resulting in disability presumed line-of-duty; accidental benefit payable
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

- 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 lineof-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% 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 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% 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

- 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% 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 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% 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

- 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, his or her benefit will be paid as a Maximum Retirement Allowance payable in monthly installments throughout his or her life, with all payments ceasing at death.

### **OPTION 1:**

### RETURN OF ANNUITY RESERVE

Option 1 provides the pensioner with a reduced monthly lifetime allowance. If the pensioner dies before the Annuity portion of his or her payments equal the total value of the Annuity reserve set aside to pay his or her 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(ies) may be changed at any time.

### **OPTION 2:**

### 100% JOINT-AND-SURVIVOR

The pensioner receives a reduced monthly lifetime allowance. When the pensioner 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 pensioner receives a reduced monthly lifetime allowance. When the pensioner 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 pensioner receives a reduced monthly lifetime allowance under either a 100% or 50% joint-and-survivor arrangement, but if the beneficiary dies before the pensioner, the pensioner'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 pensioner receives a reduced monthly lifetime allowance. When the pensioner dies, the surviving beneficiary(ies) receives a limited lump-sum payment specified by the pensioner at the time he or she chose this option. More than one beneficiary can be named and the beneficiary(ies) can be changed at any time.

### OPTION 4: CONTINUING BENEFIT

The pensioner receives a reduced monthly lifetime benefit with the provision that when he or she dies, 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 pensioner receives a reduced monthly lifetime benefit with the provision that when he or she dies, 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 pensioner, the pensioner's benefit "pops up," that is, it automatically becomes the Maximum Retirement Allowance, and all payments cease at death.

**NOTE:** A pensioner 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.

### **OPTION 5 (FIVE-YEAR CERTAIN)**

The pensioner receives a reduced monthly lifetime benefit. If the pensioner 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 pensioner, then upon the death of the pensioner the unexpended benefit will be paid in a lump sum divided equally to the surviving contingent beneficiaries. If all beneficiaries predecease the pensioner, the unexpended benefit will be paid in a lump sum to the pensioner's estate. If the pensioner dies later than five years following the effective retirement date, all retirement allowance payments will cease.

The pensioner may change the beneficiary(ies) any time within the five-year period.

### **OPTION 6 (TEN-YEAR CERTAIN)**

The pensioner receives a reduced monthly lifetime benefit. If the pensioner 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 pensioner, then upon the death of the pensioner the unexpended benefit will be paid in a lump sum divided equally to the surviving contingent beneficiaries. If all beneficiaries predecease the pensioner, the unexpended benefit will be paid in a lump sum to the pensioner's estate. If the pensioner dies later than ten years following the effective retirement date, all retirement allowance payments will cease.

The pensioner may change the beneficiary(ies) 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.

# 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% x each year of Credited Service x Final Average Salary (FAS)
  - 20 or more years of Credited Service: 2% x each year of Credited Service x 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% x Credited Service x 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% 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 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

- 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

- 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% 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 SANITATION FORCE 22-YEAR RETIREMENT PLAN (SA-22)

### SERVICE RETIREMENT

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

### VESTED RETIREMENT

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

### **DISABILITY RETIREMENT**

- Ordinary Disability: Must have at least five (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% x FAS x Credited Service, if eligible for service retirement, not in excess of 22 years of such service, minus
  - 50% of Primary Social Security Disability Benefit
- Accidental Disability: Disabled because of a natural or proximate result of an accident sustained on the job. Benefit is:
  - 50% of FAS, minus
  - 50% of Primary Social Security Disability Benefit or Primary Social Security Benefit, whichever begins first

### **DEATH BENEFITS**

- An Ordinary Death Benefit payable to 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% x FAS x years of Credited Service at the completion of 20 years of Credited Service; plus
  - .33% x FAS x each month of service in excess of 20 years, but not more than 50% of FAS; minus
  - 50% of member's Primary Social Security Benefit commencing at age 62

### **VESTED RETIREMENT**

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

### DISABILITY RETIREMENT

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

### **DEATH BENEFITS**

- An Ordinary Death Benefit payable to the designated beneficiary(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
- 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

### **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.

# 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% x FAS x years of Credited Service at the completion of 20 years of Credited Service; plus
  - .33% x FAS x each month of service in excess of 20 years, but not more than 50% of FAS; minus
  - 50% of member's Primary Social Security Benefit commencing at age 62

### VESTED RETIREMENT

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

### DISABILITY RETIREMENT

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

### DEATH BENEFITS

- An Ordinary Death Benefit payable to the designated beneficiary(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.

### TIER 3 RETIREMENT OPTIONS

### MAXIMUM RETIREMENT ALLOWANCE

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

### **OPTION 1:**

### 100% JOINT-AND-SURVIVOR

The pensioner receives a reduced monthly lifetime benefit. When the pensioner 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 pensioner receives a reduced monthly lifetime benefit. When the pensioner dies, the surviving beneficiary receives a benefit of 90% or less (amount depends on the pensioner's choice, in increments of not less than 10%) of the pensioner'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 pensioner receives a reduced monthly lifetime benefit. If the pensioner 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 pensioner, then upon the death of the pensioner the unexpended benefit will be paid in a lump sum divided equally to the surviving contingent beneficiaries. If all beneficiaries predecease the pensioner, the unexpended benefit will be paid in a lump sum to the pensioner's estate. If the pensioner dies later than five years following the effective retirement date, all retirement allowance payments will cease. The pensioner may change the beneficiary(ies) any time within the five-year period.

# **OPTION 4:**

### TEN-YEAR CERTAIN

The pensioner receives a reduced monthly lifetime benefit. If the pensioner 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 pensioner, then upon the death of the pensioner the unexpended benefit will be paid in a lump sum divided equally to the surviving contingent beneficiaries. If all beneficiaries predecease the pensioner, the unexpended benefit will be paid in a lump sum to the pensioner's estate. If the pensioner dies later than ten years following the effective retirement date, all retirement allowance payments will cease.

The pensioner may change the beneficiary(ies) 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 pensioner receives a reduced monthly lifetime benefit under a 100% or 50% joint-and-survivor option. If the beneficiary dies before the pensioner, the pensioner's benefit "pops-up," that is, it automatically becomes the Maximum Retirement Allowance, and all payments cease at death.

### **BASIC 62/5 RETIREMENT PLAN**

### 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; 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

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

#### 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

- 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. 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% x each year of Credited Service x Final Average Salary (FAS)
  - Between 20 and 30 years of Credited Service: 2% x each year of Credited Service x FAS
  - More than 30 years of Credited Service: 2% x each year for first 30 years of Credited Service x FAS, plus 1.5% x each year of Credited Service in excess of 30 years x FAS

### VESTED RETIREMENT

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

#### DISABILITY RETIREMENT

- Eligibility: Must have 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 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 (SA-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% x each year of Credited Service x FAS
  - More than 30 years of Credited Service: 2% x each year for first 30 years of Credited Service x FAS, plus 1.5% x each year of Credited Service in excess of 30 years x FAS

### **VESTED RETIREMENT**

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

### DISABILITY RETIREMENT

- Ordinary must have 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-thejob accident
- Ordinary: The greater of 1/3 of FAS or 1.67% x each year of Credited Service x FAS; If eligible for service retirement, the benefit equals the Service Retirement Benefit
- Accidental: 75% of FAS
- Heart Presumption: Heart ailment presumed accidental; member eligible for benefit of 75% of FAS
- Members may file for disability benefits in connection with the World Trade Center tragedy on 9/11/01 provided certain criteria are met

- 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 he/she 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, 11/2% of FAS

### **VESTED RETIREMENT**

- A participant must have at least 25 years of Allowable Service and not have attained age 55; payable on his/her 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

- 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

- 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

- 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

- 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 (911) TECHNICIANS 25-YEAR RETIREMENT PLAN (PCT 25)

### SERVICE RETIREMENT

- 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

- 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**

- 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

- 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, his or her benefit will be paid as a Maximum Retirement Allowance payable in monthly installments throughout his or her life, with all payments ceasing at death.

### **OPTION 1:**

### 100% JOINT-AND-SURVIVOR

The pensioner receives a reduced monthly lifetime allowance. When the pensioner 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 pensioner receives a reduced monthly lifetime allowance. When the pensioner dies, the surviving beneficiary receives a lifetime benefit of 25%, 50% or 75% of the pensioner's reduced monthly benefit, depending on the pensioner'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 pensioner receives a reduced monthly lifetime benefit. If the pensioner 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 pensioner's designated primary beneficiary predeceases the pensioner, then upon the death of the pensioner the balance of the payments due for the unexpired balance of the five-year period is paid in a lump sum to the pensioner's contingent beneficiary or, if none exists, to the estate of the pensioner. 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 pensioner may change the beneficiary(ies) any time within the five-year period.

# **OPTION 4:**

### TEN-YEAR CERTAIN

The pensioner receives a reduced monthly lifetime benefit. If the pensioner 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 pensioner's designated primary beneficiary predeceases the pensioner, then upon the death of the pensioner the balance of the payments due for the unexpired balance of the 10-year period is paid in a lump sum to the pensioner's contingent beneficiary or, if none exists, to the estate of the pensioner.

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 pensioner may change the beneficiary(ies) 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 pensioner receives a reduced monthly lifetime benefit under a 100% or 50% joint-and-survivor option. If the beneficiary dies before the pensioner, the pensioner'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% x Final Average Salary (FAS) x years of Credited Service
  - 20 or more years of Credited Service: 35% of FAS for the first 20 years of Credited Service, plus 2% x FAS x 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% 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. 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% x Final Average Salary (FAS) x the number of years of Allowable Service, up to 30 years of such service, plus
  - 1.5% x FAS x 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% x Final Average Salary (FAS) x the number of years of Allowable Service, up to 30 years of such service, plus
  - 1.5% x FAS x 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% x FAS x 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% x FAS x 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% x FAS x years of service
- If eligible for Service Retirement, the benefit equals the Service Retirement if greater than above.

- 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% x FAS x the number of years of Credited Service in excess of 20, up to a maximum of 30 years.
- Not eligible for service retirement with a deficit in Additional Member Contributions (AMCs).

### VESTED RETIREMENT

- Must have at least 10 but less than 20 years of Credited Service
- Payability Date: age 63
- 2.5% x FAS x the number of years of Credited Service
- Not eligible for vested retirement with a deficit in AMCs.

### DISABILITY RETIREMENT

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

### **DEATH BENEFITS**

- An Ordinary Death Benefit (need not have been on-the-job) payable to the Designated Beneficiary(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% x FAS x the number of years of Allowable Service

### DISABILITY RETIREMENT

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

- 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.

- 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.

- 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

- 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

- 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.

- 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, his or her benefit will be paid as a Maximum Retirement Allowance payable in monthly installments throughout his or her life, with all payments ceasing at death.

### **OPTION 1:**

### 100% JOINT-AND-SURVIVOR

The pensioner receives a reduced monthly lifetime allowance. When the pensioner 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 pensioner receives a reduced monthly lifetime allowance. When the pensioner dies, the surviving beneficiary receives a lifetime benefit of 25%, 50% or 75% of the pensioner's reduced monthly benefit, depending on the pensioner'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 pensioner receives a reduced monthly lifetime benefit. If the pensioner 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 pensioner's designated primary beneficiary predeceases the pensioner, then upon the death of the pensioner the balance of the payments due for the unexpired balance of the five-year period is paid in a lump sum to the pensioner's contingent beneficiary or, if none exists, to the estate of the pensioner. 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 pensioner may change the beneficiary(ies) any time within the five-year period.

### **OPTION 4:**

### TEN-YEAR CERTAIN

The pensioner receives a reduced monthly lifetime benefit. If the pensioner 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 pensioner's designated primary beneficiary predeceases the pensioner, then upon the death of the pensioner the balance of the payments due for the unexpired balance of the 10-year period is paid in a lump sum to the pensioner's contingent beneficiary or, if none exists, to the estate of the pensioner. 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 pensioner may change the beneficiary(ies) 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 pensioner receives a reduced monthly lifetime benefit under a 100% or 50% joint-and-survivor option. If the beneficiary dies before the pensioner, the pensioner's benefit "pops-up," that is, it automatically becomes the Maximum Retirement Allowance, and all payments cease at death.



# PART 2 FINANCIAL SECTION

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM

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### **INDEPENDENT AUDITORS' REPORT**

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

### **Report on the Combining Financial Statements**

We have audited the accompanying combining statements of fiduciary net position of the New York City Employees' Retirement Fund, New York City Correction Officers' Variable Supplements Fund, New York City Housing Police Officers' Variable Supplements Fund, New York City Housing Police Superior Officers' Variable Supplements Fund, New York City Transit Police Officers' Variable Supplements Fund, and New York City Transit Police Superior Officers' Variable Supplements Fund, which collectively comprise the New York City Employees' Retirement System (the "System"), a fiduciary fund of the City of New York, as of June 30, 2016, and the related combining statements of changes in fiduciary net position for the years then ended, and the related notes to the combining financial statements, which collectively comprise the System's basic combining financial statements as listed in the table of contents.

### 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 the combining financial statements that are free from material misstatement, whether due to fraud or error.

### Auditors' Responsibility

Our responsibility is to express opinions 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 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 opinions.

### **Opinions**

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, 2016, and the changes in combining fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.



### Prior Period Financial Statements

The combining financial statements of the System as of June 30, 2015 and for the year then ended, were audited by other auditors whose report, dated October 29, 2015, expressed unmodified opinions on those financial statements.

### 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, Schedule 2, and Schedule 3, as listed in the table of contents, be presented to supplement the basic combining financial statements. Such information, although not a part of the basic combining financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic combining financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic 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 Supplementary 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 (Schedules of Investment Expenses, Administrative Expenses and Payments to Consultants) 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, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic combining financial statements or to the basic combining financial statements themselves, and other additional procedures in accordance with 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 2016 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.

October 31, 2016 (except for the Other Supplementary Information, as to which the date is December 23, 2016)

Marks Paneth Uf

M A R K S PANETH

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) JUNE 30, 2016 AND 2015

This narrative discussion and analysis of the New York City Employees' Retirement Funds ("NYCERS" or the "Fund") financial performance provides an overview of the Funds' combining financial activities for the Fiscal Years ended June 30, 2016 and 2015. It is meant to assist the reader in understanding NYCERS' combining financial statements by providing an overall review of the combining financial activities during the three years and the effects of significant changes, as well as a comparison with the prior year's activity and results. This 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 ("TPOVSF"), and the Transit Police Superior Officers' Variable Supplements Fund ("TPSOVSF") (collectively, the "Funds").

### **OVERVIEW OF BASIC COMBINING FINANCIAL STATEMENTS**

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

### FINANCIAL HIGHLIGHTS

The Funds' combined net position restricted for benefits increased by \$465 million (0.8%) from \$55.0 billion at June 30, 2015 to \$55.5 billion at June 30, 2016. The main reason for the slight increase was a decrease in the amount of payables for investment securities purchased.

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) JUNE 30, 2016 AND 2015

The Funds' combined net position restricted for benefits increased by \$419 million (0.8%) from \$54.6 billion at June 30, 2014 to \$55.0 billion at June 30, 2015. The main reason for the slight increase was an increase in value of the Funds' Domestic and International equity investments.

Fiduciary Net Position June 30, 2016, 2015 and 2014 (in thousands)

	<u>2016</u>		<u>2015</u>		<u>2014</u>
Cash	\$ 166,041	\$	44,296	\$	90,850
Receivables for investment securities sold	1,413,529		1,639,525		1,389,323
Receivables for member loans	1,081,783		1,027,069		1,058,426
Receivables for accrued earnings	280,765		267,572		259,370
Other receivables	11		11		16
Investments at fair value	54,756,585		55,679,831		55,108,300
Securities lending collateral	5,267,092		4,789,313		5,653,563
Other assets	 84,632		140,813		42,940
Total assets	 63,050,438	_	63,588,430	_	63,602,788
Accounts payable	177,909		142,088		133,798
Payable for investment securities purchased	1,794,940		3,368,991		2,960,761
Accrued benefits payable	314,386		257,254		241,504
Due to other retirement systems	1,590		1,754		1,484
Payables for securities lending transactions	 5,267,092		4,789,313		5,655,314
Total liabilities	 7,555,917		8,559,400	_	8,992,861
Net position restricted for pensions	\$ 55,494,521	\$	55,029,030	\$	54,609,927

The cash balances were \$166 million on June 30, 2016. 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 payments each day. These overdrawn balances are the main component of accounts payable.

Receivables for investment securities sold amounted to \$1.4 billion as of June 30, 2016, a decrease of \$226 million (-13.8%) from \$1.6 billion as of June 30, 2015, which was an increase of \$250 million (18.0%) from \$1.4 billion as of June 30, 2014. 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.

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) JUNE 30, 2016 AND 2015

The receivables for member loans increased \$55 million (5.3%), from \$1.03 billion at June 30, 2015 to \$1.08 billion at June 30, 2016. The principal reason for the increase is that the amount of loans issued was higher than that of fiscal year 2015.

The receivables for member loans decreased \$31 million (-3.0%), from \$1.06 billion at June 30, 2014 to \$1.03 billion at June 30, 2015. The principal reason for the decrease is that fewer loans were issued in Fiscal Year 2015 as comparable to Fiscal Year 2014.

Fair value of investments, including securities lending collateral at June 30, 2016 was \$60.0 billion, a decrease of \$445 million (-0.7%) from the June 30, 2015 investment value of \$60.5 billion. The decrease is due to the fact that the amount of holdings of debt securities reduced by \$785 million from \$12.2 billion at June 30, 2015 to \$11.4 billion at June 30 2016.

Fair value of investments, including securities lending collateral at June 30, 2015 was \$60.5 billion, a decrease of \$292 million (-0.5%) from the June 30, 2014 investment value of \$60.8 billion. The decrease is due to the fact that the amount of securities lending collateral held at June 30, 2015 decreased \$864 million from the amount held at June 30, 2014.

Other Assets decreased \$56.2 million (-39.9%) from \$141 million in Fiscal Year 2015 to \$85 million in Fiscal Year 2016. The decrease was due to the City paying its additional required contribution to NYCERS by June 30; thereby decreasing receivables as of June 30, 2016.

Other Assets increased \$97.9 million (227.9%) from \$43 million in Fiscal Year 2014 to \$141 million in Fiscal Year 2015. The increase was due to the City paying its additional required contribution of \$87 million to NYCERS in mid-July instead of by June 30; thereby increasing receivables as of June 30, 2015.

Payables for investment securities purchased amounted to \$1.8 billion as of June 30, 2016, a decrease of \$1.6 billion (-46.7%) from \$3.4 billion as of June 30, 2015, which was an increase of \$408 million (13.8%) from \$3.0 billion as of June 30, 2014. Although trades typically do not settle until a few days after trade dates, purchases of investment securities are reflected on trade dates. The resulting payables are the result of those timing differences.

Accrued benefits payable at June 30, 2016 increased \$57 million (22.2%), from \$257 million at June 30, 2015 to \$314 million at June 30, 2016. The increase in the payable is mostly the result of a project that identifies former members who never applied for the refunds of the annuity balances in their accounts.

Accrued benefits payable at June 30, 2015 increased \$16 million (6.5%), from \$241 million at June 30, 2014 to \$257 million at June 30, 2015. The increase in the payable resulted from a higher number of In-Service Survivor lump sum death benefits; as well as higher average benefits paid.

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) JUNE 30, 2016 AND 2015

Changes in Fiduciary Net Position Years Ended June 30, 2016, 2015, and 2014 (in thousands)

Additions:		<u>2016</u>		<u>2015</u>		<u>2014</u>
Member contributions Employer contributions	\$	485,508 3,365,454	\$	467,129 3,160,258	\$	447,689 3,114,068
Investment earnings: Interest and dividend income Net appreciation (depreciation) in fair		1,529,447		1,431,016		1,397,854
value of investments		(174,204)		(50,658)		6,688,980
Net securities lending income		29,657		26,511		8,801
Investment expenses		(212,996)		(231,760)		(184,611)
Net investment income		1,171,904		1,175,109	_	7,911,024
Other income		2,928		4,140		4,648
Total additions		5,025,794		4,806,636	_	11,477,429
Deductions:						
Benefit payments and withdrawals		4,496,180		4,325,756		4,040,445
Payments to other retirement systems		7,440		7,142		7,228
Administrative expenses	_	56,683	_	<u>54,635</u>	_	50,431
Total deductions		4,560,303		4,387,533		4,098,104
Net increase in net position		465,491		419,103		7,379,325
Net position restricted for pensions: Beginning of year		55.029.030		54,609,927		47,230,602
End of year	\$	55,029,030 55,494,521	\$	55,029,030	\$	54,609,927
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Employer contributions for Fiscal Year 2016 were \$3.4 billion; an increase of \$205 million (6.5%) from \$3.2 billion for Fiscal Year 2015, which was a slight increase of \$46 million (1.5%) from \$3.1 billion for Fiscal Year 2014. These increases were primarily due to a change in the post-retirement mortality rates, an increase in the amortization payment of the 2010 initial unfunded liability and a net actuarial gain.

Net investment income remained relatively level in Fiscal Year 2016, a decrease of only \$3 million (-0.3%) from \$1.2 billion in Fiscal Year 2015. Almost all of the net investment income in FY 2016 and FY 2015 can be attributed to the interest and dividends.

## NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) JUNE 30, 2016 AND 2015

Net investment income for the Fiscal Year ended June 30, 2015 totaled \$1.2 billion, compared to the net investment income of \$7.9 billion in Fiscal Year 2014. This \$6.7 billion decrease in investment gains was the result of the investment portfolio experiencing a very small depreciation of \$50 million, as compared to the \$6.7 billion appreciation earned in Fiscal Year 2014. Almost all of the net investment income in FY 2015 can be attributed to the interest and dividends. Most of the appreciation in FY 2014 resulted from gains in the domestic and international equity markets.

Investment expenses for Fiscal Year 2016 were \$213 million, compared to \$232 million in Fiscal Year 2015. The \$19 million decrease (-8.1%) in total investment expenses was primarily due to decreased expenses in the Hedge Fund sector, from \$40 million in Fiscal Year 2015 to \$17 million in Fiscal Year 2016.

Investment expenses for Fiscal Year 2015 were \$232 million, compared to \$185 million in Fiscal Year 2014. The \$47 million increase (25.5%) was primarily due to increased expenses in the Private Equity, International Equity, Fixed Income, and Hedge Fund sectors.

Benefit payments and withdrawals for the Fiscal Year ended June 30, 2016 totaled \$4.5 billion, a \$170 million (3.9%) increase from the \$4.3 billion of Fiscal Year 2015. The increase is due to the increasing number of retirees and their corresponding higher average retirement allowances.

Benefit payments and withdrawals for the Fiscal Year ended June 30, 2015 totaled \$4.3 billion, a \$285 million (7.1%) increase from the \$4.0 billion of Fiscal Year 2014. The increase is due to inclusion of VSF's in the combining financial statements, as well as the increasing number of retirees and their corresponding higher average retirement allowances.

Administrative expenses increased \$2 million (3.7%), from \$55 million in Fiscal Year 2015 to \$57 million in Fiscal Year 2016. This increase was primarily due to a project to modernize NYCERS' information technology systems and the improvement of NYCERS' facilities.

Administrative expenses increased \$4 million (8.3%), from \$51 million in Fiscal Year 2014 to \$55 million in Fiscal Year 2015. This increase was primarily due to the increase of employee salaries in Fiscal Year 2015 upon the settlement of union contracts; plus the retroactive payments that needed to be made on account of those new contracts.

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) JUNE 30, 2016 AND 2015

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

Investment Summary June 30, 2016 (in thousands)

Investments -At fair value:	<u>QPP</u>	COVSF	Combined		
Short-term investments: U.S. treasury bills and agencies Commercial paper Short-term investment fund Discount notes Short-term hedge fund	\$ 11,073 739,639 760,635 59,860	\$ 43,693 - -	\$ 11,073 739,639 804,328 59,860		
Debt securities: U.S. Government and agencies Corporate and other	4,289,153 7,157,423	- -	4,289,153 7,157,423		
Equity securities	18,523,033	-	18,523,033		
Alternative investments	9,873,044	-	9,873,044		
Collective trust funds: International equity Mortgage debt security Treasury inflation protected securities Fixed income	9,220,895 607,685 2,448,307 1,022,145	- - -	9,220,895 607,685 2,448,307 1,022,145		
Collateral from securities lending	\$ 5,267,092 59,979,984	\$ 43,693	\$ 5,267,092 60,023,677		

### INVESTMENT PERFORMANCE

Total portfolio performance (net of fees) for Fiscal Year 2016 was 1.52%, less than NYCERS' Policy benchmark, which had a rate of return of 2.28%. Domestic equities returned 1.68%, less than the Russell 3000 benchmark of 2.14%. International equity holdings returned (8.40)%, more than the MSCI AC World Index of (10.24)%. Fixed income securities returned 4.29%.

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) JUNE 30, 2016 AND 2015

Investment Summary June 30, 2015 (in thousands)

Investments -At fair value:	<u>QPP</u>	COVSF	Combined
Short-term investments: U.S. treasury bills and agencies Commercial paper Short-term investment fund Discount notes Short-term hedge fund	\$ 393,360 831,425 810,547 486,281 25,500	\$ 126,756 - - -	\$ 393,360 831,425 937,303 486,281 25,500
Debt securities: U.S. Government and agencies Corporate and other	5,368,727 6,862,950	- -	5,368,727 6,862,950
Equity securities	18,188,567	-	18,188,567
Alternative investments	9,824,907	-	9,824,907
Collective trust funds: International equity Mortgage debt security Treasury inflation protected securities Fixed income	9,501,921 492,104 1,760,761 1,006,025	- - -	9,501,921 492,104 1,760,761 1,006,025
Collateral from securities lending	\$ 4,789,313 60,342,388	\$ - 126,756	\$ 4,789,313 60,469,144

### **INVESTMENT PERFORMANCE**

Total portfolio performance for Fiscal Year 2015 was 3.11%, less than NYCERS' Policy benchmark, which had a rate of return of 3.95%. Domestic equities returned 6.35%, less than the Russell 3000 benchmark of 7.29%. International equity holdings returned (5.91)%, trailing close behind the MSCI AC World Index of (5.26)%. Fixed income securities returned 1.23%.

### **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 John D. Hartman, Associate Director of Finance, New York City Employees' Retirement System, 335 Adams Street, Suite 2300, Brooklyn, NY 11201-3751.

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# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM COMBINING STATEMENTS OF FIDUCIARY NET POSITION JUNE 30, 2016 (In thousands)

	<u>QPP</u>	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	Eliminations	<u>Total</u>
ASSETS: Cash and cash equivalents	\$ 165,68 <u>5</u>	\$ 213	\$ 30	\$ 44	\$ 29	<u>\$ 40</u>	<u>\$</u>	\$ 166,041
RECEIVABLES: Investment securities sold Member loans (Note 7) Accrued interest and dividends	1,413,529 1,081,783 280,740	- - 25	- - -	- - -	- - -	- - -	- - -	1,413,529 1,081,783 280,765
Other receivables Receivables – due from QPP Transferrable earnings due from QPP	-	11 -	991	1,318	1,967	1,448	(5,724)	11 -
to variable Supplement funds		3,000					(3,000)	
Total receivables	2,776,052	3,036	991	1,318	1,967	1,448	(8,724)	2,776,088
INVESTMENTS – At fair value (Notes 2 and 3): Short-term investments: U.S. treasury bills and agencies Commercial paper	11,073 739,639	-	Ī	-	-	-	Ī	11,073 739,639
Short-term investment fund	760,635	43,693	-	-	-	-	_	804,328
Discount notes Debt securities:	59,860	-	-	-	-	-	-	59,860
U.S. government and agency Corporate and other Equity securities Alternative investments	4,289,153 7,157,423 18,523,033 9,873,044	- - -	- - -	- - -	- - -	- - -	- - -	4,289,153 7,157,423 18,523,033 9,873,044
Collective trust funds: International equity Mortgage debt securities Treasury inflation protected securities Fixed income Collateral from securities lending	9,220,895 607,685 2,448,307 1,022,145 5,267,092	- - - -	- - - - -	- - - -	- - - - -	- - - -	- - - -	9,220,895 607,685 2,448,307 1,022,145 5,267,092
Total investments	59,979,984	43,693						60,023,677
OTHER ASSETS	84,632							84,632
Total assets	63,006,353	46,942	1,021	1,362	1,996	1,488	(8,724)	63,050,438
LIABILITIES: Accounts payable Payable for investment securities	177,887	-	-	-	22	-	-	177,909
purchased Accrued benefits payable	1,794,940 266,616	41,925	1,021	1,362	1,974	1,488		1,794,940 314,386
Amounts due to Variable Supplement Funds	5,724	-	-	-	-	-	(5,724)	-
Transferrable earnings due from QPP to Variable Supplement Funds Due to other retirement systems Securities lending (Note 2)	3,000 1,590 5,267,092	- - -	- - -	- - -	- - -	- - -	(3,000)	1,590 5,267,092
Total liabilities	7,516,849	41,925	1,021	1,362	1,996	1,488	(8,724)	7,555,917
NET POSITION RESTRICTED FOR BENEFITS	55,489,504							55,489,504
Benefits to be provided by QPP Benefits to be provided by VSF		5,017						5,469,504
Total net position restricted for benefits	<u>\$55,489,504</u>	<u>\$ 5,017</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$55,494,521</u>

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM COMBINING STATEMENTS OF FIDUCIARY NET POSITION JUNE 30, 2015 (In thousands)

	<u>QPP</u>	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	Eliminations	<u>Total</u>
ASSETS: Cash and cash equivalents	\$ 40,548	\$ 3,631	\$ 30	<u>\$ 38</u>	<u>\$ 16</u>	<u>\$ 33</u>	<u>\$</u>	\$ 44,296
RECEIVABLES: Investment securities sold Member loans (Note 7) Accrued interest and dividends Other receivables Receivables – due from QPP Transferrable earnings due from QPP	1,639,525 1,027,069 267,570	- - 2 10	- - - 1,044	- - 1 1,354	- - - 2,019	- - - - 1,530	- - - - (5,947)	1,639,525 1,027,069 267,572 11
to variable Supplement funds		49,000		<u> </u>		<u> </u>	(49,000)	
Total receivables	2,934,164	49,012	1,044	1,355	2,019	1,530	(54,947)	2,934,177
INVESTMENTS – At fair value (Notes 2 and 3): Short-term investments: U.S. treasury bills and agencies Commercial paper Short-term investment fund Discount notes Short-term hedge fund Debt securities: U.S. government and agency	393,360 831,425 810,547 486,281 25,500 5,368,727	- 126,756 - -	: : :	- - - - -	:	:	- - - - -	393,360 831,425 937,303 486,281 25,500 5,368,727
Corporate and other Equity securities	6,862,950 18,188,567	-	-	-	-	-	-	6,862,950 18,188,567
Alternative investments Collective trust funds: International equity	9,824,907	-	-	-	-	-	-	9,824,907
Mortgage debt securities Treasury inflation protected securities Fixed income Collateral from securities lending	492,104 1,760,761 1,006,025 4,789,313	- - -	-			- - - -	- - -	492,104 1,760,761 1,006,025 4,789,313
Total investments	60,342,388	126,756						60,469,144
OTHER ASSETS	140,813					<del>-</del>		140,813
Total assets	63,457,913	179,399	1,074	1,393	2,035	1.563	(54,947)	63,588,430
LIABILITIES: Accounts payable Payable for investment securities	142,067	-	-		21		-	142,088
purchased Accrued benefits payable Amounts due to Variable Supplement	3,368,991 211,517	39,693	1,074	1,393	2,014	1.563	-	3,368,991 257,254
Funds Transferrable earnings due from QPP to Variable Supplement Funds Due to other retirement systems	5,947 49,000 1,754	-	-	-	-		(5,947) (49,000)	- - 1,754
Securities lending (Note 2)	4,789,313	<del></del>		<del></del>			<del></del>	4,789,313
Total liabilities	8,568,589	39,693	1,074	1,393	2,035	1.563	(54,947)	8,559,400
NET POSITION RESTRICTED FOR BENEFITS Benefits to be provided by QPP Benefits to be provided by VSF	54,889,324	139,706	<u> </u>		<u>-</u>	- -	- -	54,889,324 139,706
Total net position restricted for benefits	\$54,889,324	<u>\$ 139,706</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>	\$55,029,030

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM COMBINING STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION YEAR ENDED JUNE 30, 2016 (In thousands)

	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	ELIM	Total
ADDITIONS:								
Contributions:								
Member contributions	\$ 485,508	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 485,508
Employer contributions	3,365,454							3,365,454
Total contributions	3,850,962	·				=		3,850,962
Investment income (Note 2):								
Interest income	692,773	184	-	-	-	-	-	692,957
Dividend income	836,490	=	-	-	=	-	=	836,490
Net depreciation in fair value of investments	(174,204)							(174,204)
Total investment income	1,355,059	184	-	-	-	-	-	1,355,243
Less:								
Investment expenses	212,996							212,996
Net income	1,142,063	184						1,142,247
Securities lending transactions:								
Securities lending income	31,719	_	_	_	_	_	_	31,719
Less - securities lending fees	2,062							2,062
Net securities lending income	29,657							29,657
Net investment income	1,171,720	184						1,171,904
Other - other income	2,928							2,928
Reimbursement of benefit payments from QPP	-	=	1,968	2,648	3,945	2,964	(11,525)	-
Transferrable earnings from QPP to Variable								
Supplement Funds		(52,724)					52,724	
Total additions	5,025,610	(52,540)	1,968	2,648	3,945	2,964	41,199	5,025,794
DEDUCTIONS:								
Benefit payments and withdrawals (Note 1)	4,402,506	82,149	1,968	2,648	3,945	2,964	-	4,496,180
Payments to other retirement systems	7,440	-	-	-	-	-	-	7,440
Amounts transferred to Variable Supplement Funds	11,525	-	-	-	=	-	(11,525)	=
Transferrable earnings from QPP to Variable								
Supplement Funds	(52,724)	-	-	-	-	-	52,724	-
Administrative expenses	56,683							56,683
Total deductions	4,425,430	82,149	1,968	2,648	3,945	2,964	41,199	4,560,303
NET INCREASE IN NET POSITION	600,180	(134,689)	-	-	-	-	-	465,491
NET POSITION RESTRICTED FOR BENEFITS:								
Beginning of year	54,889,324	139,706						55,029,030
End of year	\$ 55,489,504	\$ 5,017	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 55,494,521

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM COMBINING STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION YEAR ENDED JUNE 30, 2015 (In thousands)

	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	ELIM	Total
ADDITIONS:								
Contributions:								
Member contributions	\$ 467,129	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 467,129
Employer contributions	3,160,258							3,160,258
Total contributions	3,627,387		<del></del>					3,627,387
Investment income (Note 2):								
Interest income	635,747	10	-	-	-	-	-	635,757
Dividend income	795,259	-	-	-	-	-	-	795,259
Net depreciation in fair value of investments	(50,658)		<del></del>					(50,658)
Total investment income	1,380,348	10	-	-	-	-	-	1,380,358
Less:								
Investment expenses	231,760							231,760
Net income	1,148,588	10						1,148,598
Securities lending transactions:								
Securities lending income	28,196	-	-	-	-	-	-	28,196
Less - securities lending fees	1,685							1,685
Net securities lending income	26,511							26,511
Net investment income	1,175,099	10						1,175,109
Other - other income	4,140							4,140
Reimbursement of benefit payments from QPP	-	12	2,100	2,686	4,040	3,080	(11,918)	-
Transferrable earnings from QPP to Variable								
Supplement Funds		30,000					(30,000)	
Total additions	4,806,626	30,022	2,100	2,686	4,040	3,080	(41,918)	4,806,636
DEDUCTIONS:								
Benefit payments and withdraw als (Note 1)	4,235,565	78,285	2,100	2,686	4,040	3,080	_	4,325,756
Payments to other retirement systems	7,142	-	-	· -	· -	-	_	7,142
Amounts transferred to Variable								
Supplement Funds	11,918	-	-	-	-	-	(11,918)	-
Transferrable earnings from QPP to Variable								
Supplement Funds	30,000	-	-	-	-	-	(30,000)	-
Administrative expenses	54,635							54,635
Total deductions	4,339,260	78,285	2,100	2,686	4,040	3,080	<u>(41,918</u> )	4,387,533
NET INCREASE IN NET POSITION	467,366	(48,263)	-	-	-	-	-	419,103
NET POSITION RESTRICTED FOR BENEFITS:								
Beginning of year	54,421,958	187,969						54,609,927
End of year	\$54,889,324	\$139,706	<u>\$ -</u>	<u>\$ -</u>	\$ -	<u>\$ -</u>	<u>\$ -</u>	\$55,029,030

### 1. PLAN DESCRIPTION

The City of New York ("The City") maintains a number of pension systems providing benefits for employees of its various agencies (as defined within New York State ("State") statutes and City laws). The City's five major actuarially-funded pension systems are the New York City 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 Fund ("POLICE"), and the New York Fire Department Pension Fund ("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" or "Plan"), 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") 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 Administrative Code of the City of New York ("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 Transit Police Superior Officers and who retired on or after July 1, 1987.

Under current law, the VSFs are not to be construed as constituting a pension or retirement system. Instead, they provide defined supplemental payments, other than pension or retirement system allowances, in accordance with applicable statutory provisions. While The City guarantees these payments, the New York State Legislature has reserved to itself and the State of New York (the "State") the right and power to amend, modify, or repeal the VSFs and the payments they provide. For financial reporting purposes, however, the VSFs are considered single-employer defined benefit pension plans.

NYCERS is a fiduciary component of The City and is in the Pension and Other Employee Benefit Trust Funds section of The City's Comprehensive Annual Financial Report ("CAFR").

#### Boards of Trustees

The QPP's Board of Trustees consists of 11 members; the Mayor's representative is the Chairperson of the Board, Borough Presidents of Manhattan, the Bronx, Brooklyn, Queens, and Staten Island, the Comptroller of The City of New York, the Public Advocate, and Presidents of the three unions with the largest number of participating employees, which are District Council 37 – 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 consist of the Mayor's representative, the Comptroller and the Commissioner of Finance. Additional trustees are: 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 (1/2 vote). For the HPOVSF, two members of the association designated by the board, each of whom are entitled to cast one vote. For TPOVSF, two members of the association designated by the board, each of whom are entitled to cast one vote. 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, 2014 and June 30, 2013, the dates of the QPP's most recent completed actuarial valuations, the QPP's membership consisted of:

	2014	2013
Retirees and beneficiaries receiving benefits	142,095	139,399
Terminated vested members not yet receiving benefits	9,674	10,086
Other inactives *	16,527	16,482
Active members receiving salary	184,762	<u>185,971</u>
Total	353,058	351,938

<sup>\*</sup> Represents members who are no longer on payroll but not otherwise classified.

At June 30, 2015 and 2014, the dates of the VSF's most recent actuarial valuations, membership consisted of:

	COVSF		HPOVSF		HPSOVSF		TPOVSF		TPSOVSF	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
Retirees currently receiving payments	6,850	6,645	170	175	224	232	333	339	255	258
Active members	8,466	8,612								
Total	15,316	15,257	170	175	224	232	333	339	255	258

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 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 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 of

3.0% of 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 ten years of credited service, whichever is earlier.

Members who joined the QPP on or after September 1, 1983 and prior to April 1, 2012 ("Tier 4"), must make basic contributions of 3.0% of salary until termination of service. Effective October 1, 2000, these members, except for certain Transit Authority employees, are not required to make contributions after the 10th anniversary of their membership date or completion of ten years of credited service, whichever is earlier. 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" per year of service for members with 10 to 30 years, plus 1.5% of "final average salary" per year of 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 5 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 final average salary ("FAS") period from 3 to 5 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 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% APR). 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 his or her credited service, plus statutory earnings thereon. The amount of the member's retirement annuity or the refund of contributions that he or she is entitled to is increased by any Excess of Contributions or reduced by any Deficiency of Contributions. The total value of members' Excesses of Contributions, net of all Deficiencies of Contributions, has not been determined, for the years ended June 30, 2016 and 2015, respectively. Actuarial estimates of the impacts of Excesses and Deficiencies are incorporated into calculation of the QPP's net pension liability (see footnote 6).

### VSF's

### **COVSF**

The COVSF provides supplemental benefits, varying by calendar year according to a schedule and available Fund assets, for those NYCERS members who retire for service as UCF members with 20 (25) or more years of service on or after July 1, 1999. The annual scheduled amount is \$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 2019, when COVSF provides for a guaranteed schedule of defined supplemental benefits, benefits are payable in a calendar year only if there are sufficient Fund 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 market value of assets of the Fund exceeds the actuarial present value of the defined schedule of benefits payable through Calendar Year 2018.

Based on calculations of the Funds' Chief Actuary of the Office of the Actuary (the "Actuary"), The City guarantee of the schedule of benefits prior to Calendar Year 2019 has not yet come into effect.

The Actuary has also determined that benefits were payable for Calendar Year 2000 through Calendar Year 2006. However, the Actuary determined that no benefits were payable for Calendar Years 2007 through 2013. Benefits were payable for Calendar Years 2014 and 2015. No benefits were payable for 2016.

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 Fund under legislation enacted on or after December 29, 1999 will reduce benefits payable from the Fund to such retiree by an amount equal to such increase until the later of: (a) the first day of the month following the month such retiree attains age 62 and (b) January 1, 2007.

Chapter 125 of the Laws of 2000 ("Chapter 125/00") provided Supplementation benefits from NYCERS for certain retirees who retired before Calendar Year 1997 effective September 2000. In addition, Chapter 125/00 provided future COLA increases from NYCERS beginning September 2001 and on each subsequent September to these 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 twelve months of retirement, increasing by \$500 each year until a maximum of \$12,000 is payable in the twentieth and later years of retirement. This was later modified by Chapter 719 of the Laws of 1994 as discussed below.

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 Fund, or if the New York City ("The City") guarantee comes into effect. The City guarantee of benefits comes into effect prior to calendar year 2007 if the market value of assets of the Fund exceeds the actuarial present value of the defined schedules of benefits payable through calendar year 2006 plus 15% of the assets of the Fund at that time.

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

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 Fund 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 Fund. The law also provided that transfers to the Fund 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 COLA payable from NYCERS to a retiree of the Fund under legislation enacted on or after January 1, 1993 will reduce benefits payable from the Fund to such retiree by an amount equal to such increase until the following date:

- For a retiree with a date of membership before July 1, 1988, the later of: (a) the first day of the month following the month such retiree attains age 62 and (b) January 1, 2007.
- For a retiree with a date of membership on or after July 1, 1988, the later of: (a) the first day of the
  month following the month such retiree attains age 62 and (b) the earlier of (1) the first day of the
  month following the 19<sup>th</sup> anniversary of such 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 Fund 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") provided Supplementation benefits from NYCERS for certain retirees who retired before calendar year 1997 effective September 2000. In addition, Chapter 125/00 provided future COLA increases from NYCERS beginning September 2001 and on each subsequent September to eligible retirees.

#### **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 twelve months of retirement, increasing by \$500 each year until a maximum of \$12,000 is payable in the twentieth 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 Fund, or if The City guarantee comes into effect. The City guarantee of benefits comes into effect prior to calendar year 2007 if the market value of assets of the Fund exceeds the actuarial present value of the defined schedules of benefits payable through calendar year 2006 plus 15% of the assets of the Fund at that time.

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

Based on the calculations of the Funds' Chief Actuary of the Office of the Actuary (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 "Merger"), 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 Fund 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 Fund 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 Fund. The law also provided that supplemental benefits become guaranteed commencing 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 Fund under legislation

enacted on or after January 1, 1994 will reduce benefits payable from the Fund to such retiree by an amount equal to such increase until the following date:

- For a retiree with a date of membership before July 1, 1988, the later of: (a) the first day of the month following the month such retiree attains age 62 and (b) January 1, 2007.
- For a retiree with a date of membership on or after July 1, 1988, the later of: (a) the first day of the
  month following the month such retiree attains age 62 and (b) the first day of the month following
  the 19<sup>th</sup> anniversary of such 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 Fund, 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") provided Supplementation benefits from NYCERS for certain retirees who retired before calendar year 1997 effective September 2000. 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 twentieth 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 Fund, or if The City guarantee comes into effect. The City guarantee of benefits comes into effect prior to Calendar Year 2007 if the market value of assets of the Fund exceeds the actuarial present value of the defined schedules of benefits payable through Calendar Year 2006 plus 15% of the assets of the Fund at that time.

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

As a result of calculations performed by the Funds' Chief Actuary of the Office of the Actuary (the "Actuary") during November 1993, The City guarantee became effective.

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 Fund 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 Fund. The law also provides that transfers to the Fund 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 Fund under legislation enacted on or after January 1, 1992 will reduce benefits payable from the Fund to such retiree by an amount equal to such increase until the following date:

- For a retiree with a date of membership before July 1, 1988, the later of: (a) the first day of the month following the month such retiree attains age 62 and (b) January 1, 2007.
- For a retiree with a date of membership on or after July 1, 1988, the later of: (a) the first day of the month following the month such retiree attains age 62 and (b) the first day of the month following the 19<sup>th</sup> anniversary of such 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 Fund 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") provided Supplementation benefits from NYCERS for certain retirees who retired before Calendar Year 1997 effective September 2000. 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 twentieth 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 Fund, or if The City guarantee comes into effect. The City guarantee of benefits comes into effect prior to calendar year 2007 if the market value of assets of the Fund exceeds the actuarial present value of the defined schedules of benefits payable through calendar year 2006 plus 15% of the assets of the Fund at that time.

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

Based on the calculations of the Funds' Chief Actuary of the Office of the Actuary (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 "Merger"), 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 Fund 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 Fund 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 Fund. The law also provided that supplemental benefits become guaranteed commencing 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 Fund under legislation enacted on or after January 1, 1994 will reduce benefits payable from the Fund to such retiree by an amount equal to such increase until the following date:

- For a retiree with a date of membership before July 1, 1988, the later of: (a) the first day of the month following the month such retiree attains age 62 and (b) January 1, 2007.
- For a retiree with a date of membership on or after July 1, 1988, the later of: (a) the first day of the month following the month such retiree attains age 62 and (b) the first day of the month following the 19<sup>th</sup> anniversary of such 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 Fund 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") provided Supplementation benefits from NYCERS for certain retirees who retired before Calendar Year 1997 effective September 2000. In addition, Chapter 125/00 provided future COLA increases from NYCERS beginning September 2001 and on each subsequent September to eligible retirees.

### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS

Basis of Accounting — The Funds uses 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 makes payroll deductions from Plan members. Employer contributions are recognized when due and the employer has a legal obligation to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the Funds.

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

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

Investment Valuation — Investments are reported at fair value. Securities purchased pursuant to agreements to resell are carried at the contract price, exclusive of interest, at which the securities will be resold. Fair value is defined as the closing market value on the last trading day of the period, except for the Short-Term Investment Fund ("STIF", a money market fund), International Investment fund ("IIF") and Alternative Investment funds ("ALTINVF"). The IIF are private funds of publicly traded securities which are managed by various investment managers on behalf of the QPP. Fair value is determined by NYCERS management based on information provided by the various investment managers. The investment managers determine fair value using the last available quoted price for each security owned, adjusted by any contributions to or withdrawals from the fund during the period. The ALTINVF are 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 NYCERS.

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 QPP to lend its investments to broker-dealers and other entities for collateral, with a simultaneous agreement to return the collateral for the same securities in the future. The QPP's custodian lends the following types of securities: short-term securities, common stock, long-term corporate bonds, U.S. Government and U.S. Government agencies' bonds, asset-backed securities, and international equities and bonds held in collective investment funds.

In return, it receives collateral in the form of cash and U.S. Treasury and U.S. Government agency securities at 100 percent to 105 percent of the principal plus accrued interest for reinvestment. At June 30, 2015, management believes the Plan had no credit risk exposure to borrowers because the amounts the Plan owed the borrowers equaled or exceeded the amounts the borrowers owed the Plan. The contracts with the Plan custodian require borrowers to indemnify the Plan if the borrowers fail to return the securities and if the collateral is inadequate to replace the securities loaned or fail to pay the QPP for income distributions by the securities' issuers while the securities are on loan. All securities loans can be terminated on demand within a period specified in each agreement by either the QPP or the borrowers. Cash collateral is invested in the lending agents' short-term investment pools, which have a weighted average maturity of 90 days. The securities lending program in which QPP participates only allows pledging or selling securities in the case of borrower default. The underlying fixed income securities have an average maturity of 10 years.

During Fiscal Year 2003, the value of certain securities, which had been purchased with cash collateral, became impaired because of the credit failure of the issuer. Accordingly, the carrying amount of the collateral reported in the QPP's statement of plan net position for Fiscal Year 2003 was reduced by \$30 million to reflect this impairment and reflect the net realizable value of the securities purchased with collateral from securities lending transactions. In the Fiscal Years 2004 to 2009, the QPP received \$20 million from distributions in bankruptcy proceedings from the defaulted issuer, as well as litigation settlements. The Plan has received an additional recoupment of \$5,000 during Fiscal Year 2015. The remaining amount due of \$1.7 million was written off as a loss.

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, 2016 and 2015 was \$5.3 billion and \$4.7 billion. Cash collateral received related to securities lending as of June 30, 2016 and 2015 was \$5.3 billion and \$4.8 billion. As of the date of the statements of fiduciary net position, the maturities of the investments made by the Plan with cash collateral, on average, exceed the maturities of the securities loans by approximately 30 days.

**New Accounting Standards Adopted** - In Fiscal Year 2015, NYCERs adopted Government Accounting Standards Board ("GASB") Statement No. 72, *Fair Value Measurement and Application*. GASB 72 requires the Funds to use valuation techniques which are appropriate under the circumstances and are either a market approach, a cost approach or income approach. GASB 72 establishes a hierarchy of inputs used to measure fair value consisting of three levels. Level 1 inputs are quoted prices in active markets for identical assets or liabilities. Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs, and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability. GASB 72 also contains note disclosure requirements regarding the hierarchy of valuation inputs and valuation techniques that was used for the fair value measurements. There was no material impact on the Funds' financial statements as a result of the implementation of GASB 72.

### 3. INVESTMENTS AND DEPOSITS

The City Comptroller (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 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 our asset allocation process. Assets are diversified over a broad range of asset classes and encompass multiple investment strategies aimed at limiting concentration risk. The asset allocation targeted for the funds in Fiscal Year 2016 and 2015 included the securities in the following categories:

	<u>2016</u>	<u>2015</u>
Domestic Equities	32.6%	32.6%
International Equity Fund	16.9%	16.9%
Domestic Fixed Income	33.5%	33.5%
Alternative Investments	<u>17.0%</u>	<u>17.0%</u>
Total	<u>100.0%</u>	100.0%

**Concentrations** – The QPP does not have any investments in any one entity that represents 5% or more of fiduciary net position. The COVSF only holds one investment in a short term investment fund.

**Credit Risk** — Portfolios other than U.S. Government and related portfolios have credit rating limitations. Investment Grade portfolios are limited to mostly ratings of BBB and above except that they are also permitted a 10% maximum exposure to BB & B rated securities. While non-investment grade managers are primarily invested in BB & B rated securities, they can also invest up to 7% of their portfolio in securities rated CCC. Non-rated securities are considered to be non-investment grade. The quality ratings of QPP investments, by percentage of the rated portfolio, as described by nationally recognized statistical rating organizations, are as follows:

### Investment Type\*

### **S&P Quality Ratings**

June 30, 2016	AAA	AA	Α	BBB	ВВ	В	CCC & Below	Short term	Not Rated	Total
U.S. Government	-%	- %	- %	- %	-%	- %	- %	- %	- %	- %
Corporate bonds Short-term:	2.41	2.64	13.76	29.20	12.91	10.06	3.59	-	8.17	82.74
Commercial Paper	-	-	-	-	-	-	-	8.65	-	8.65
Pooled funds	-	-	-	-	-	-	-	7.79	-	7.79
Discount Notes & T-Bills								0.82		0.82
Percent of rated portfolio	2.41%	2.64%	13.76%	29.20%	<u>12.91</u> %	10.06%	3.59%	<u>17.26</u> %	<u>8.17</u> %	100.00%

### Investment Type\*

### **S&P Quality Ratings**

June 30, 2015	AAA	AA	Α	BBB	ВВ	В	CCC & Below	Short term	Not Rated	Total
U.S. Government	-%	- %	- %	- %	-%	- %	- %	- %	- %	- %
Corporate bonds Short-term:	1.73	1.91	12.91	24.59	11.04	10.83	2.82	-	7.99	73.82
Commercial Paper	-	-	-	-	-	-	-	9.11	-	9.11
Pooled funds	-	-	-	-	-	-	-	8.11	-	8.11
Discount Notes & T-Bills								8.96		8.96
Percent of rated portfolio	<u>1.73</u> %	<u>1.91</u> %	<u>12.91</u> %	<u>24.59</u> %	<u>11.04</u> %	<u>10.83</u> %	<u>2.82</u> %	<u>26.18</u> %	<u>7.99</u> %	<u>100.00</u> %

<sup>\*</sup> U.S. Treasury Bonds, Notes and Treasury-inflation protected securities are obligations of the U.S. government or explicitly guaranteed by the U.S. government and therefore not considered to have credit risk and are not included above.

The quality ratings of the COVSF investments, by percentage of the rated portfolio, as described by nationally recognized statistical rating organizations, at June 30, 2016 and 2015 are as follows:

### Investment Type\*

### **S&P Quality Ratings**

June 30, 2016	AAA	AA	Α	BBB	ВВ	В	CCC & Below	Short term	Not Rated	Total
U.S. Government	-%	- %	- %	- %	-%	- %	- %	- %	- %	- %
Corporate bonds	-	-	-	-	-	-	-	-	-	-
Yankee bonds	-	-	-	-	-	-	-	-	-	-
Short-term – pooled funds								100.00		100.00
Percent of rated portfolio	- %	- %	- %	- %	- %	- %	- %	100.00%	- %	100.00%

### Investment Type\*

### **S&P Quality Ratings**

June 30, 2015				<b>DDD</b>	DD.	_	CCC &	Short	Not	T-4-1
U.S. Government	<b>AAA</b> -%	<b>AA</b> - %	- %	<b>BBB</b> - %	<b>BB</b> -%	<b>B</b> - %	Below - %	term - %	Rated - %	Total - %
Corporate bonds	-	-	-	-	-	-	-	-	-	-
Yankee bonds Short-term – pooled funds	-	-	-	-	-	-	-	-	-	100.00
Short-term – pooled funds			<del></del>	<u> </u>	<del></del> -	<del></del>	<del></del>	<del></del>	<u>100.00</u>	100.00
Percent of rated portfolio	%	%	%	%	%	- %	<u> </u>	%	<u>100.00</u> %	<u>100.00</u> %

<sup>\*</sup> U.S. Treasury Bonds, Notes and Treasury-inflation protected securities are obligations of the U.S. government or explicitly guaranteed by the U.S. government and therefore not considered to have credit risk and are not included above.

**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 for up to \$250,000 per Plan member and are, therefore, insured up to such limit.

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 in NYCERS' name.

Interest Rate Risk — Interest rate risk is the risk that the fair value of investments could be adversely affected by the change in interest rates. Duration limits are used to control the portfolios exposure to interest rate changes. In the investment grade core Fixed Income portfolios duration is limited to a range of 0 to.75 years versus the duration of the benchmark indices. Duration range is a measure of the overall portfolio, while statements of the stated maturity reflect the specific maturities of the individual securities held. NYCERS has no formal risk policy. The lengths of investment maturities (in years) for QPP, as shown by the percent of the rated portfolio, are as follows:

		Investment Maturities											
Years to Maturity													
Investment Type	Fair	Less Than	One to Five	Six to Ten	More Than								
June 30, 2016	Value	One Year	Years	Rated	Ten Years								
U.S. Government	33.82%	0.27%	1.80%	5.52%	26.23%								
Corporate bonds	54.76	1.45	17.14	20.65	15.52								
Short-term:													
Commercial paper	5.72	5.72	-	-	-								
Pooled funds	5.15	5.15	-	-	-								
Discount Notes & T-Bills	<u>.55</u>	<u>55</u>											
Percent of rated portfolio	<u>100.00</u> %	<u>13.14</u> %	<u>18.94</u> %	<u>26.17</u> %	<u>41.75</u> %								
			Investmen	t Maturities									
Vocas to Motorito			Investmen	t Maturities									
Years to Maturity	Fair	Loss Than			Moro Than								
Investment Type	Fair Value	Less Than	One to Five	Six to Ten	More Than								
Investment Type June 30, 2015	Value	One Year	One to Five Years	Six to Ten Rated	Ten Years								
Investment Type June 30, 2015 U.S. Government	<b>Value</b> 37.57%	One Year 0.19%	One to Five Years 6.40%	Six to Ten									
Investment Type June 30, 2015	Value	One Year	One to Five Years	Six to Ten Rated 4.78%	<b>Ten Years</b> 26.20%								
Investment Type June 30, 2015 U.S. Government Corporate bonds	<b>Value</b> 37.57%	One Year 0.19%	One to Five Years 6.40%	Six to Ten Rated 4.78%	<b>Ten Years</b> 26.20%								
Investment Type June 30, 2015 U.S. Government Corporate bonds Short-term:	<b>Value</b> 37.57% 46.09	One Year 0.19% 1.55	One to Five Years 6.40%	Six to Ten Rated 4.78%	<b>Ten Years</b> 26.20%								
Investment Type June 30, 2015 U.S. Government Corporate bonds Short-term: Commercial Paper	<b>Value</b> 37.57% 46.09	One Year 0.19% 1.55 5.69	One to Five Years 6.40%	Six to Ten Rated 4.78%	<b>Ten Years</b> 26.20%								

The length of investment maturities (in years) of the COVSF investments, as shown, by the percent of the rated portfolio, at June 30, 2016 and 2015 are as follows:

	Investment Maturities										
Years to Maturity Investment Type June 30, 2016	Fair Value	Less Than One Year	One to Five Years	Six to Ten Rated	More Than Ten Years						
U.S. Government Corporate bonds Short term – Pooled funds:	- % - <u>100.00</u>	- % - 100.00	- % - 	- % - -	- % - 						
Percent of rated portfolio	<u>100.00</u> %	<u>100.00</u> %	%	%	%						
			Investment	Maturities							
Years to Maturity Investment Type June 30, 2015	Fair Value	Less Than One Year	One to Five Years	Six to Ten Rated	More Than Ten Years						
U.S. Government Corporate bonds Short term – Pooled funds:	- % - <u>100.00</u>	- % - <u>100.00</u>	- % - 	- % - -	- % - -						
Percent of rated portfolio	<u>100.00</u> %	<u>100.00</u> %	%	%	%						

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 have proven to be good 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.

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, 2016 and 2015 are as follows (amounts in thousands of U.S. dollars):

Trade Currency	2016	2015
Euro Currency	\$ 1,617,805	\$ 1,762,515
Japanese Yen	1,011,527	1,014,447
British Pound Sterling	888,069	1,017,423
South Korean Won	832,431	736,969
Taiwan Dollar	600,479	639,070
Indian Rupee	541,808	519,886
Swiss Franc	476,458	520,117
South African Rand	404,313	397,506
Brazilian Real	323,868	324,935
Hong Kong Dollar	281,955	339,435
Mexican Nuevo Peso	196,789	183,018
Malaysian Ringgit	171,724	153,435
Australian Dollar	158,204	155,920
Swedish Krona	140,277	151,451
Danish Krone	112,553	86,880
Indonesian Rupiah	110,542	22
Turkish Lira	103,931	97,634
Philippines Peso	86,012	68,341
Polish Zloty	85,090	93,828
Canadian Dollar	71,687	87,259
Singapore Dollar	66,785	99,685
Chilean Peso	58,767	54,214
Norwegian Krone	41,290	49,725
Qatari Rial	34,187	-
UAE Dirham	33,130	23,779
Thai Baht	25,980	137,373
Colombian Peso	25,955	23,790
Hungarian Forint	21,101	19,666
Czech Koruna	13,723	16,886
New Zealand Dollar	11,996	7,503
Israeli Shekel	11,566	10,854
Moroccan Dirham	9,764	9,618
Egyptian Pound	6,969	13,173
Peruvian Nuevo Sol	5,329	4,775
Yuan Renminbi	 2	 <del>_</del>
Total	\$ 8,582,066	\$ 8,821,132

### **Securities Lending Transactions**

*Credit Risk* — The quality ratings of investments held as collateral for Securities Lending of the QPP at June 30, 2016 and 2015 are as follows:

Investment Type and Fair Value of Securities Lending Transactions (In Thousands)

(III Triododinas)								S&F	Qı	uality	Ra	tings	3								
June 30, 2016	_	AAA		AA		Α		BBB		вв		В	С	CC & elow		nort erm			Not ited	Т	otal
Corporate bonds	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		\$	-
Short-term:																					
Reverse repurchase agreements				-		-		-		-		-		-		-		4,388,	354	4	,388,354
Money market	3	342,530		-		-		-		-		-		-		-		-			342,530
Bank notes		-		-		-		-		-		-		-		-		103,			103,672
Cash		-		-		-		-		-		-				-		428,			428,010
Uninvested	_	-	_		_		_		_		_		_		_		_		<u>526</u>		4,526
Total	\$ 3	342,530	\$		\$	_	\$	-	\$	-	\$	_	\$		\$	_	\$	4,924,	562	\$ 5	,267,092
Percent of securities lending portfolio	_	<u>6.50</u> %	_	%	_	%	_	%	_	%	· _	%	_	%		%	) =	93	<u>3.50</u> %		<u>100.00</u> %
								S&F	Qı	uality	Ra	itings	3								
June 30, 2015														CCC &		Sho	rt		Not		
		AAA		AA		Α		BBI	В	В	В	ı	В	Below		teri	n	F	Rated		Total
Corporate bonds	\$	-	\$	-	\$	-		\$ -		\$ -		\$ -		\$ -	\$	-		\$ -		\$	-
Short-term:																					
Reverse repurchase agreements				-		-		-		-		-		-		-		3,80	64,540		3,864,540
Money market	1	19,497		-		-		-		-		-		-		-		-			119,497
Bank notes		-		-		-		-		-		-		-		-		3	29,068		329,068
Cash		-		-	47	74,458		-		-		-				-		-			474,458
Uninvested	_		_		_					-	_		_	<del></del>	_	-	_		1,750	_	1,750
Total	<u>\$ 1</u>	19,497	\$		\$47	74,458	<u> </u>	<u>\$ -</u>		<u>\$ -</u>	_	<u>\$ -</u>	=	<u>\$ -</u>	\$	-	_	\$ 4,1	95.358	\$	4,789,313

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 (In Thousands)

	Investment Maturities (In years)												
June 30, 2016	Fair Value	Less Than One Year	One to Five Years	Six to Ten Rated	More Than Ten Years								
Short-term: Reverse repurchase agreements Money market Bank notes Cash Uninvested Total	\$ 4,388,354 342,530 103,672 428,010 4,526 \$ 5,267,092	\$4,388,354 342,530 103,672 408,010 <u>4,526</u> \$5,267,092	- - - - - - \$	- - - - - - - -	- - - - - - - \$_								
Percent of securities lending portfolio	<u>100.00</u> %	<u>100.00</u> %	%	%	·%								
			Investment Matu	urities (In yea	rs)								
June 30, 2015	Fair Value	Less Than One Year	One to Five Years	Six to Ten Rated	More Than Ten Years								
Short-term: Reverse repurchase agreements Money market Bank notes	\$ 3,864,540 119,497	\$3,864,540 119,497	- -	- -	- -								
Cash Uninvested Total	329,068 474,458 1,750 \$ 4,789,313	329,068 474,458 1,750 \$4,789,313	- - - \$	- - - \$ -	- - - \$ -								

**Rate of Return –** For the years ended June 30, 2016 and 2015, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, for the Funds were as follows:

	<u>2016</u>	<u>2015</u>		
QPP	1.45%	3.10%		
COVSF	0.19%	0.03%		

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 Fund adopted GASB Statement No. 72 ("GASB 72"), Fair Value Measurement and Application. GASB 72 was issued to address accounting and financial reporting issues related to fair value measurements.

The Fund categorizes its 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 Fund has the following recurring fair value measurements as of June 30, 2016 and June 30, 2015:

			16					
	•	Level		Level		Level		
		One		Two		Three		Total
GASB 72 Disclosure								
(in thousands)								
INVESTMENTS – At fair value								
Short-term investments:								
U.S. treasury bills and agencies	\$	-	\$	11,073	\$	-	\$	11,073
Commercial paper		-		739,639		-		739,639
Short term investment fund		-		804,328		-		804,328
Discount notes		-		59,860		-		59,860
Short term hedge fund (CASH)		-		-		-		-
Debt securities:								
U.S. government and agency		-		4,289,153		-		4,289,153
Corporate and other		-		6,962,773		194,650		7,157,423
Equity securities		18,523,033		-		-		18,523,033
Alternative investments		-		-		8,749,183		8,749,183
Collective trusts funds:								
International equity		8,801,003		419,892		-		9,220,895
Mortgage debt securities		-		109,589		498,096		607,685
Domestic equity		-				-		
Treasury inflation protected securities		-		2,448,307		-		2,448,307
Fixed income		6,498		79,785		935,862		1,022,145
Collateral from securities lending	_	-	_	5,267,092	_	-	_	5,267,092
Total investments	\$	27,330,534	\$	21,191,491	\$	10,377,791	\$	58,899,816
Alternative Investments valued								4 400 004
at net asset value							•	1,123,861
Total							5	60,023,677

		Level		Level		Level	
		One		Two		Three	Total
GASB 72 Disclosure							
(in thousands)							
INVESTMENTS – At fair value							
Short-term investments:							
U.S. treasury bills and agencies	\$	-	\$	393,360	\$	-	\$ 393,360
Commercial paper		-		831,425		-	831,425
Short term investment fund		-		937,273		-	937,273
Discount notes		-		486,281		-	486,281
Short term hedge fund (CASH)		25,500		-		-	25,500
Debt securities:							
U.S. government and agency		-		5,368,727		-	5,368,727
Corporate and other		-		6,673,110		189,840	6,862,950
Equity securities		18,185,632		2,935		-	18,188,567
Alternative investments		-		-		9,824,907	9,824,907
Collective trusts funds:							
International equity		9,495,944		1,709		4,268	9,501,921
Mortgage debt securities		-		492,104		-	492,104
Domestic equity		-		-		-	-
Treasury inflation protected securities		-		1,760,761		-	1,760,761
Fixed income				228,072		777,953	1,006,025
Collateral from securities lending	_		_	4,789,313	_		 4,789,313
Total investments	\$	27,707,076	\$	21,965,070	\$	10,796,968	\$ 60,469,114

### **Equity and 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 market place, 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 our 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.

#### **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 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. 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 ASC 820, 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 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.

### 4. TRANSFER TO VARIABLE SUPPLEMENTS FUNDS

The Administrative Code of the City of New York ("ACNY") provides that the QPP transfer to the VSFs an amount equal to certain excess earnings in equity investments, limited to the unfunded Accumulated Benefit Obligation ("ABO") 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 calculation of the Hypothetical Fixed Income Security Earnings 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 2016 and 2015, the QPP was required to transfer approximately \$2.6 million and \$2.7 million, respectively. With respect to the benefits payable from TPSOVSF, for Fiscal Years 2016 and 2015, the QPP was required to transfer approximately \$3.0 million and \$3.1 million, respectively. With respect to the benefits payable from HPOVSF for Fiscal Years 2016 and 2015, the QPP was required to transfer approximately \$2.0 million and \$2.1 million, respectively. With respect to the benefits payable from TPOVSF for Fiscal Years 2016 and 2015, the QPP was required to transfer approximately \$3.9 million and \$4.0 million, respectively.

With respect to the COVSF, for Fiscal Year 2016, 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 Plan to the COVSF as of June 30, 2016. For Fiscal Years 2014 and 2015, it was estimated that there were excess earnings and the QPP transferred \$190 million to the COVSF for Fiscal Year 2014, and \$30 million for Fiscal Year 2015. However, during Fiscal Year 2016, the excess earnings estimated for Fiscal Year 2014 were finalized and revised downward to \$137.3 million.

The amount shown below as the ABO is a measure of the present value of scheduled supplemental benefits estimated to be payable in the future as a result of employee service-to-date. The ABO is calculated as the actuarial present value of credited projected benefits, prorated on service and is intended to help users assess the funded status of the Fund on an ongoing-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.

A comparison of the ABO as calculated by the Actuary, with the net position restricted for pensions for the COVSF, HPSOVSF, TPOVSF and TPSOVSF as of June 30, 2015 and June 30, 2014 follows (in millions):

	CO	VSF*	HPOVSF		HPSOVSF		TPOVSF		TPSOVSF		Te	otal
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
Accumulated benefit obligation**												
Retirees currently receiving benefits Active Members	\$ 1,303.8 585.8	\$ 1,280.5 589.6	\$20.3	\$ 21.6 	\$ 27.6	\$ 29.3	\$40.5 -	\$ 42.6 	\$31.1 <u>-</u>	\$ 32.6 	\$1,423.3 585.8	\$ 1,406.6 589.6
Total accumulated benefit obligation	\$1,889.6	\$ 1,870.1	\$20.3	\$21.6	\$27.6	\$29.3	\$40.5	\$42.6	\$31.1	\$32.6	\$2,009.1	\$1,996.20
Net position held in trust for benefits Unfunded accumulated benefit	179.4	226.0		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	179.4	226.0
obligation	\$1,710.2	\$ 1,644.1	\$20.3	\$21.6	\$27.6	\$29.3	\$40.5	\$42.6	\$31.1	\$32.6	\$1,829.7	\$ 1,770.2

<sup>\*</sup> Includes all non-guaranteed payments.

For purposes of the June 30, 2015 and June 30, 2014 actuarial valuations of the Fund, Chapter 125/00 has been taken into account in the determination of the unfunded ABO related to the Supplementation benefit increases that began Fiscal Year 2001 and the automatic COLA that began Fiscal Year 2002 (see Note 1).

The June 30, 2015 and June 30, 2014 ABO's decreased by approximately \$17.0 million and \$20.2 million respectively, in actuarial liabilities attributable to Chapter 125/00.

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 from 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.

<sup>\*\*</sup>Based on actuarial assumptions adopted by the Board of Trustees of the QPP during Fiscal Year 2016.

The following actuarial assumptions represent the recommendations of the Actuary and were used in the actuarial calculations to determine the preceding ABOs as of June 30, 2015 and June 30, 2014:

	June 30, 2015	June 30, 2014
Investment rate of return	4.0% per annum. <sup>1</sup>	4.0% per annum. <sup>1</sup>
Post-retirement mortality	Tables adopted by NYCERS during Fiscal Year 2016 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 2016 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 2012 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 2012 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 2012 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 2012 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.
Actuarial asset valuation method	Fair market value.	Fair market value.

<sup>&</sup>lt;sup>1</sup> Developed assuming a long-term Consumer Price Inflation assumption of 2.5% per year.

### 5. QPP CONTRIBUTIONS

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

**Member Contributions** — Members who joined prior to July 27, 1976, contribute by salary deductions on the basis of 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 so as 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 ten 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 ("BMC") 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 ("AMC"). The AMC rate is plan-specific. Tier 6 Special Plan members must contribute AMC until they attain 30 years of service or retire, whichever comes first, except for TBTA 20/50 Plan members who must contribute AMC for 20 years.

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 later of 25 years of service or until they retire, except DA Investigator members who must contribute 3% of gross wages until they retire.

**Employer Contributions** — Statutorily-required contributions ("Statutory Contributions") to the QPP, determined by the Funds' Chief Actuary of the Office of the Actuary (the "Actuary") in accordance with State statutes and City laws, are generally funded by the Employer within the appropriate fiscal year. The Statutory Contribution for the year ended June 30, 2016, based on an actuarial valuation as of June 30, 2014 was \$3,365,454 million, and the Statutory Contribution for the year ended June 30, 2015, based on an actuarial valuation as of June 30, 2013 was \$3,160,258 million. The Statutory Contributions for Fiscal Years 2016 and 2015 were equal to the Actuarial Contributions. Refer to the Schedule of Employer Contributions in the accompanying required supplementary information for more information on the actuarial methods and assumptions applied by the Actuary to determine Statutory Contributions.

6. NET PENSION LIABILITY

The components of the net pension liability of the Employer at June 30, 2016 and 2015, for the Funds, were as follows (in thousands):

			ui)	(in thousands)			
June 30, 2016	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	TOTAL
Total pension liability	\$ 78,411,107	\$ 1,331,931	\$ 16,498	\$ 22,394	\$ 32,415	\$ 24,790	\$79,839,135
Fiduciary net position <sup>1</sup>	55,495,228	46,942	30	44	29	40	55,542,313
Employers' net pension liability	\$ 22,915,879	\$ 1,284,989	\$ 16,468	\$ 22,350	\$ 32,386	\$ 24,750	\$24,296,822
Fiduciary net position as a percentage of the total pension liability	70.77%	3.52%	0.18%	0.20%	%60.0	0.16%	%29.22%
June 30, 2015	QPP	COVSF	(in HPOVSF	(in thousands) HPSOVSF	TPOVSF	TPSOVSF	TOTAL
Total pension liability	\$ 73,915,631	\$ 1,302,018	\$ 17,038	\$ 22,916	\$ 32,907	\$ 25,052	\$75,315,562
Fiduciary net position 1	54,895,271	179,399	30	39	16	33	55,074,788
Employers' net pension liability	\$ 19,020,360	\$ 1,122,619	\$ 17,008	\$ 22,877	\$ 32,891	\$ 25,019	\$20,240,774
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%

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

# **Actuarial Methods and Assumptions**

The total pension liability as of June 30, 2016 and 2015, were determined by actuarial valuations as of June 30, 2014 and June 30, 2013, 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

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.

Mortality tables for Service and Disability pensioners were developed from an experience study of the QPP's pensioners. Mortality tables for beneficiaries were also developed from an experience study of the QPP's beneficiaries.

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

In October 2015 the NYC Charter-mandated independent actuarial auditor, Gabriel, Roeder, Smith & Company (GRS) issued a report on their actuarial experience studies for the four-year and ten-year periods ended June 30, 2013 (the GRS Report).

Based, in part, on the GRS Report, on published studies of mortality improvement, and on input from the City's outside consultants and auditors, the Actuary proposed, and the Board of Trustees adopted, the new post-retirement mortality tables for use in determining employer contributions beginning in Fiscal Year 2016. The new tables of post-retirement mortality are based primarily on the experience of NYCERS (the Base Tables) and the application of Mortality Improvement Scale MP-2015, published by the Society of Actuaries in October 2015 (the Valuation Tables). Scale MP-2015 replaced Mortality Improvement Scale AA.

In addition, beginning in Fiscal Year 2016, the Actuary revised the Actuarial Asset Valuation Method to constrain the Actuarial Asset Value to be within a 20% corridor of the Market Value of Assets.

The two previously completed studies were published by The Hay Group ("Hay") dated December 2011 and by The Segal Company ("Segal"), dated November 2006. Hay analyzed experience for Fiscal Years 2006 through 2009 and made recommendations with respect to the actuarial assumptions and methods based on their analysis. Segal analyzed experience for Fiscal Years 2002 through 2005 and made recommendations with respect to the actuarial assumptions and methods based on their analysis.

The June 30, 2014 (Lag) actuarial valuation was used to determine the Fiscal Year 2016 Employer Contributions. Except as stated above, there were no changes in actuarial assumptions and methods from the prior actuarial valuation.

The June 30, 2010 (Lag) actuarial valuation used to determine the Fiscal Year 2012 Employer Contributions was based on revised actuarial assumptions and methods proposed by the Actuary (the "2012 A&M"). The Board of Trustees of the Plan adopted those changes to the actuarial assumptions and methods that require Board approval during Fiscal Year 2012. The New York State Legislature and the Governor enacted Chapter 3 of the Laws of 2013 ("Chapter 3/13") to provide for those changes in actuarial assumptions and methods that

require legislation, including the Actuarial Interest Rate ("AIR") assumption of 7.0% per annum, net of investment expenses, the Entry Age Actuarial Cost Method and the amortization of Unfunded Actuarial Accrued Liabilities.

Beginning with the June 30, 2010 (Lag) actuarial valuation under the 2012 A&M, the Entry Age Actuarial Cost Method ("EAACM") of funding is utilized by the Plan's Actuary to calculate the contribution required of the Employer.

Under this method, the Actuarial Present Value ("APV") of Benefits ("APVB") 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 APV allocated to a valuation year is the Normal Cost. The portion of this APV not provided for at a valuation date by the APV of Future Normal Costs or future member contributions is the Actuarial Accrued Liability ("AAL").

The excess, if any, of the AAL over the Actuarial Asset Value ("AAV") is the Unfunded Actuarial Accrued Liability ("UAAL").

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

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

The Fiscal Year 2016 and Fiscal Year 2015 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.

The APV of projected benefits includes the obligations of the Plan to the HPOVSF, the HPSOVSF, the TPOVSF, the TPSOVSF and the COVSF (referred to collectively as the NYCERS VSFs), which are recognized through the Liability Valuation Method.

Under this method, the APV 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 APV of Future SKIM is computed as the excess, if any, of the APV of benefits of each individual NYCERS VSF offset by the AAV of that individual NYCERS VSF, respectively. Under the EAACM, a portion of the APV of Future SKIM is reflected in the APV of Future Normal Costs and a portion is reflected in the UAAL.

The concept in use for the Actuarial Asset Valuation Method ("AAVM") for actuarial valuations on and after June 30, 2012 is the same as that in use for the June 30, 2009 (Lag) actuarial valuation.

In accordance with this AAVM, actual Unexpected Investment Returns ("UIR") for Fiscal Years 2012, 2013, etc. are phased into the Actuarial Asset Value ("AAV") beginning June 30, 2012, June 30, 2013, etc. at rates of 15%, 15%, 15%, 15%, 20%, and 20% per year (i.e., cumulative rates of, 15%, 30%, 45%, 60%, 80%, and 100% over a period of six years).

The Actuary reset the Actuarial Asset Value to the Market Value of Assets ("MVA") as of June 30, 2011 (i.e., "Market Value Restart").

For the June 30, 2010 (Lag) actuarial valuation, the AAV is defined to recognize Fiscal Year 2011 investment performance. The June 30, 2010 AAV is derived as equal to the June 30, 2011 MVA, discounted by the AIR assumption (adjusted for cash flow) to June 30, 2010.

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

The long-term expected rate of return on pension plan 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:

Asset Class	Target Asset <u>Allocation</u>	Long-Term Expected Real Rate of Return
U.S. Public Markets Equities	32.60%	6.60%
International Public Markets Equities	10.00%	7.00%
Emerging Public Markets Equities	6.90%	7.90%
Private Market Equities	7.00%	9.90%
Fixed Income (Core, TIPS, High Yield, Opportunistic, Convertibles)	33.50%	2.70%
Alternatives (Real Assets, Hedge Funds)	10.00%	4.00%
Total	<u>100.00%</u>	

### **Discount Rate**

The discount rate used to measure the total pension liability as of June 30, 2016 and 2015 was 7.0% per annum. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that City's contributions will be made in accordance with the Statutory contributions determined by the Actuary. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

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

		(In thousands)	
Employer net pension liability June 30, 2016	1% Decrease (6.0%)	Current discount rate (7.0%)	1% Increase (8.0%)
QPP	\$ 31,776,520	\$ 22,915,879	\$ 15,494,807
COVSF	1,434,373	1,284,989	1,159,935
HPOVSF	17,578	16,468	15,482
HPSOVSF	23,905	22,350	20,976
TPOVSF	34,604	32,386	30,419
TPSOVSF	<u>26,454</u>	24,750	23,241
Total	<u>\$ 33,313,434</u>	<u>\$ 24,296,822</u>	<u>\$ 16,744,860</u>

### 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, 2016 and 2015 is \$1.1 billion and \$1.0 billion, respectively.

# 8. RELATED PARTIES

The Comptroller of The City of New York 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 also provides 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.

# 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 2016, the total non-investment expenses attributable to the Plan were approximately \$61.7 million, of which \$56.7 million was paid from the assets of the QPP and \$5.0 million was incurred on behalf of the QPP by other City agencies. In Fiscal Year 2015, the total non-investment expenses attributable to the Plan were approximately \$59.4 million, of which \$54.6 million was paid from the assets of the QPP and \$4.8 million was incurred on behalf of the QPP by other City agencies.

Investment expenses, exclusive of fees related to securities lending transactions, for Fiscal Year 2016 were \$213.7 million, of which \$213.0 million was charged to the investment earnings of the Plan; and \$0.7 million was incurred by the Comptroller's Office. Investment expenses, exclusive of fees related to securities lending transactions, for Fiscal Year 2015 were \$238.9 million, of which \$231.8 million was charged to the investment earnings of the Plan; and \$7.1 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 agreement expires in 2020, with options to renew the agreement through 2030. The future minimum rental payments required under this operating lease are shown in the table below.

Rent expenses, under the lease agreement, for the Fiscal Years ended June 30, 2016 and 2015, were approximately \$4.7 million and \$4.2 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 expires in 2016, and the Plan exercised the options to renew the agreement through April 2021. The future minimum rental payments required under the renewed lease are shown in the table below.

Rent expenses, under the lease agreement, for the Fiscal Years ended June 30, 2016 and 2015, were approximately \$531 thousand and \$519 thousand, respectively.

	He	eadquarters		Business Recovery Site
Fiscal Years Ending		Minimum ntal Payments	Fiscal Years Ending	Minimum Rental Payments
2017	\$	4,535,336	2017	\$ 1,207,081
2018		4,535,336	2018	1,234,278
2019		4,535,366	2019	1,262,087
2020		4,535,366	2020	1,290,507

### 10. CONTINGENT LIABILITIES AND OTHER MATTERS

Contingent Liabilities — The Fund has a number of claims pending against it and 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 Fund, increases in the obligations of the Fund to members and beneficiaries ordinarily result in increases in the obligations of the employers to the Fund.

**Other Matters** — During Fiscal Years 2016 and 2015, certain events described below took place which, in the opinion of Fund management, could have the effect of increasing benefits to members and/or their beneficiaries and therefore would increase the obligations of the Fund. The effect of such events has not been fully quantified. However, it is the opinion of plan management that such developments would not have a material effect on the net position restricted for benefits or cause changes in the plan net position held in trust for pension benefits.

**Actuarial Audit** — Pursuant to Section 96 of the New York City Charter, studies of the actuarial assumptions used to value liabilities of the five actuarially-funded NYCRS are conducted every two years. Refer to Note 5 for a discussion of the most recent actuarial studies for NYCRS.

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

Based, in part, upon a review of the Segal and Hay studies, the Actuary issued a February 10, 2012 Report entitled "Proposed Changes in Actuarial Assumptions and Methods for Determining Employer Contributions for Fiscal Years Beginning on and After July 1, 2011 for the New York City Employees' Retirement System" ("February 2012 Report").

The Board of Trustees of the Plan adopted those changes to actuarial assumptions that require Board approval. The State Legislature and the Governor enacted Chapter 3/13 to provide for those changes to the actuarial assumptions and methods that require legislation, including the AIR assumption of 7.0% per annum, net of investment expenses.

In October 2015 the independent actuarial auditor, Gabriel, Roeder, Smith & Company (GRS), issued a report on their NYC Charter-mandated actuarial experience studies for the four-year and ten-year periods ended June 30, 2013 (the GRS Report).

Based, in part, on the GRS Report, on published studies of mortality improvement, and on input from the City's outside consultants and auditors, the Actuary proposed, and the Boards of Trustees of the NYCERS adopted, new post-retirement mortality tables for use in determining employer contributions beginning in Fiscal Year 2016. The new tables of post-retirement mortality are based primarily on the experience of the NYCERS (the Base Tables) and the application of Mortality Improvement Scale MP-2015, published by the Society of Actuaries in October 2015 (the Valuation Tables). Scale MP-2015 replaced Mortality Improvement Scale AA.

In addition, beginning in Fiscal Year 2016, the Actuary revised the Actuarial Asset Valuation Method to constrain the Actuarial Asset Value to be within a 20% corridor of the Market Value of Assets.

**OTB Bankruptcy** — During December 2009, the New York City Off-Track Betting Corporation ("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 2016 and Fiscal Year 2015 employer contributions do not take into account OTB's filing. The Fiscal Year 2016 and Fiscal Year 2015 employer contributions, and the allocation to OTB, assumed that OTB was a going-concern. Any amounts due but unpaid by OTB for Fiscal Year 2016 and Fiscal Year 2015 are treated as a receivable that is expected to be paid in full.

**New York State Legislation (only significant laws included)** — Chapter 104 of the Laws of 2005, as amended by Chapter 93 of the Laws of 2005, created a presumptive eligibility for accidental disability in connection with the World Trade Center attack on September 11, 2001.

Chapter 105 of the Laws of 2005 states that a member killed in the U.S. Armed Forces on and after June 14, 2005, is deemed a Line-of-Duty death while on active payroll.

Chapter 477 of the Laws of 2005 extends service credit of up to one year for each period of Correction Officer leave-of-absence due to child care to include Tier III members.

Chapter 152/06 provided for the changes in actuarial assumptions and methods that require legislation, including the continuation of the AIR assumption of 8.0% per annum and continuation of the current Frozen Initial Liability ("FIL") Actuarial Cost Method and the existing Unfunded Actuarial Accrued Liability ("UAAL"). In addition, Chapter 152/06 provides for elimination of the use of the ten-year phase-in of Chapter 278/02 for funding the additional actuarial liabilities created by the benefits provided by Chapter 125/00.

Chapter 445 of the Laws of 2006 (Chapter 445/06) created a presumptive eligibility for accidental death benefits in connection with the World Trade Center attack on September 11, 2001.

Chapter 711 of the Laws of 2006 revised the retirement allowance of Tier II DA Investigator members for service beyond 20 years.

Chapter 734 of the Laws of 2006 refunds certain frozen Additional Member Contributions to certain participants of the Transit 55/25 Program employed in a job title which is or was represented by the Amalgamated Transit Union.

Chapter 5 of the Laws of 2007 amended Chapter 445/06 to clarify the World Trade Center accidental disability benefits payable to retirees who die in the first 25 years of retirement. It also amended Chapter 445/06 to include World Trade Center deaths as presumptive accidental death benefits in the Line-of-Duty.

Chapter 214 of the Laws of 2007 extends the World Trade Center Accidental Disability and Accidental Death benefits provisions to cover certain Handlers and Repairers of motor vehicles or equipment contaminated by such disaster.

# NOTES TO THE COMBINING FINANCIAL STATEMENTS JUNE 30, 2016 AND 2015

Chapter 349 of the Laws of 2007 is a Reopener of the 25/50 Automotive Members Retirement Program.

Chapter 379 of the Laws of 2007 refunds certain frozen Additional Member Contributions to certain participants of the Transit 55/25 Program employed in a job title which was or is represented by the Transit Workers Union Local 100.

Chapter 489 of the Laws of 2008 expanded and redefined the eligibility provisions of the accidental disability and accidental death benefits that arise in connection with the World Trade Center attack on September 11, 2001.

Chapter 211 of the Laws of 2009 continued the valuation and other interest rates for one year to June 30, 2010 from June 30, 2009.

Chapter 157 of the Laws of 2010 provides that members who were laid off from the School Construction Authority ("SCA") on or after December 1, 2002 and who returned to work prior to January 8, 2008, can buy back their layoff time for retirement purposes. Similarly, members who were laid off from the SCA on or after December 1, 2002 and retired prior to July 7, 2010, may purchase service for the layoff period.

Chapter 265 of the Laws of 2010 continued the valuation and other interest rates for one year to June 30, 2011 from June 30, 2010.

Chapter 180 of the Laws of 2011 continued the valuation and other interest rates for one year to June 30, 2012 from June 30, 2011.

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 OYLM, employed the Entry Age Actuarial Cost Method ("EAACM"), an Actuarial Interest Rate ("AIR") assumption of 7.0% per annum, net of expenses and defined the amortization of Unfunded Actuarial Accrued Liabilities ("UAAL").

Chapter 489 of the Laws of 2013 ("Chapter 489/13") extended the WTC Disability Laws to vested members.

Chapter 427 of the Laws of 2014 amends Military Law Section 243-d to provide non-contributory retirement service credit for any member of the New York City Retirement Systems who was called to active military duty on or after September 11, 2001 and prior to January 1, 2006, who did not receive his or her full salary from a participating employer and who otherwise would be eligible to receive retirement service credit in the NYCRS for such active military service. Such member would not be required to make member contributions to receive such credit.

Chapter 41 of the Laws of 2016 removes the specified periods of time, medal requirements, and theaters of operation in which military service would had to have been rendered for a service purchase pursuant to the Retirement and Social Security Law (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.

**SCHEDULE 1** 

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS (In thousands)

June 30, 2016	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	•	1	1	1	ı	3,365,454
Member contributions	485,508	1	1	•	'	1	485,508
Net investment income	1,171,720	184	1	•	'	1	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 VSF's	(11,525)	1	1,968	2,648	3,945	2,964	•
Adminis trative Expenses	(56,683)	1	1	1	1	1	(56,683)
Other	2,928	'	'	1	'	1	2,928
Net change in plan fiduciary net	547,233	(79,733)	'	5	13	7	467,525
position							
Accrued Transfers to/From VSF's	52,724	(52,724)	1	•	•	1	•
Plan fiduciary net position – beginning	54,895,271	179,399	30	39	16	33	55,074,788
Plan fiduciary net position – ending (b) *	55,495,228	46,942	30	44	29	40	55,542,313
Employer's net pension liability – ending (a)-(b)	\$ 22,915,880	\$ 1,284,988	\$ 16,468	\$ 22,350	\$ 32,386	\$ 24,750	\$ 24,296,822
Plan fiduciary net position as a percentage of	70.77%	3.52%	0.18%	0.20%	%60:0	0.16%	69.57%
the total pension liability							
Covered-employee 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-employee payroll	185.75%	A/N	N/A	N/A	A/A	N/A	196.94%

Additionally, in accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2013.

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

# SCHEDULE 1 (CONTINUED)

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS
(In thousands)

June 30, 2015							
	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	TOTAL
Total pension liability.							
Service cost	\$ 1,808,955	\$ 23,532	· \$	· \$	ι <del>9</del>	ا ج	\$ 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)	(863)	(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 inves tment income	1,175,099	10	•	•	•	•	1,175,109
Benefit payments and withdrawals	(4,235,644)	(209'92)	(2,083)	(2,682)	(4,047)	(3,073)	(4,324,135)
Payments to Other Retirement Systems	(7,142)	•	•	•	•	•	(7,142)
Transfers to VSF's	(11,918)	12	2,100	2,686	4,040	3,080	•
Administrative Expenses	(54,635)	•	1	1	1	•	(54,635)
Other	4,140	•	•	'	•	•	4,140
Net change in plan fiduciary net	497,287	(76,584)	17	4	(7)	7	420,724
position							
Plan fiduciary net position – beginning	54,779,447	225,983	13	35	23	26	55,005,527
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	74.27%	13.78%	0.18%	0.17%	0.05%	0.13%	73.13%
the total pension liability							
Covered-employee payroll	\$ 12,314,958	A/N	A/N	N/A	A/N	A/N	\$ 12,314,958
Employer's net pension liability as a percentage of covered-em ployee payroll	154.45%	Ą/Z	δ/Z	Ø/Z	Ψ/N	Ψ/Z	164.36%
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Additionally, in accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2013.

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

# SCHEDULE 1 (CONTINUED)

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF CHANGES IN THE EMPLOYERS' NET PENSION LIABILITY AND RELATED RATIOS (In thousands)

June 30, 2014								
	QPP	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	0	TOTAL
Total pension liability:								
Service cost	\$ 1,783,734	\$ 23,329	' <del>У</del>	, \$	' \$	, \$	\$	1,807,063
Interest	4,825,904	77,397	1,267	1,655	2,416	1,820	4,	4,910,459
Changes of benefit terms	•	•	•	•	•	•		•
Differences between expected and actual								
experience	•	•	•	•	•	•		•
Changes of assumptions	•	1	•	1	•	'		
Benefit payments and withdrawals	(3,990,569)	•	(2,187)	(2,782)	(4,054)	(3,089)	(4,0	(4,002,681)
Net change in total pension liability	2,619,069	100,726	(920)	(1,127)	(1,638)	(1,269)	2,	2,714,841
Total pension liability – beginning	69,119,408	1,082,338	19,169	25,006	36,508	27,524	70,	70,309,953
Total pension liability – ending (a)	71,738,477	1,183,064	18,249	23,879	34,870	26,255	73,	73,024,794
Plan fiduciary net position:								
Employer contributions	3,114,068	•	1	i	1	1	·, κ	3,114,068
Member contributions	447,689	1	•	1	1	•	•	447,689
Netinvestmentincome	8,262,467	20	•	•	1	•	80	8,262,487
Benefit payments and withdrawals	(3,990,569)	•	(2,187)	(2,782)	(4,054)	(3,089)	(4)	(4,002,681)
Payments to Other Retirement Systems	(7,228)	•	•	1	1	•		(7,228)
Transfers to VSF's	(12,125)	•	2,168	2,797	4,070	3,090		•
Administrative Expenses	(50,431)	1	1	i	1	1		(50,431)
Other	4,881	•		1	1	•		4,881
Net change in plan fiduciary net	7,768,752	20	(19)	15	16	_	7,	7,768,785
position								
Accrued Transfers to VSF's	(190,000)	190,000	•	•	•	•		
Plan fiduciary net position – beginning	47,200,695	35,963	32	20	7	25	47,	47,236,742
Plan fiduciary net position – ending (b) *	54,779,447	225,983	13	35	23	- 26	55,	55,005,527
Employer's net pension liability – ending (a)-(b)	\$ 16,959,030	\$ 957,081	\$ 18,236	\$ 23,844	\$ 34,847	\$ 26,229	\$ 18,0	18,019,267
Plan fiduciary net position as a percentage of	76.36%	19.10%	0.07%	0.15%	0.07%	0.10%		75.32%
the total pension liability								
Covered-employee payroll	\$ 12,183,011	A/A	√X V	√N ∀/N	A/N	A/N	\$ 12,	12,183,011
Employer's net pension liability as a percentage of covered-employee payroll	139.20%	N/A	A/N	A/N	N/A	A/N	Ì	147.90%

Additionally, in accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2013.

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

**SCHEDULE 2** 

NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
QUALIFIED PENSION PLAN
SCHEDULE OF CITY CONTRIBUTIONS
(In thousands)

2007	\$ 1,471,030	1,471,030		9,456,351	15.56 %
2008	\$ 1,874,242	1,874,242	·	9,863,912	19.00 %
2009	\$ 2,150,438	2,150,438	\$	10,454,244	20.57 %
2010	\$ 2,197,717	2,197,717		10,977,607	20.02 %
2011	\$ 2,387,216	2,387,216	·   φ	11,465,975	20.82 %
2012	\$ 3,017,004	3,017,004	\$	11,812,858	25.54 %
2013	\$ 3,046,845	3,046,845	· •	11,954,975	25.49 %
2014	\$ 3,114,068	3,114,068	\$	12,183,011	25.56 %
2015	\$ 3,160,258	3,160,258	\$	12,314,958	25.66 %
2016	\$ 3,365,454	3,365,454	€	12,336,979	27.28 %
	Actuarially determined contributions	Contributions in relation to the actuarially determined contributions	Contribution deficiency (excess)	Covered-employee payroll	Contribution as a percentage of covered-employee payroll

# SCHEDULE 2 (CONTINUED)

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) QUALIFIED PENSION PLAN SCHEDULE OF CITY CONTRIBUTIONS (In thousands)

# Notes to Schedule:

The above actuarially determined contributions were developed using a One-Year Lag Methodology, under which the actuarial valuation determines the employer contribution for the second discussing facal year (e.g. Fiscand Year (e.g. Fiscand Forest Vear 2014). The methods and assumptions used to determine the actuarial y determined contributions are as follows:

Valuation Dates	June 30, 2014	June 30, 2013	June 30, 2012	June 30, 2011	June 30, 2010	June 30, 2009- June 30, 2005
Actuarial cost method	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Frozen Initial Liability <sup>1</sup>
Amortization method for Unfunded Actuarial Accrued Liabilities: Initial Unfunded Post-2010 Unfundeds	Increasing Dollar Level Dollar	Increasing Dollar Level Dollar	Increasing Dollar Level Dollar	Increasing Dollar Level Dollar	increasing Dollar Level Dollar	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z
Remaining amortization period: initial Unfunded 2010 ERI 2011 Actuarial Galas/Losses 2012 Actuarial Galas/Losses 2013 Actuarial Galas/Losses 2014 Actuarial Galas/Losses	18 years (closed) 2 years (closed) 12 years (closed) 13 years (closed) 14 years (closed) 15 years (closed)	19 years (closed) 3 years (closed) 13 years (closed) 14 years (closed) 15 years (closed)	20 years (closed) 4 years (closed) 14 years (closed) 15 years (closed) NA NA NA	21 years (closed) 5 years (closed) 15 years (closed) NA NA	22 years (closed) NA NA NA NA NA NA NA NA	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z
Actuarial Asset Valuation (AAV) Method	Modified six-year moving avarage of market values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010. The June 30, 2010 defined to recognize Fiscal Year 2011 investment performance. 4	Modified six-year mowing average of market values with a "Market Value Restart" as of June 30. 2011. The June 30, 2010 AAV 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 AAV 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 AAV 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 AAV is The June 30 2010 AAV is fedimed to recognize Fiscal Year 2011 investment performance.	Modified six-year moving average of market values with a "Market Value Restart" as of June 30, 1999.
Actuarial assumptions: Assumed rate of return Post-retirement mortality	7.0% per annum, net of investment expenses <sup>3</sup> Tables adopted by Board of Trustes during Fiscal	7.0% per annum, net of investment expenses <sup>3</sup> Tables adopted by Board of Trustees during Fiscal	7.0% per annum, net of investment expenses <sup>3</sup> Tables adopted by Board of Trustes during Fiscal	7.0% per annum, net of investment expenses <sup>3</sup> Tables adopted by Board of Trustees during Fiscal	7.0% per annum, net of investment expenses <sup>3</sup> Tables adopted by Board of Trustees during Fiscal	8.0% per annum, gross of investment expenses <sup>3</sup> Tables adopted by Board of Trustes during Fiscal
Active service: withdrawal, death, disability, service retirement	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2006
Salary increases	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year. <sup>3</sup>	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year. <sup>3</sup>	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year. <sup>3</sup>	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year. <sup>3</sup>	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year. <sup>3</sup>	In general, ment and promotion increases plus assumed General Wage Increases of 3.0% per year. <sup>3</sup>
Cost-of-Living Adjustments <sup>3</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	1.3% per annum

Under this actuarial cost method, the Initial Liability was reestablished as of June 30, 1999, by the Entry Age Actuarial Cost Method but with the unfunded actuarial accused liability (UAAL) not less than \$50. The financial results using this Frozen Initial Liability 1 Actuarial Cost Method are the same as those that would be produced using the Aggregate Actuarial Cost Method.

the June 30, 1999 UAAL for the QPP equaled \$0 and no amortization period was In conjunction with Chapter 85 of the Laws of 2000, there is an required.

 $<sup>^3</sup>$  Developed using a long-term Consumer Price Inflation assumption of 2.5% per year.

<sup>4</sup> As of the June 30, 2014 (Lag) valuation, the AAV is constrained to be no more than 20% from the Market Value

**SCHEDULE 3** 

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) QUALIFIED PENSION PLAN SCHEDULE OF INVESTMENT RETURNS

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

Fiscal year ended	<u>QPP</u>	COVSF
June 30, 2016	1.45%	0.19%
June 30, 2015	3.10%	0.03%
June 30, 2014	17.006%	0.055%

Note: In accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2013.

# Additional Supplementary Information SCHEDULE OF INVESTMENT EXPENSES Year Ended June 30, 2016

Fees Paid to Investment Managers for FY 2016 Services <sup>1</sup>	\$161,876,122
Fees Paid to Investment Consultants <sup>1</sup>	3,497,131
Investment-related Legal Fees <sup>1</sup>	270,285
Fees Paid to Investment Managers and Consultants	165,643,538
Private Equity Organizational Costs	12,820,411
Real Estate Partnership Organizational Costs	4,194,968
Alternative Opportunity & Global Fixed Organizational Costs	8,069,944
Foreign Taxes Withheld	16,850,077
Reimbursement to NYC Comptroller's Office for Investment Expenses Paid	3,022,828
Miscellaneous Investment Expenses	2,394,337
Total Investment Expenses Paid Directly by the Plan	212,996,103
Fees Related to Securities Lending Transactions	2,061,708
Total Investment Expenses and Fees Paid Directly by the Plan	215,057,811
Total Paid by the NYC Comptroller's Office	661,982
<b>Total Investment Expenses and Fees</b>	215,719,793

*Note:* 

<sup>1)</sup> For details, see Schedule of Fees Paid to Investment Managers and Consultants beginning on Page 137.

Personal Services	Employee Compensation	\$ 37,950,289
	Consultants <sup>1</sup>	3,771,034
Professional Services	Medical Board and Medical Consultants	846,800
	Steno for Medical and Trustees' Boards	70,092
	20110 101 11201011 1110 11101000 2011 110	4,687,929
	Postage	625,034
Communication	Telephone	496,73
	Printing	238,62
	-	1,360,39
Rentals	Office and Storage Space	5,453,383
	Facilities Services	2,306,165
	Office Supplies and Services	1,791,81
Other	Software, Licenses, and Support	1,433,013
	Office and Data Processing Equipment	1,134,302
	Equipment Maintenance	565,69
		7,230,989
NYCERS' Direct Expenses		56,682,988
	Financial Information Services	3,418,23
Incurred by Other City Agencies	Office of the Comptroller	812,45
	Law Department	490,970
City Agencies	Office of Management and Budget	146,33
	Office of Payroll Administration	138,89
		5,006,89
Total Administrative Expens	ses	61,689,883

# Additional Supplementary Information SCHEDULE OF PAYMENTS TO CONSULTANTS Year Ended June 30, 2016

Nature of Service	Firm	Fees
	Gartner Inc	\$ 1,993,492
	Crowe Horwath LLP	377,400
	Digital Deployment Inc	222,750
	CWI Coaching and Consulting	139,946
	Presidio Network Solutions	31,375
Consultant Services	Q-Matic Corporation	30,580
	Jean North Brewer	16,575
	Enterprise Risk Management Inc	16,300
	Avaya Inc	5,902
	Sanders, Susan	750
Computer Services	UTC Associates Inc	177,841
	Geomatrix Software Services Inc	172,563
	Spruce Technology Inc	157,845
	Diaspark Inc	156,082
	Deltamine Inc	46,464
	Sharp Decisions Inc	36,870
	Elegant Enterprise Wide Solutions Inc	25,344
	Granwood Inc	17,480
	QED National	12,792
Architectural Services	Mancini Duffy	107,635
Mechanical and Electrical Engineering	Cosentini	34,500
Energy Efficiency Engineering	The Daylight Savings Company	(9,452
Total Payment to Consultants		3,771,034

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# PART 3 INVESTMENT SECTION

# REPORT ON INVESTMENT ACTIVITY AND POLICIES

# **Investment Policies and Objectives**

The purpose of the New York City Employees' Retirement System 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 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-AFSCME, 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 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. The bulk of the portfolio is in a very wide variety of domestic stocks and bonds. The Policy Mix consists of 32.6% in U.S. Equities, 16.9% in an International Investment Fund involving only New York City pension plans, 33.5% in U.S. Fixed Income, and 17.0% in Alternative Investments, which includes private equity, real estate investments, and hedge funds. 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. As noted in the Asset Allocation chart on page 133, over the last six years, Alternative Investments have increased as a percentage of the overall portfolio, reducing the Plan's concentration in U.S. equity 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 assure 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 2016, the ETI Plan issued additional investments and commitments for new loans to finance the rehabilitation or new construction of individual multifamily projects through its Public/Private Apartment Rehabilitation program. The Plan increased its investment in the AFL-CIO's Housing Investment Trust, which focuses on meeting the need for affordable housing in New York City. In addition, the Plan maintained its separately managed account with the Royal Bank of Canada to invest 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. The Plan also maintains an investment in the CPC 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.
- 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 towards achieving its objectives. In addition, as well as being a Board member, the City Comptroller is the custodian of the funds of the Plan and oversees all of the City's pension trust funds. The Comptroller's Office is the avenue by which the Board's directives are implemented. The Comptroller's Office manages the actual flow of funds to the investment advisors, and it assures that the investments recommended by the advisors meet the legal restrictions for plan investments. It also conducts its own performance analysis of individual advisors and of the different investment categories. The Comptroller is responsible for cash management related to the Plan, and provides various cash receipt and cash disbursement services to the Plan.

# **Investment Accounting**

Investments are reported at fair value. Securities purchased pursuant to agreements to resell are carried at the contract price, exclusive of interest, at which the securities will be resold. Fair value is defined as the quoted market value at the end of the last trading day of the period, except for the International Investment funds (the "IIF") and Alternative Investment funds (the "ALTINVF"). The IIF are private funds of publicly traded securities which are managed by various investment managers on behalf of the Plan. Fair value is determined by Plan management based on information provided by the various investment managers. The investment managers determine fair value using the last available quoted price for each security owned adjusted by any contributions to or withdrawals from the fund during the period. The ALTINVF are 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.

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:

Fixed income investments may be made only in U.S. Government securities, securities of government agencies backed by the U.S. Government, securities of companies rated BBB or better or securities rated below BBB (up to 10% of the total asset allocation) by both Standard & Poor's Corporation and Moody's Investors' Service, or any bond on the list of Legal Investments for New York Savings Banks as published by the Department of Financial Services.

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 100% to 102% of matured value, purchased through primary dealers of U.S. Government securities.
- 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 New York City Administrative Code.

In addition, investments of up to 25.0% of total pension fund assets may be made in instruments not specifically covered by the NY State Retirement and Social Security Law.

No investment in any one corporation may represent more than either 2% of the Plan net assets or 5% of the corporation's total outstanding issues.

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 2016 the net investment income earned by the portfolio, including interest and dividends, contributed \$1.171 billion to the Plan's revenue, which was little changed from the \$1.175 billion in net investment income that the portfolio earned in Fiscal Year 2015. The Table of Revenue by Source on page 202 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 continues to generate increased income, 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 fair value of the Plan's investment portfolio as of June 30, 2016 was \$60.0 billion, which included Securities Lending Collateral of \$5.3 billion. This is shown in detail in the Investment Summary on page 131, and is consistent with the Statement of Plan Fiduciary Net Position on page 78. However, the portfolio percentages that are used below and in the Asset Allocation charts on pages 132 and 133 are based on \$54.7 billion, which is net of the Securities Lending Collateral.

The total return on the investment portfolio during Fiscal Year 2016 was 1.52 %, which is lower than the NYCERS' Policy Benchmark of 2.28%. Domestic Equities, which comprise 33.8% of the total portfolio, returned 1.68%, lower than the Russell 3000 Index of 2.14%. 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.

The International Equity portfolio is externally managed as part of a fund that only includes NYC retirement systems as shareholders. It makes up 16.8% of the total portfolio, and it contributed a return of (8.40%), which beat the MSCI AC World ex US Index of (10.24%).

The U.S. Fixed Income segment, externally managed and constituting 31.3% of the portfolio, returned 4.44%. This segment contains two main components – the Structured Managed Program, which returned 6.56%, as compared to the NYC Core Plus Five Index of 7.16%; and the Enhanced Yield component, which returned 0.28% as compared to the Citigroup BB & B index of 0.83%.

The Alternative Investment segment accounted for 18.1% of the investment portfolio. This segment is comprised primarily of three major components – Private Equity, which returned 6.36%; Private Real Estate, which returned 12.95%; and Hedge Funds, which returned (3.58%). The corresponding index performance relating to these components is published in the Schedule of Investment Results on page 136.

All investment results are time-weighted rates of return that are reported net of fees, and are based on market values.

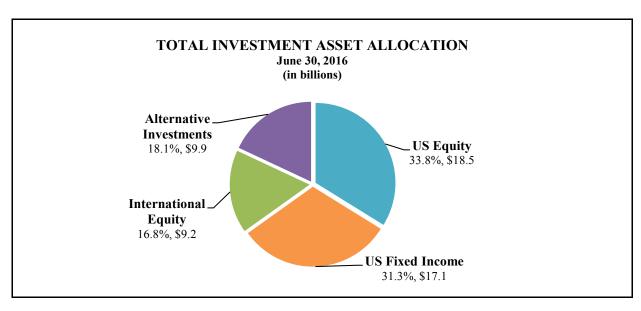
Listings of the Plan's investment securities are available upon request.

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.

Type of Investment	Market Value (in thousands)	Percent of Total Market Value
US Equity	\$ 18,523,033	33.8%
US Fixed Income		
Short Term Investments <sup>1</sup>	1,614,900	2.9%
Long Term Bonds - U.S. Government	4,289,153	7.8%
Long Term Bonds - Corporate	7,157,423	13.1%
Collective Trust Funds - Mortgages	607,685	1.1%
Collective Trust Funds - Fixed Income	1,022,145	1.9%
Collective Trust Funds - TIPS	2,448,307	4.5%
Total US Fixed Income	17,139,613	31.3%
International Equity	9,220,895	16.8%
Alternative Investments		
Private Equity Holdings	8,749,183	16.0%
Hedge Fund	1,123,861	2.1%
<b>Total Alternative Investments</b>	9,873,044	18.1%

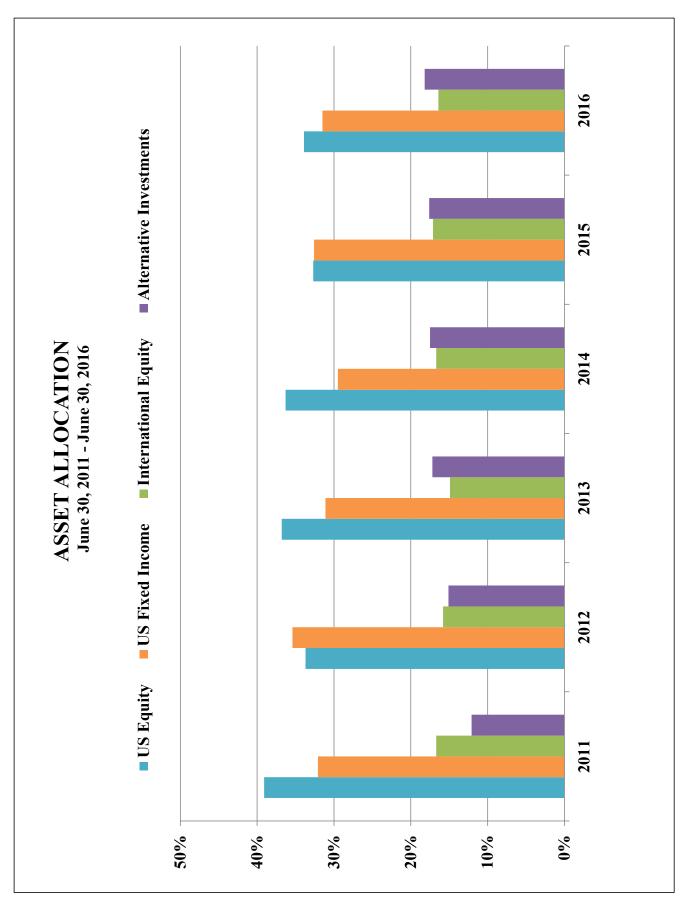
# Notes:

- 1) Includes \$43.693 million held separately by the Correction Officers' Variable Supplement Fund.
- 2) Excludes \$5.267 billion in collateral from securities lending.



# **COMPARISON OF ASSET ALLOCATION AND POLICY MIX** June 30, 2016 40.0% 35.0% 30.0% 25.0% 20.0% 15.0% 10.0% 5.0% 0.0%**US Fixed** Alternative **International US Equity** Income **Equity Investments** ■ Asset Mix 33.8% 31.3% 16.8% 18.1% ■ Policy Mix 32.6% 16.9% 17.0% 33.5%

Note: Percentages exclude collateral from securities lending.



# LIST OF LARGEST EQUITY HOLDINGS (at Fair Value) June 30, 2016

	Security	Shares	Fair Value	Percent of Domestic Equities
1	Apple Inc	3,858,805	\$ 368,901,758	2.00%
2	Exxon Mobil Corporation	3,284,445	307,883,874	1.67%
3	Alphabet Inc	424,357	296,113,896	1.60%
4	Microsoft Corporation	5,523,809	279,431,812	1.51%
5	Johnson & Johnson Company	1,887,580	228,963,454	1.24%
6	AT&T Inc	5,135,222	221,892,943	1.20%
7	General Electric Company	6,381,222	200,880,869	1.09%
8	Amazon.com Inc	267,630	191,521,381	1.04%
9	Berkshire Hathaway Inc	1,295,990	183,940,677	1.00%
10	Verizon Communications Inc	3,104,383	173,348,747	0.94%
11	Facebook Inc	1,501,846	171,630,961	0.93%
12	J.P. Morgan Chase & Company	2,761,627	171,607,502	0.93%
13	Wells Fargo & Company	3,194,929	171,503,795	0.93%
14	Pfizer Inc	4,766,612	167,832,409	0.91%
15	Chevron Corporation	1,588,375	166,509,351	0.90%
16	Procter & Gamble Company	1,914,353	162,088,269	0.88%
17	Intel Corporation	3,771,775	123,714,220	0.67%
18	Coca-Cola Company	2,699,641	121,967,822	0.66%
19	International Business Machines Corp	802,851	121,856,725	0.66%
20	Home Depot Inc	946,051	120,801,252	0.65%
21	Wal-Mart Stores Inc	1,584,711	115,715,597	0.63%
22	Merck & Company Inc	2,005,764	115,552,064	0.63%
23	Comcast Corporation	1,761,761	114,849,200	0.62%
24	Cisco Systems Inc	3,859,573	110,731,149	0.60%
25	UnitedHealth Group Inc	778,721	109,955,405	0.60%
26	The Walt Disney Company	1,114,012	108,972,654	0.59%
27	PepsiCo Inc	1,023,318	108,410,309	0.59%
28	Bank Of America Corporation	7,285,772	106,498,826	0.58%
29	Visa Inc	1,274,064	94,497,327	0.51%
30	Oracle Corporation	2,196,370	89,897,424	0.49%
31	Citigroup Inc	2,102,446	89,122,686	0.48%
32	Bristol Myers Squibb Co	1,181,051	86,866,301	0.47%
33	Amgen Inc	559,998	85,203,696	0.46%
34	CVS Health Corporation	869,524	83,248,228	0.45%
35	McDonald's Corporation	683,014	82,193,905	0.45%
36	Gilead Sciences Inc	971,749	81,063,302	0.44%
37	3M Company	438,017	76,705,537	0.42%
38	Medtronic PLC	854,404	74,136,635	0.40%
39	Schlumberger Limited	930,140	73,555,471	0.40%
40	AbbVie Inc	1,073,240	66,444,288	0.36%
	Total	,,	5,826,011,718	31.58%

Note: A full list of the plan's securities is available upon request.

# LIST OF LARGEST BOND HOLDINGS (at Fair Value) June 30, 2016

	Security Description	Fair Value	Percent of Long Term Fixed Income
1	FNMA Securities	\$ 1,415,755,629	12.37%
2	U.S. Treasury Securities	1,265,448,973	11.06%
3	GNMA Securities	892,679,771	7.80%
4	Federal Home Loan Mortgage Corp	703,063,308	6.14%
5	Community/Economic Development Bonds	150,094,648	1.31%
6	Bank of America Corporation	104,399,311	0.91%
7	Citigroup & Subsidiaries	94,888,930	0.83%
8	Verizon Communications Inc	90,919,427	0.79%
9	Goldman Sachs Group	90,425,305	0.79%
10	J.P. Morgan Chase & Subsidiaries	89,847,330	0.78%
11	Morgan Stanley	87,503,325	0.76%
12	AT&T Inc	67,516,159	0.59%
13	Ford Company & Subsidiaries	57,497,184	0.50%
14	General Electric Company	56,421,140	0.49%
15	AbbVie Inc	48,640,614	0.42%
16	HCA Inc	46,462,084	0.41%
17	Anheuser-Busch InBev	44,073,320	0.39%
18	Oracle Corporation	40,334,634	0.35%
19	Charter Communications Operating LLC	40,148,689	0.35%
20	CVS Health	37,046,008	0.32%
21	Time Warner Inc	36,729,052	0.32%
22	Apple Inc	35,321,875	0.31%
23	Frontier Communications Corporation	35,301,920	0.31%
24	Berkshire Hathaway Inc	33,458,535	0.29%
25	Wells Fargo & Company	32,463,056	0.28%
26	Lockheed Martin Corporation	31,724,484	0.28%
27	Actavis Inc	31,608,871	0.28%
28	The Kraft Heinz Company	31,590,545	0.28%
29	HSBC Bank	31,005,597	0.27%
30	COMM Mortgage Trust	30,844,172	0.27%
31	Credit Suisse Group Ltd	27,495,792	0.24%
32	Jefferies Group LLC	26,974,144	0.24%
33	Celgene Corporation	26,767,440	0.23%
34	The Priceline Group	26,459,729	0.23%
35	UnitedHealth Group Inc	26,298,920	0.23%
36	General Motors Company	26,201,390	0.23%
37	Microsoft Corp	26,091,979	0.23%
38	United Mexican States	25,694,170	0.22%
39	Enterprise Products Operating LLC	25,535,533	0.22%
40	T-Mobile US Inc	25,515,206	0.22%
	Total	6,016,248,201	52.54%

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.

# SCHEDULE OF INVESTMENT RESULTS

**Time-Weighted Rates of Return** 

	Year	Ended Ju	ne 30 <sup>1</sup>		Trailing <sup>2</sup>	
	2016	2015	2014	3 Years	5 Years	10 Years
Total Portfolio	1.52%	3.11%	17.04%	7.18%	6.96%	6.12%
NYCERS' Policy Benchmark	2.28%	3.95%	16.81%	7.46%	7.52%	6.37%
Managed by Outside Advisors						
US Equity	1.68%	6.35%	24.96%	10.62%	11.18%	7.31%
Russell 3000 Index	2.14%	7.29%	25.22%	11.13%	11.60%	7.40%
International Equity	-8.40%	-5.91%	20.94%	1.59%	0.27%	2.20%
MSCI AC World ex US (Net) Index	-10.24%	-5.26%	21.75%	1.16%	0.10%	1.87%
Total Fixed Income	4.44%	1.23%	7.78%	4.53%	4.69%	6.25%
Fixed Income - Structured	6.56%	1.88%	6.61%	5.05%	4.90%	6.24%
NYC - Core Plus Five Index	7.16%	2.08%	5.54%	4.91%	4.57%	5.87%
Fixed Income - Enhanced Yield	0.28%	-0.46%	12.88%	4.30%	5.76%	7.41%
Citigroup BB & B Index	0.83%	0.28%	10.91%	3.90%	5.63%	6.18%
Private Equity	6.36%	12.24%	15.20%	11.21%	9.89%	8.84%
NYC R3000 + 3% Lagged Index	2.65%	15.71%	28.84%	14.16%	14.57%	11.33%
Private Real Estate	12.95%	16.06%	13.20%	14.06%	14.50%	6.91%
NCREIF NFI-ODCE NET + 100 BP Index	11.90%	14.51%	12.85%	13.08%	12.77%	-
Hedge Funds	-3.58%	3.89%	6.54%	2.34%	2.62%	-
HFRI Composite + 1% Index	-4.50%	4.99%	8.62%	2.94%	2.65%	-
In-House Portfolio						
Short Term Investments	0.51%	0.52%	0.21%	0.41%	0.45%	1.61%

# Notes:

<sup>1)</sup> For 2016 and 2015, the investment returns are reported net of fees; for 2014, the investment returns are reported gross of fees.

<sup>2)</sup> For trailing 3, 5, and 10 years, the investment returns are reported gross of fees.

	Assets under	_
Entity Name	Management (in thousands)	Fees (in dollars)
Investment Managers' Fees		
Fixed Income		
Advent (Convertible Bonds)	\$ 329,104	\$ 1,665,864
Barrow, Hanley, Mewhinney & Strauss (Credit Sector)	693,175	915,223
Blackrock (Corporate)	912,211	381,499
Blackrock (Government Sector)	609,983	278,451
Blackrock (Mortgage)	1,033,786	599,385
Fort Washington (Enhanced Yield)	117,674	225,440
GIA Partners LLC (Emerging Mgrs)	104,857	304,479
Goldman Sachs-TCW (Mortgage)	452,617	566,172
Loomis Sayles (Enhanced Yield)	409,678	1,270,885
Neuberger Berman Fixed Income (Enhanced Yield)	352,062	1,250,603
Neuberger Berman Fixed Income (Mortgage Sector)	903,052	376,058
New Century Advisors-Core Plus (Emerging Mgrs)	26,905	158,024
Oaktree (Enhanced Yield)	330,603	1,255,837
Pacific Investment Mgmt. Co (Gov't)	-	(100,000)
Pacific Investment Mgmt. Co (Mortgage)	-	(230,000)
Penn Capital Management (Enhanced Yield)	128,366	433,849
PIM Ramirez Asset (Emerging Mgrs)	37,899	125,273
Prudential (Corporate)	1,263,900	870,973
Pugh Capital Management-Core (Emerging Mgrs)	30,197	100,103
Shenkman Capital Management (Enhanced Yield)	175,137	591,856
Smith Breeden Associates-TCW (Mortgage)	178,760	313,838
State Street Bank and Trust Co (Gov't)	611,192	336,186
Stone Harbor (Enhanced Yield)	203,156	537,384
T. Rowe Price (Corporate)	920,267	993,118
T. Rowe Price (Enhanced Yield)	356,853	1,034,265
Taplin Canida & Habacht (Corporate)	785,169	590,520
Victory (Convertible Bonds)	203,696	567,079
Wellington Management (Mortgage)	452,367	439,865
Total Fixed Income	11,622,664	15,852,230
Domestic Equity		
Amalgamated S&P 500	4,644,060	125,621
Attucks Asset Management (Value)	317,532	1,718,495
Barclays Global (Russell 3000)	-	24,537
BlackRock (Russell 3000)	-	14,635
BlackRock Inst. R 1000 (Growth)	2,789,771	167,606
BlackRock Inst. R 1000 (Value)	2,678,233	185,905
Capital Prospects LLC	75,016	411,559
Castle Ark Management LLC	-	5,523
Ceredex SCV	281,819	1,473,962
Daruma Asset Management LCC	-	955,872
F.I.S. Fund Mgmt.	237,095	1,154,187
Profit Investment Mgmt Large Cap Growth	-	(108,893)
RAFI Enhanced Large Companies	1,437,723	1,845,989

Entity Name	Assets under Management (in thousands)	Fees (in dollars)
RAFI Enhanced Small Companies	\$ 972,806	\$ 1,890,815
Seizert Capital Partners LLC	-	(14,781
State Street (Russell 3000)	1,701,116	115,110
State Street (S&P 400 Mid Cap)	1,719,571	92,923
Total Progress Investment Management Co	400,780	2,384,693
VTL S&P 500 (Large Cap)	485,087	525,272
Walden Asset Mgmt	341,146	1,516,976
Wellington SCV	157,243	1,125,984
<b>Total Domestic Equities</b>	18,238,998	15,611,991
Private Equity		
ACON Equity Partners III LP	9,511	175,591
Aisling Capital II LP	2,251	35,604
Aisling Capital III LP	9,743	110,790
Altaris Health Partners III LP	3,514	97,786
American Securities Partners VI LP	92,928	285,744
American Securities Partners VII LP	-	686,100
Apollo Investment Fund VIII	61,245	972,943
Ardian-ASF VII	7,290	101,016
Ardian Secondary VI	63,081	408,450
Ares Corp Opportunities	4,486	(24,172
Ares Corp Opportunities Fund II	9,201	42,745
Ares Corp Opportunities Fund III	71,015	393,008
Ares Corp Opportunities Fund IV	100,326	1,772,804
Arsenal Capital Partners II	18,484	21,153
Avista Capital Partners	21,577	10,431
AXA Secondary Fund V LP A345	78,816	(1,535,653
BC European Capital IX	93,443	1,362,647
BDCM Opportunity Fund II	34,726	124,924
BDCM Opportunity Fund III	46,168	288,069
Blackstone Capital Partners IV	382	201,059
Blackstone Capital Partners V	42,301	110,002
Blackstone Capital Partners VI	113,007	1,141,952
Blackstone Mezz. Partners II	617	10,098
Bridgepoint Europe V	11,776	1,037,258
Bridgepoint Europe IV	16,041	144,705
Brookfield Infr Fund II	49,590	740,774
Capital Partners Private Equity Income Fund II LP	4,098	97,365
Carlyle Partners V	32,456	170,045
Carlyle Partners VI	40,049	1,173,725
Carpenter Community Banc Fund	18,439	287,972
Catterton Partners VI	33,291	395,223
Centerbridge Cap III	6,516	349,763
CO-Investment Partners Europe	24,620	160,759
Constellation Ventures III	15,559	171,507
Craton Equity Investors	3,616	(103,362)

# SCHEDULE OF FEES PAID TO INVESTMENT MANAGERS AND CONSULTANTS Year Ended June 30, 2016

Entity Name	Assets under Management (in thousands)	Fees (in dollars)
Credit Suisse Custom Fund Investment Grade	\$ -	\$ 28,081
Credit Suisse Emerging Market Domestic Mgrs Fund	88,713	1,047,559
Crestview Partners II	37,587	(27,462)
Crestview Partners III	21,720	492,818
CVC Capital Partners VI	39,382	1,841,962
EQT VI LP	98,904	992,768
EQT VII LP	27,555	1,839,266
Fairview Capital Partners III	26,070	173,908
Fairview Emerging Managers	51,550	110,650
First Reserve Fund XII	14,921	143,342
Fourth CINVEN Fund	6,465	570,594
FS Equity Partners V	2,446	14,642
FS Equity Partners VI	31,628	88,927
FTV Capital IV	15,061	(36,050)
GI Partners Fund II	11,388	74,528
GI Partners Fund III	20,849	430,034
Green Equity Investors VI	98,262	345,665
Grey MT Ptnrs Fund III	2,533	105,896
GSC Recovery III	2,922	57,361
GSO Capital Opportunities Fund	5,854	84,479
Halyard Capital II	8,990	69,618
Incline Equity Partners III LP	6,705	108,683
InterMedia Partners VII	24,788	298,405
J.P. Morgan Investment Management	59,986	671,435
Lee Equity Partners	3,769	(191,480)
Levine Leichtman CAP Partners IV	17,050	153,009
Lexington Capital Partners VII	26,207	322,864
Lincolnshire Equity Fund III	26,630	384,446
Lincolnshire Equity Fund IV	24,719	183,003
Midocean Partners III	49,199	465,499
Mill City Capital	1,981	•
New Mainstream Capital II	2,510	64,114 98,418
New Mountain Partners III		154,146
	105,185	,
NGN Biomed Opportunity II	10,018	222,078
Olympus Growth Fund VI	37,150	1,147,798
Onex Partners III	62,897	712,458
Paladin Homeland Security III	30,771	459,084
Palladium EQ Partners III	19,368	25,720
Palladium EQ Partners IV	24,436	367,354
Pegasus Partners IV LP	17,027	291,384
Pegasus Partners V LP	19,074	48,585
Perseus Partners VII	475	(139,803)
Pine Brook Capital Partners	16,505	244,798
Platinum Equity Capital Partners III	58,699	1,553,951
Quadrangle Capital Partners II  Quaker BioVentures II LP	14,451 10,967	(323,450) 156,162
		tinued on next page

Relativity Fund         3,604         19,43           Riverstone/Carlyle GLB EP IV         22,082         151,86           RLJ Equity Partners Fund 1         23,109         214,84           RRE Ventures III         2,951         74,46           RRE Ventures IV         46,622         487,88           SCP Vitalic Partners II         12,40         163,00           Siris Capital Group LLC         4,200         354,38           Snow, Phipps & Guggenheim         11,844         163,23           Snow, Phipps Group II         29,197         600,00           Solera Partners         3,850         46,43           Star Vest Partners II         21,242         228,99           Stellex Capital Management LP         4,370         270,09           Terra Firma Cap III-Contingent         22,424         379,28           Tridantic Capital Partners III         1,105         24,76           Trilantic Capital Partners VI         21,781         36,88           Trilantic Capital Partners III         13,564         (20	Entity Name	Assets under Management (in thousands)	Fees (in dollars)	
Riverstone/Carlyle GLB EP IV		\$ 6,477	\$ 900,000	
RLI Equity Partners Fund 1 23,100 214,84 RRE Ventures III 2,951 74,46 RRE Ventures III 2,951 74,46 RRE Ventures IV 46,622 487,85 SCP Vitalife Partners II 12,440 163,00 Siris Capital Group LLC 4,200 354,33 Snow, Phipps & Guggenheim 11,844 163,32 Snow Phipps & Guggenheim 29,197 600,00 Solera Partners 3,850 46,43 Snow Phipps Group II 29,197 600,00 Solera Partners 1 21,242 228,98 StarVest Partners II 21,242 228,98 StarVest Partners II 21,244 370,28 Trien Tima Capital Management LP 4,370 270,00 Terra Firma Cap III-Contingent 22,424 379,28 Trident V LP A160 112,746 1,760,28 Trilantic Capital Partners III 1,105 24,76 Trilantic Capital Partners III 1,105 24,76 Trilantic Capital Partners IV 21,781 36,85 Trilantic Capital Partners V 33,260 735,76 Valor Equity Partners V 31,260 735,85 Vista Equity Partners III 13,564 (200,00 Vista Equity Partners IV 124,364 1,278,90 Vista Equity Partners IV 18,757 199,45 Vista Equity Partners IV 12,800 300,00 Vista Equity Partners V 96,689 1,926,39 Vista Equity Partners V 10,800 300,000 VSS Comm Partners IV 3,224 58,99 Warburg Pincus PE XI 106,897 830,04 Warburg Pincus P			19,431	
RRE Ventures III         2,951         74,46           RRE Ventures IV         46,622         487,83           SCP Vitalife Partners II         12,440         163,80           Siris Capital Group LLC         4,200         354,38           Snow, Phipps & Guggenheim         11,844         163,23           Snow Phipps Group II         29,197         600,03           Solera Partners         3,850         46,43           StarVest Partners II         21,242         228,98           Stellex Capital Management LP         4,370         270,00           Terra Firma Cap III-Contingent         22,424         379,28           Tridantic Capital Partners III         1,105         24,76           Trilantic Capital Partners IV         21,781         36,88           Trilantic Capital Partners V         33,260         735,70           Valor Equity Partners         6,321         410,63           Vista Equity Partners IV         124,364         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners V         18,757         199,45           Vista Equity Partners V         18,757         199,45           Vista Equity Partners V         16,699         30,00			151,861	
RRE Ventures IV         46,622         487,85           SCP Vitalife Partners II         12,440         163,00           Stris Capital Group LLC         4,200         354,38           Snow, Phipps & Guggenheim         11,844         163,23           Snow, Phipps Group II         29,197         600,00           Solera Partners         3,850         46,43           Star Vest Partners II         21,242         228,98           Stellex Capital Management LP         4,370         270,09           Terra Firma Cap III-Contingent         22,424         379,28           Trident V LP A160         112,746         1,760,29           Trilantic Capital Partners III         1,105         24,76           Trilantic Capital Partners V         33,260         735,70           Valor Equity Partners         6,321         410,63           Vista Equity Partners III         13,564         (200,00           Vista Equity Partners V         32,264         (200,00           Vista Equity Partners VI         12,4364         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners VI         18,757         199,45           Vista Equity Partners VI         3,224         58,99 </td <td>* *</td> <td>*</td> <td>214,844</td>	* *	*	214,844	
SCP Vitalife Partners II         12,440         163,00           Siris Capital Group LLC         4,200         354,38           Snow, Phipps & Guggenheim         11,844         163,23           Snow, Phipps Group II         29,197         600,00           Solera Partners         3,850         46,43           StarVest Partners II         21,242         228,98           Stellex Capital Management LP         4,370         270,09           Terra Firma Cap III-Contingent         22,424         379,28           Trident V LP A160         112,746         1,760,29           Trilantic Capital Partners III         1,105         24,76           Trilantic Capital Partners IV         21,781         (36,85           Trilantic Capital Partners V         33,260         735,70           Valor Equity Partners         6,321         410,63           Vista Equity Partners III         13,564         (200,00           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners V         124,364         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners V         3,224	RRE Ventures III	2,951	74,469	
Siris Capital Group LLC         4,200         354,38           Snow, Phipps & Guggenheim         11,844         163,23           Snow Phipps Group II         29,197         600,00           Solera Partners         3,850         46,43           Star Vest Partners II         21,242         228,98           Stellex Capital Management LP         4,370         270,00           Terra Firma Cap III-Contingent         22,424         379,28           Trident V LP A160         112,746         1,760,29           Trilantic Capital Partners III         1,105         24,76           Trilantic Capital Partners IV         21,781         (36,85           Trilantic Capital Partners V         33,260         735,70           Valor Equity Partners         6,321         410,63           Vista Equity Partners III         13,564         (200,00           Vista Equity Partners V         124,364         1,278,02           Vista Equity Partners IV         124,364         1,278,02           Vista Equity Partners V         18,757         199,45           Vista Equity Partners VI         18,757         199,45           Vista Equity Partners VI         18,757         199,45           Vista Equity Partners VI         3,224	RRE Ventures IV	-	487,852	
Snow, Phipps & Guggenheim         11,844         163,23           Snow Phipps Group II         29,197         600,00           Solera Partners         3,850         46,43           Star Vest Partners II         21,242         228,88           Stellex Capital Management LP         4,370         270,09           Terra Firma Cap III-Contingent         22,424         379,28           Trident V LP A160         112,746         1,760,29           Trilantic Capital Partners III         1,105         24,76           Trilantic Capital Partners IV         33,260         735,70           Valor Equity Partners         6,321         410,63           Vista Equity Partners III         13,564         (200,00           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners V         96,689         1,926,30           Vista Equity Partners V         3,224         58,99           Vista Equity Partners V         3,224         58,99           Warburg Pincus PE XI         106,897         830	SCP Vitalife Partners II	12,440	163,009	
Snow Phipps Group II         29,197         600,00           Solera Partners         3,850         46,43           StarVest Partners II         21,242         228,98           Stellex Capital Management LP         4,370         270,09           Terra Firma Cap III-Contingent         22,424         379,28           Trident V LP A160         112,746         1,760,29           Trilantic Capital Partners III         1,105         24,76           Trilantic Capital Partners IV         21,781         (36,85           Trilantic Capital Partners V         33,260         735,70           Valor Equity Partners         6,321         410,63           Vista Equity Partners III         13,564         (200,00           Vista Equity Partners IV         124,364         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Foundation Fund II         12,690         300,00           Vista Foundation Fund II         12,690         300,00           Vista Foundation Fund II         12,690         2,277,29           Warburg Pincus PE XII         12,490         2,277,29           Webster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140	Siris Capital Group LLC	4,200	354,382	
Solera Partners         3,850         46,43           Star Vest Partners II         21,242         228,98           Stellex Capital Management LP         4,370         270,09           Terra Firma Cap III-Contingent         22,424         379,28           Trident V LP A160         112,746         1,760,29           Trilantic Capital Partners III         1,105         24,76           Trilantic Capital Partners IV         21,781         (36,85)           Trilantic Capital Partners V         33,260         735,70           Valor Equity Partners         6,321         410,63           Vista Equity Partners III         13,564         (200,00           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners VI         18,757         199,45           Vista Foundation Fund II         12,690         300,00           VSS Comm Partners IV         3,224         58,99           Warburg Pincus PE XI         106,897         830,04           Warburg Pincus PE XII         106,897         830,04           Webster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140	Snow, Phipps & Guggenheim	11,844	163,236	
StarVest Partners II         21,242         228,98           Stellex Capital Management LP         4,370         270,09           Terra Firma Cap III-Contingent         22,424         379,28           Trident V LP A160         112,746         1,760,29           Trilantic Capital Partners III         1,105         24,76           Trilantic Capital Partners IV         21,781         (36,85           Trilantic Capital Partners V         33,260         735,70           Valor Equity Partners         6,321         410,63           Vista Equity Partners III         13,564         (200,00           Vista Equity Partners V         124,364         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners V         18,757         199,45           Vista Equity Partners V         3,224         58,99           Warburg Pincus PE XII         12,690         300,00           VSS Comm Partners IV         3,224         58,99           Warburg Pincus PE XII         12,490         2,277,29           Webster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140         413,42           Yucaipa Corp Initiative II         23,97	Snow Phipps Group II	29,197	600,000	
Stellex Capital Management LP         4,370         270,09           Terra Firma Cap III-Contingent         22,424         379,28           Trident V LP A160         112,746         1,760,29           Trilantic Capital Partners III         1,105         24,76           Trilantic Capital Partners IV         21,781         (36,85           Trilantic Capital Partners V         33,260         735,70           Valor Equity Partners III         13,564         (200,00           Vista Equity Partners IV         124,344         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners V         30,00         300,00           Vista Equity Partners V         3,224         58,99           Warburg Pincus PE XII         106,897         830,04           Warburg Pincus PE XII         12,490         2,277,29           Weblster Capital Management LLC	Solera Partners	3,850	46,436	
Terra Firma Cap III-Contingent         22,424         379,28           Trident V LP A160         112,746         1,760,29           Trilantic Capital Partners III         1,105         24,76           Trilantic Capital Partners IV         21,781         36,88           Trilantic Capital Partners V         33,260         735,70           Valor Equity Partners         6,321         410,63           Vista Equity Partners III         13,564         (200,00           Vista Equity Partners IV         124,364         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners V         3,224         58,99           Warburg Pincus PE XI         106,897         830,04           Warburg Pincus PE XII         12,490         2,277,29           Weblster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140         413,44           Yucaipa Corp Initiative II         23,978         156,70           Total Private Equity <t< td=""><td>StarVest Partners II</td><td>21,242</td><td>228,983</td></t<>	StarVest Partners II	21,242	228,983	
Trident V LP A160         112,746         1,760,29           Trilantic Capital Partners III         1,105         24,76           Trilantic Capital Partners IV         21,781         (36,85)           Trilantic Capital Partners V         33,260         735,70           Valor Equity Partners         6,321         410,63           Vista Equity Partners III         13,564         (200,00           Vista Equity Partners IV         124,364         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners VI         18,757         199,45           Vista Equity Partners VI         3,224         58,99           Warburg Pincus PE XI         106,897         830,04           Warburg Pincus PE XII         106,897         830,04           Warburg Pincus PE XII         12,490         2,277,29           Webster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140         413,42           Yucaipa American Alliance Fund II         129,082         501,53           Yucaipa Corp Initiative II         23,978         156,70           Total Private Equity Opport. & Global Fixed Income         111,335         773,56           Contrari	Stellex Capital Management LP	4,370	270,097	
Trilantic Capital Partners IV         21,781         (36,85           Trilantic Capital Partners V         33,260         735,70           Valor Equity Partners         6,321         410,63           Vista Equity Partners III         13,564         (200,00           Vista Equity Partners IV         124,364         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners VI         18,757         199,45           Vista Equity Partners VI         18,757         199,45           Vista Equity Partners VI         18,757         199,45           Vista Equity Partners VI         3,224         58,99           Warburg Pincus PE XI         106,897         830,40           Warburg Pincus PE XII         12,490         2,277,29           Webster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140         413,42           Yucaipa American Alliance Fund II         129,082         501,53           Yucaipa Corp Initiative II         23,978         156,70           Total Private Equity Opport. & Global Fixed Income         41,1434         1,039,31           Apollo Centre St. Partnership LP         171,335         773,56	Terra Firma Cap III-Contingent	22,424	379,288	
Trilantic Capital Partners IV         21,781         (36,85           Trilantic Capital Partners V         33,260         735,70           Valor Equity Partners         6,321         410,63           Vista Equity Partners III         13,564         (200,00           Vista Equity Partners IV         124,364         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners VI         18,757         199,45           Vista Foundation Fund II         12,690         300,00           VSS Comm Partners IV         3,224         58,99           Warburg Pincus PE XI         106,897         830,04           Warburg Pincus PE XII         106,897         830,04           Webster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140         413,42           Yucaipa American Alliance Fund II         129,082         501,53           Yucaipa Corp Initiative II         23,978         156,70           Total Private Equity - Opport. & Global Fixed Income	Trident V LP A160	112,746	1,760,297	
Trilantic Capital Partners V         33,260         735,70           Valor Equity Partners         6,321         410,63           Vista Equity Partners III         13,564         (200,00           Vista Equity Partners IV         124,364         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners VI         18,757         199,45           Vista Equity Partners VI         12,690         300,00           VSS Comm Partners IV         3,224         58,99           Warburg Pincus PE XI         106,897         830,04           Warburg Pincus PE XII         12,490         2,277,29           Webster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140         413,42           Yucaipa American Alliance Fund II         129,082         501,53           Yucaipa Corp Initiative II         23,978         156,70           Total Private Equity - Opport. & Global Fixed Income         3,406,056         42,120,74           Private Equity - Opport. & Global Fixed Income         141,434         1,039,31           Apollo Centre St. Partners         141,434         1,039,31           Apollo Centre St. Partners         15,288         1,259,58 </td <td>Trilantic Capital Partners III</td> <td>1,105</td> <td>24,764</td>	Trilantic Capital Partners III	1,105	24,764	
Valor Equity Partners         6,321         410,63           Vista Equity Partners III         13,564         (200,00           Vista Equity Partners IV         124,364         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners VI         18,757         199,45           Vista Foundation Fund II         12,690         300,00           VSS Comm Partners IV         3,224         58,99           Warburg Pincus PE XI         106,897         830,04           Warburg Pincus PE XII         12,490         2,277,29           Webster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140         413,42           Yucaipa American Alliance Fund II         129,082         501,53           Yucaipa Corp Initiative II         23,978         156,70           Total Private Equity         3,406,056         42,120,74           Private Equity-Opport. & Global Fixed Income         411,434         1,039,31           Apollo Centre St. Partners         141,434         1,039,31           Apollo Centre St. Partners         171,335         773,56           Contrarian C A LLC         62,282         383,86           Fortress CTR ST Part	Trilantic Capital Partners IV	21,781	(36,854	
Vista Equity Partners III         13,564         (200,00           Vista Equity Partners IV         124,364         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners VI         18,757         199,45           Vista Foundation Fund II         12,690         300,00           VSS Comm Partners IV         3,224         58,99           Warburg Pincus PE XII         106,897         830,04           Warburg Pincus PE XII         12,490         2,277,29           Webster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140         413,42           Yucaipa American Alliance Fund II         129,082         501,53           Yucaipa Corp Initiative II         23,978         156,70           Total Private Equity - Opport. & Global Fixed Income         Value Equity - Opport. & Global Fixed Income           Angelo Gordon CT ST Partners         141,434         1,039,31           Apollo Centre St. Partnership LP         171,335         773,56           Contrarian C A LLC         62,282         383,86           Fortress CTR ST Partners         125,288         1,259,88           Golden Tree OD MTA 111         176,733         882,35	Trilantic Capital Partners V	33,260	735,704	
Vista Equity Partners III         13,564         (200,00           Vista Equity Partners IV         124,364         1,278,02           Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners VI         18,757         199,45           Vista Foundation Fund II         12,690         300,00           VSS Comm Partners IV         3,224         58,99           Warburg Pincus PE XI         106,897         830,04           Warburg Pincus PE XII         12,490         2,277,29           Webster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140         413,42           Yucaipa American Alliance Fund II         129,082         501,53           Yucaipa Corp Initiative II         23,978         156,70           Total Private Equity—Opport. & Global Fixed Income         Value Trivate Equity—Opport. & Global Fixed Income           Angelo Gordon CT ST Partners         141,434         1,039,31           Apollo Centre St. Partnership LP         171,335         773,56           Contrarian C A LLC         62,282         383,86           Fortress CTR ST Partners         125,288         1,259,88           Golden Tree OD MTA 111         176,733         882,35 <t< td=""><td>Valor Equity Partners</td><td>6,321</td><td>410,636</td></t<>	Valor Equity Partners	6,321	410,636	
Vista Equity Partners V         96,689         1,926,39           Vista Equity Partners VI         18,757         199,45           Vista Foundation Fund II         12,690         300,00           VSS Comm Partners IV         3,224         58,99           Warburg Pincus PE XII         106,897         830,04           Warburg Pincus PE XII         12,490         2,277,29           Webster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140         413,42           Yucaipa American Alliance Fund II         129,082         501,53           Yucaipa Corp Initiative II         23,978         156,70           Total Private Equity Opport. & Global Fixed Income         3,406,056         42,120,74           Private Equity-Opport. & Global Fixed Income         141,434         1,039,31           Apollo Centre St. Partners         141,434         1,039,31           Apollo Centre St. Partners         171,335         773,56           Contrarian C A LLC         62,282         383,86           Fortress CTR ST Partners         125,288         1,259,88           Golden Tree OD MTA 111         176,733         882,35           Jone Star Fund VIII         53,306         165,78		13,564	(200,000	
Vista Equity Partners VI         18,757         199,45           Vista Foundation Fund II         12,690         300,00           VSS Comm Partners IV         3,224         58,99           Warburg Pincus PE XII         106,897         830,04           Warburg Pincus PE XII         12,490         2,277,29           Webster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140         413,42           Yucaipa American Alliance Fund II         129,082         501,53           Yucaipa Corp Initiative II         23,978         156,70           Total Private Equity         3,406,056         42,120,74           Private Equity-Opport. & Global Fixed Income         411,434         1,039,31           Angelo Gordon CT ST Partners         141,434         1,039,31           Apollo Centre St. Partnership LP         171,335         773,56           Contrarian C A LLC         62,282         383,86           Fortress CTR ST Partners         125,288         1,259,58           Golden Tree OD MTA 111         176,733         882,35           Lone Star Fund VIII         53,306         165,78           Marathon CTR ST Partners         254,360         1,504,99           NYC-ERS-ARES	Vista Equity Partners IV	124,364	1,278,028	
Vista Foundation Fund II         12,690         300,00           VSS Comm Partners IV         3,224         58,99           Warburg Pincus PE XI         106,897         830,04           Warburg Pincus PE XII         12,490         2,277,29           Webster Capital Management LLC         8,032         84,35           Well Spring Capital Partners V         43,140         413,42           Yucaipa American Alliance Fund II         129,082         501,53           Yucaipa Corp Initiative II         23,978         156,70           Total Private Equity         3,406,056         42,120,74           Private Equity-Opport. & Global Fixed Income         411,434         1,039,31           Apollo Centre St. Partnership LP         171,335         773,56           Contrarian C A LLC         62,282         383,86           Fortress CTR ST Partners         125,288         1,259,88           Golden Tree OD MTA 111         176,733         882,35           Lone Star Fund VIII         53,306         165,78           Marathon CTR ST Partners         254,360         1,504,99           NYC-ERS-ARES Centre Street         133,120         678,53           Oak Hill Ctr. St. Partners         164,529         1,152,29           Oaktree OPP F	Vista Equity Partners V	96,689	1,926,391	
VSS Comm Partners IV       3,224       58,99         Warburg Pincus PE XI       106,897       830,04         Warburg Pincus PE XII       12,490       2,277,29         Webster Capital Management LLC       8,032       84,35         Well Spring Capital Partners V       43,140       413,42         Yucaipa American Alliance Fund II       129,082       501,53         Yucaipa Corp Initiative II       23,978       156,70         Total Private Equity       3,406,056       42,120,74         Private Equity-Opport. & Global Fixed Income       411,434       1,039,31         Appllo Gordon CT ST Partners       141,434       1,039,31         Appllo Centre St. Partnership LP       171,335       773,56         Contrarian C A LLC       62,282       383,86         Fortress CTR ST Partners       125,288       1,259,58         Golden Tree OD MTA 111       176,733       882,35         Lone Star Fund VIII       53,306       165,78         Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudenti	Vista Equity Partners VI	18,757	199,454	
Warburg Pincus PE XI       106,897       830,04         Warburg Pincus PE XII       12,490       2,277,29         Webster Capital Management LLC       8,032       84,35         Well Spring Capital Partners V       43,140       413,42         Yucaipa American Alliance Fund II       129,082       501,53         Yucaipa Corp Initiative II       23,978       156,70         Total Private Equity - Opport. & Global Fixed Income       8       42,120,74         Private Equity - Opport. & Global Fixed Income       141,434       1,039,31         Appllo Centre St. Partnership LP       171,335       773,56         Contrarian C A LLC       62,282       383,86         Fortress CTR ST Partners       125,288       1,259,58         Golden Tree OD MTA 111       176,733       882,35         Lone Star Fund VIII       53,306       165,78         Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57	Vista Foundation Fund II	12,690	300,000	
Warburg Pincus PE XII       12,490       2,277,29         Webster Capital Management LLC       8,032       84,35         Well Spring Capital Partners V       43,140       413,42         Yucaipa American Alliance Fund II       129,082       501,53         Yucaipa Corp Initiative II       23,978       156,70         Total Private Equity       3,406,056       42,120,74         Private Equity-Opport. & Global Fixed Income       42,120,74         Angelo Gordon CT ST Partners       141,434       1,039,31         Apollo Centre St. Partnership LP       171,335       773,56         Contrarian C A LLC       62,282       383,86         Fortress CTR ST Partners       125,288       1,259,58         Golden Tree OD MTA 111       176,733       882,35         Lone Star Fund VIII       53,306       165,78         Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57)	VSS Comm Partners IV	3,224	58,997	
Webster Capital Management LLC       8,032       84,35         Well Spring Capital Partners V       43,140       413,42         Yucaipa American Alliance Fund II       129,082       501,53         Yucaipa Corp Initiative II       23,978       156,70         Total Private Equity       3,406,056       42,120,74         Private Equity-Opport. & Global Fixed Income       411,434       1,039,31         Angelo Gordon CT ST Partners       141,434       1,039,31         Apollo Centre St. Partnership LP       171,335       773,56         Contrarian C A LLC       62,282       383,86         Fortress CTR ST Partners       125,288       1,259,58         Golden Tree OD MTA 111       176,733       882,35         Lone Star Fund VIII       53,306       165,78         Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57)	Warburg Pincus PE XI	106,897	830,048	
Well Spring Capital Partners V       43,140       413,42         Yucaipa American Alliance Fund II       129,082       501,53         Yucaipa Corp Initiative II       23,978       156,70         Total Private Equity       3,406,056       42,120,74         Private Equity-Opport. & Global Fixed Income         Angelo Gordon CT ST Partners       141,434       1,039,31         Apollo Centre St. Partnership LP       171,335       773,56         Contrarian C A LLC       62,282       383,86         Fortress CTR ST Partners       125,288       1,259,58         Golden Tree OD MTA 111       176,733       882,35         Lone Star Fund VIII       53,306       165,78         Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57	Warburg Pincus PE XII	12,490	2,277,297	
Well Spring Capital Partners V       43,140       413,42         Yucaipa American Alliance Fund II       129,082       501,53         Yucaipa Corp Initiative II       23,978       156,70         Total Private Equity       3,406,056       42,120,74         Private Equity-Opport. & Global Fixed Income         Angelo Gordon CT ST Partners       141,434       1,039,31         Apollo Centre St. Partnership LP       171,335       773,56         Contrarian C A LLC       62,282       383,86         Fortress CTR ST Partners       125,288       1,259,58         Golden Tree OD MTA 111       176,733       882,35         Lone Star Fund VIII       53,306       165,78         Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57	Webster Capital Management LLC	8,032	84,351	
Yucaipa American Alliance Fund II       129,082       501,53         Yucaipa Corp Initiative II       23,978       156,70         Total Private Equity       3,406,056       42,120,74         Private Equity-Opport. & Global Fixed Income         Angelo Gordon CT ST Partners       141,434       1,039,31         Apollo Centre St. Partnership LP       171,335       773,56         Contrarian C A LLC       62,282       383,86         Fortress CTR ST Partners       125,288       1,259,58         Golden Tree OD MTA 111       176,733       882,35         Lone Star Fund VIII       53,306       165,78         Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57	•		413,429	
Yucaipa Corp Initiative II         23,978         156,70           Total Private Equity         3,406,056         42,120,74           Private Equity-Opport. & Global Fixed Income           Angelo Gordon CT ST Partners         141,434         1,039,31           Apollo Centre St. Partnership LP         171,335         773,56           Contrarian C A LLC         62,282         383,86           Fortress CTR ST Partners         125,288         1,259,58           Golden Tree OD MTA 111         176,733         882,35           Lone Star Fund VIII         53,306         165,78           Marathon CTR ST Partners         254,360         1,504,99           NYC-ERS-ARES Centre Street         133,120         678,53           Oak Hill Ctr. St. Partners         164,529         1,152,29           Oaktree OPP FD IX         95,649         1,590,81           Prudential-Privest         10         (88,57			501,539	
Total Private Equity         3,406,056         42,120,74           Private Equity-Opport. & Global Fixed Income           Angelo Gordon CT ST Partners         141,434         1,039,31           Apollo Centre St. Partnership LP         171,335         773,56           Contrarian C A LLC         62,282         383,86           Fortress CTR ST Partners         125,288         1,259,58           Golden Tree OD MTA 111         176,733         882,35           Lone Star Fund VIII         53,306         165,78           Marathon CTR ST Partners         254,360         1,504,99           NYC-ERS-ARES Centre Street         133,120         678,53           Oak Hill Ctr. St. Partners         164,529         1,152,29           Oaktree OPP FD IX         95,649         1,590,81           Prudential-Privest         10         (88,57	•	23,978	156,708	
Angelo Gordon CT ST Partners       141,434       1,039,31         Apollo Centre St. Partnership LP       171,335       773,56         Contrarian C A LLC       62,282       383,86         Fortress CTR ST Partners       125,288       1,259,58         Golden Tree OD MTA 111       176,733       882,35         Lone Star Fund VIII       53,306       165,78         Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57			42,120,749	
Apollo Centre St. Partnership LP       171,335       773,56         Contrarian C A LLC       62,282       383,86         Fortress CTR ST Partners       125,288       1,259,58         Golden Tree OD MTA 111       176,733       882,35         Lone Star Fund VIII       53,306       165,78         Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57				
Contrarian C A LLC       62,282       383,86         Fortress CTR ST Partners       125,288       1,259,58         Golden Tree OD MTA 111       176,733       882,35         Lone Star Fund VIII       53,306       165,78         Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57	<del>-</del>		1,039,319	
Fortress CTR ST Partners       125,288       1,259,58         Golden Tree OD MTA 111       176,733       882,35         Lone Star Fund VIII       53,306       165,78         Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57			773,560	
Golden Tree OD MTA 111       176,733       882,35         Lone Star Fund VIII       53,306       165,78         Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57			383,863	
Lone Star Fund VIII       53,306       165,78         Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57			1,259,588	
Marathon CTR ST Partners       254,360       1,504,99         NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57			882,357	
NYC-ERS-ARES Centre Street       133,120       678,53         Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57			165,783	
Oak Hill Ctr. St. Partners       164,529       1,152,29         Oaktree OPP FD IX       95,649       1,590,81         Prudential-Privest       10       (88,57	Marathon CTR ST Partners		1,504,993	
Oaktree OPP FD IX         95,649         1,590,81           Prudential-Privest         10         (88,57)	NYC-ERS-ARES Centre Street		678,532	
Prudential-Privest 10 (88,57	Oak Hill Ctr. St. Partners	164,529	1,152,292	
	Oaktree OPP FD IX	95,649	1,590,811	
Torchlight Investors 9 995 900 26	Prudential-Privest	10	(88,575	
Total Private Equity-Opport. & Global Fixed Income 1,388,040 10,242,79	Torchlight Investors	9,995	900,268	

Apollo Real Estate Fund V LP  Avanath Capital  Blackstone Real Estate Partners Europe III  Blackstone Real Estate Partners IV  Blackstone Real Estate Partners IV  Blackstone Real Estate Partners VI  Blackstone Real Estate Partners VII  Blackstone Real Estate Partners VIII  Blackstone Real Estate Partners VIII  Brookfield Infra Fund III  Canyon Johnson Urban Fund III  Carlyle Partners R.P. Fund VI  EMMES Interborough Fund LLC  First Reserve Energy Infrastructure GP II  FRM Sandy Manager LLC  Global Infrastructure Prt. III  Heitman America RE Trust  Hudson Sandy Manager LLC  J.P. Morgan Chase SP Fund  J.P. Morgan Chase SP Fund  KKR GI Inf. Fd II  LaSalle US Property Fund  Prisa II  Prisa III  RREEF America III Inc  Silverpeak Legacy Partners III  Taconic NY Investment Fund LP  USS Trumball Property Fund (TPF)  Westbrook Real Estate VII LP  Westbrook Real Estate VII LP  Vacadian (Emerging Markets)  Acadian (Small Cap)  3333	under ement sands)	Fees (in dollars)
Apollo Real Estate Fund V LP  Avanath Capital  Blackstone Real Estate Partners Europe III  Blackstone Real Estate Partners IV  Blackstone Real Estate Partners VI  Blackstone Real Estate Partners VI  Blackstone Real Estate Partners VII  Blackstone Real Estate Partners VII  Blackstone Real Estate Partners VIII  Brookfield Infra Fund III  Canyon Johnson Urban Fund II  Canyon Johnson Urban Fund III  Carlyle Partners R.P. Fund VI  Carlyle Partners R.P. Fund VI  Carlyle Partners R.P. Fund VII  Divco West Fund IV  EMMES Interborough Fund LLC  First Reserve Energy Infrastructure GP II  FRM Sandy Manager LLC  Global Infrastructure Prt. III  Heitman America RE Trust  Hudson Sandy Manager LLC  J.P. Morgan Chase SP Fund  LS. J.P. Morgan Chase SP Fund  KKR GI Inf. Fd II  LaSalle US Property Fund  Prisa II  Prisa II  RREEF America III Inc  RREEF America III Inc  RREEF America III Inc  RIEF America III I		
Avanath Capital  Blackstone Real Estate Partners Europe III  Blackstone Real Estate Partners IV  Blackstone Real Estate Partners VI  Blackstone Real Estate Partners VI  Blackstone Real Estate Partners VII  Blackstone Real Estate Partners VIII  Brookfield Infra Fund III  Brookfield Infra Fund III  Brookfield Strategic RE Partners GP LLC  Canyon Johnson Urban Fund II  Canyon Johnson Urban Fund II  Canyon Johnson Urban Fund III  Carlyle Partners R.P. Fund VI  Carlyle Partners R.P. Fund VI  Carlyle Partners R.P. Fund VII  Divco West Fund IV  EMMES Interborough Fund LLC  First Reserve Energy Infrastructure GP II  FRM Sandy Manager LLC  Global Infrastructure Prt. III  Heitman America RE Trust  Hudson Sandy Manager LLC  J.P. Morgan Chase SP Fund  J.P. Morgan Chase SP Fund  KKR GI Inf. Fd II  LaSalle US Property Fund  Frisa III  REEF America III Inc  RREEF America III	19,384	\$ 204,795
Blackstone Real Estate Partners Europe III   36	13,251	65,220
Blackstone Real Estate Partners IV         8           Blackstone Real Estate Partners VI         64           Blackstone Real Estate Partners VIII         173           Blackstone Real Estate Partners VIII         59           Brookfield Infra Fund III         6           Brookfield Strategic RE Partners GP LLC         111           Canyon Johnson Urban Fund III         1           Carlyle Partners R.P. Fund VI         6           Carlyle Partners R.P. Fund VI         41           Carlyle Partners R.P. Fund VII         30           Divco West Fund IV         23           EMMES Interborough Fund LLC         66           First Reserve Energy Infrastructure GP II         7           FRM Sandy Manager LLC         63           Global Infrastructure Prt. III         4           Heitman America RE Trust         208           Hudson Sandy Manager LLC         17           J.P. Morgan Chase SP Fund         255           J.P. Morgan Chase SS Fund         113           KKR GI Inf. Fd II         17           LaSalle US Property Fund         67           Prisa II         18           Prisa III         18           RREEF America II Inc         11           Silverpeak Legacy Part	6,599	301,642
Blackstone Real Estate Partners VI       64         Blackstone Real Estate Partners VII       173         Blackstone Real Estate Partners VIII       59         Brookfield Infra Fund III       6         Canyon Johnson Urban Fund II       11         Canyon Johnson Urban Fund III       2         Carlyle Partners R.P. Fund V       6         Carlyle Partners R.P. Fund VI       41         Carlyle Partners R.P. Fund VII       30         Divco West Fund IV       23         EMMES Interborough Fund LLC       66         First Reserve Energy Infrastructure GP II       7         FRM Sandy Manager LLC       63         Global Infrastructure Prt. III       4         Heitman America RE Trust       208         Hudson Sandy Manager LLC       17         J.P. Morgan Chase SP Fund       253         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa II       115         RREEF America II Inc       11         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       9         Westbrook Real Estat	36,546	405,685
Blackstone Real Estate Partners VII   173	8,616	1,946,190
Blackstone Real Estate Partners VIII         55           Brookfield Infra Fund III         6           Brookfield Strategic RE Partners GP LLC         111           Canyon Johnson Urban Fund III         1           Carlyle Partners R.P. Fund VI         6           Carlyle Partners R.P. Fund VI         41           Carlyle Partners R.P. Fund VII         30           Ucarlyle Partners R.P. Fund VII         30           Divco West Fund IV         23           EMMES Interborough Fund LLC         66           First Reserve Energy Infrastructure GP II         7           FRM Sandy Manager LLC         63           Global Infrastructure Prt. III         4           Heitman America RE Trust         208           Hudson Sandy Manager LLC         17           J.P. Morgan Chase SP Fund         255           J.P. Morgan Chase SS Fund         113           KKR GI Inf. Fd II         17           LaSalle US Property Fund         67           Prisa         111           Prisa II         18           Prisa III         18           REEF America II Inc         4           Silverpeak Legacy Partners III         7           Taconic NY Investment Fund LP         31 <td>54,396</td> <td>680,806</td>	54,396	680,806
Brookfield Infra Fund III   6   Brookfield Strategic RE Partners GP LLC	73,340	1,981,644
Brookfield Strategic RE Partners GP LLC	59,121	1,677,778
Canyon Johnson Urban Fund III       1         Canyon Johnson Urban Fund III       6         Carlyle Partners R.P. Fund V       6         Carlyle Partners R.P. Fund VI       41         Carlyle Partners R.P. Fund VII       30         Divco West Fund IV       23         EMMES Interborough Fund LLC       66         First Reserve Energy Infrastructure GP II       7         FRM Sandy Manager LLC       63         Global Infrastructure Prt. III       4         Heitman America RE Trust       208         Hudson Sandy Manager LLC       17         J.P. Morgan Chase SP Fund       255         J.P. Morgan Chase SS Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa III       18         Prisa III       18         RREEF America II Inc       11         RREEF America III Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       2         Westbrook Real Estate VII LP       2         Total Pri	6,957	234,415
Canyon Johnson Urban Fund III       6         Carlyle Partners R.P. Fund V       6         Carlyle Partners R.P. Fund VI       41         Carlyle Partners R.P. Fund VII       30         Divco West Fund IV       23         EMMES Interborough Fund LLC       66         First Reserve Energy Infrastructure GP II       7         FRM Sandy Manager LLC       63         Global Infrastructure Prt. III       1         Heitman America RE Trust       208         Hudson Sandy Manager LLC       27         J.P. Morgan Chase SP Fund       255         J.P. Morgan Chase SP Fund       255         J.P. Morgan Chase SP Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa II       118         Prisa III       119         RREEF America II Inc       111         RREEF America III Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VIII LP       9         Westbrook Real Estate VIII LP       9         Westbro	1,834	998,036
Carlyle Partners R.P. Fund VI       41         Carlyle Partners R.P. Fund VII       30         Divco West Fund IV       23         EMMES Interborough Fund LLC       66         First Reserve Energy Infrastructure GP II       7         FRM Sandy Manager LLC       63         Global Infrastructure Prt. III       4         Heitman America RE Trust       208         Hudson Sandy Manager LLC       17         J.P. Morgan Chase SP Fund       255         J.P. Morgan Chase SS Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa II       187         Prisa III       119         RREEF America II Inc       111         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       9         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity         Acadian (Emerging Markets)       515         Acadian (Small Cap)       3333	1,996	(53,386)
Carlyle Partners R.P. Fund VI       41         Carlyle Partners R.P. Fund VII       30         Divco West Fund IV       23         EMMES Interborough Fund LLC       66         First Reserve Energy Infrastructure GP II       7         FRM Sandy Manager LLC       63         Global Infrastructure Prt. III       4         Heitman America RE Trust       208         Hudson Sandy Manager LLC       17         J.P. Morgan Chase SP Fund       235         J.P. Morgan Chase SS Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa II       187         Prisa III       119         RREEF America II Inc       11         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       9         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       3333	236	(124,759)
Carlyle Partners R.P. Fund VII       36         Divco West Fund IV       23         EMMES Interborough Fund LLC       66         First Reserve Energy Infrastructure GP II       7         FRM Sandy Manager LLC       63         Global Infrastructure Prt. III       4         Heitman America RE Trust       208         Hudson Sandy Manager LLC       17         J.P. Morgan Chase SP Fund       255         J.P. Morgan Chase SS Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa III       187         Prisa III       119         RREEF America II Inc       111         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       5         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	6,762	47,970
Divco West Fund IV       23         EMMES Interborough Fund LLC       66         First Reserve Energy Infrastructure GP II       7         FRM Sandy Manager LLC       63         Global Infrastructure Prt. III       4         Heitman America RE Trust       208         Hudson Sandy Manager LLC       17         J.P. Morgan Chase SP Fund       255         J.P. Morgan Chase SS Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa III       187         Prisa III       119         RREEF America II Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       2         Total Private Real Estate       2,279         International Equity         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	11,626	247,481
EMMES Interborough Fund LLC       66         First Reserve Energy Infrastructure GP II       7         FRM Sandy Manager LLC       63         Global Infrastructure Prt. III       4         Heitman America RE Trust       208         Hudson Sandy Manager LLC       17         J.P. Morgan Chase SP Fund       255         J.P. Morgan Chase SS Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa III       187         RREEF America II Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	30,483	732,508
First Reserve Energy Infrastructure GP II       7         FRM Sandy Manager LLC       63         Global Infrastructure Prt. III       208         Hudson Sandy Manager LLC       17         J.P. Morgan Chase SP Fund       255         J.P. Morgan Chase SS Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa III       187         Prisa III       119         RREEF America II Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Small Cap)       333	23,681	222,416
FRM Sandy Manager LLC       63         Global Infrastructure Prt. III       208         Hudson Sandy Manager LLC       17         J.P. Morgan Chase SP Fund       255         J.P. Morgan Chase SS Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa II       187         Prisa III       119         RREEF America II Inc       111         RREEF America III Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       9         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	66,472	605,222
Global Infrastructure Prt. III       208         Hudson Sandy Manager LLC       17         J.P. Morgan Chase SP Fund       255         J.P. Morgan Chase SS Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa II       187         Prisa III       119         RREEF America II Inc       111         RREEF America III Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       9         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	7,973	240,141
Heitman America RE Trust       208         Hudson Sandy Manager LLC       17         J.P. Morgan Chase SP Fund       255         J.P. Morgan Chase SS Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa II       187         Prisa III       119         RREEF America II Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       9         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	53,950	552,212
Hudson Sandy Manager LLC       17         J.P. Morgan Chase SP Fund       255         J.P. Morgan Chase SS Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa II       187         Prisa III       119         RREEF America II Inc       111         RREEF America III Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Small Cap)       333	-	747,910
J.P. Morgan Chase SP Fund       255         J.P. Morgan Chase SS Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa II       187         Prisa III       119         RREEF America II Inc       111         RREEF America III Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       9         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	08,002	636,040
J.P. Morgan Chase SS Fund       113         KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa II       187         Prisa III       119         RREEF America II Inc       111         RREEF America III Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       9         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	7,429	162,727
KKR GI Inf. Fd II       17         LaSalle US Property Fund       67         Prisa       111         Prisa II       187         Prisa III       119         RREEF America II Inc       111         RREEF America III Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       5         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	55,108	1,274,857
LaSalle US Property Fund       67         Prisa       111         Prisa II       187         Prisa III       119         RREEF America II Inc       111         RREEF America III Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       5         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	3,110	908,866
Prisa       111         Prisa II       187         Prisa III       119         RREEF America II Inc       111         RREEF America III Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	7,208	1,288,063
Prisa II       187         Prisa III       119         RREEF America II Inc       111         RREEF America III Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	57,077	319,847
Prisa III         119           RREEF America II Inc         111           RREEF America III Inc         4           Silverpeak Legacy Partners III         7           Taconic NY Investment Fund LP         31           UBS Trumball Property Fund (TPF)         261           Westbrook Real Estate VII LP         13           Westbrook Real Estate VIII LP         9           Total Private Real Estate         2,279           International Equity         515           Acadian (Emerging Markets)         515           Acadian (Small Cap)         333	1,923	724,352
RREEF America II Inc       111         RREEF America III Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	37,660	1,337,969
RREEF America III Inc       4         Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	9,664	1,102,585
Silverpeak Legacy Partners III       7         Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Emerging Markets)       515         Acadian (Small Cap)       333	1,541	1,032,159
Taconic NY Investment Fund LP       31         UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Small Cap)       333	4,078	68,339
UBS Trumball Property Fund (TPF)       261         Westbrook Real Estate VII LP       13         Westbrook Real Estate VIII LP       9         Total Private Real Estate       2,279         International Equity       515         Acadian (Small Cap)       333	7,245	162,132
Westbrook Real Estate VII LP  Westbrook Real Estate VIII LP  Total Private Real Estate  Z,279  International Equity  Acadian (Emerging Markets)  Acadian (Small Cap)  333	31,726	(0)
Westbrook Real Estate VIII LP  Total Private Real Estate  2,279  International Equity  Acadian (Emerging Markets)  Acadian (Small Cap)  333	51,430	1,188,783
Total Private Real Estate  2,279  International Equity Acadian (Emerging Markets) Acadian (Small Cap)  333	13,330	161,497
International Equity Acadian (Emerging Markets) 515 Acadian (Small Cap) 333	9,797	188,779
Acadian (Emerging Markets) 515 Acadian (Small Cap) 333	79,549	22,270,920
Acadian (Small Cap) 333		
1	15,480	1,791,277
Baillie Gittord Overseas Ltd (Emerging Markets) 557	33,605	1,108,483
	57,987	2,966,760
	27,350	2,159,255
	72,328 78,797	829,092 3,146,308

Entity Name	Assets under Management (in thousands)	Fees (in dollars)
CONY GT NYCERS MSCI World SSGA MTA	\$ 40	\$ 39,766
DFA (Emerging Markets)	574,747	2,191,770
Eaton Vance EM MTA 321 (Emerging Markets)	530,205	2,408,353
Generation GE (Opportunistic Strategic)	217,224	6,633,748
LM Capital MTA (Opportunistic Strategic)	292,403	431,325
Pyramis EAFE Small Cap MTA	324,444	2,231,671
Sprucegrove (Value)	864,932	1,853,362
State Street (Emerging Markets)	-	465,734
SSGA EAFE MTA 121 (Value)	537,381	235,289
SSGA MSCI EAFE Small Cap Index MTA	243,541	465,626
Thornburg (EAFE Markets Equities-Core)	652	30
Total Progress International	46,924	461,394
Walter Scott EAFE Large Cap	1,002,231	3,436,534
Total International Equity	9,220,271	32,855,776
Hedge Funds		
Blue Trend Fund	20	1,224,774
Brevan Howard	47,431	970,429
Brevan Howard Opp.	105,011	532,725
Caspian Select Credit Fund LP	108,275	1,117,191
CCP Quantitative Fund	90,987	1,109,090
D.E. Shaw Investment Management LLC	188,733	4,574,681
Fir Tree Value Fund LP	89,195	2,046,068
Luxor Capital	73,356	1,294,411
Permal Asset Mgt-Citco Fund Serv (Curacao) NV	246,481	1,713,186
Perry Capital	70,902	1,144,365
SRS Investment Management	50,458	781,919
Standard General	26,911	319,439
Turiya Fund LP	47,460	649,266
Total Hedge Funds	1,145,219	17,477,545
Mutual Fund - Mortgages		
Access Capital Strategies	109,842	252,080
AFL-CIO Housing Investment Trust	306,683	1,207,041
Total Mutual Funds - Mortgages	416,525	1,459,121
Treasury Inflation Protected Securities (TIPS)		
Blackrock	600,227	297,592
Pacific Investment Management Co (Active)	127	274,731
State Street (Passive)	1,847,954	86,061
Total TIPS	2,448,307	658,384
Mutual Fund - Domestic Equity		
Blackrock Inst. R 2000 (Growth)	207,189	15,875
Blackrock Inst. R 2000 (Value)  Total Mutual Funds - Domestic Equity	57,118 <b>264,306</b>	4,292

Entity Name	Ma	Assets under Management (in thousands)		Fees (in dollars)	
Mutual Fund - Fixed Income Bank Loan					
Babson Capital Management MTA	\$	277,603	\$	939,645	
Credit Suisse BL MTA		285,919		632,355	
Guggenheim BL MTA		182,242		712,987	
Invesco BL MTA		276,380		1,021,461	
Total Mutual Funds - Fixed Income Bank Loan		1,022,145		3,306,449	
Total For All Investment Managers	:	51,452,081		61,876,122	
Consultant Fees					
Aksia				439,680	
Callan Associates Inc				905,666	
Citco Fund Services Inc				(35,000)	
Courtland Partners Ltd				94,715	
Ernst & Young				14,270	
Institutional Shareholders Services				44,782	
SEC Board of India				500	
Stepstone Group LLC				1,630,500	
The Townsend Group				402,018	
Total Consultant Fees				3,497,131	
Legal Fees					
Bryan Cave LLP				7,500	
Cox, Castle & Nicholson LLP				11,584	
Daypitney LLP				26,265	
Foster, Pepper PLLC				75,105	
Morgan, Lewis & Bockius LLP				17,694	
Nixon Peabody LLP				34,123	
Phillsbury Winthrop Shaw Pittman LLP				32,987	
Orrick, Herrington & Sutcliffe LLP				(3,053)	
Reinhart Boerner Van Deuren				45,437	
Sadis & Goldberg LLP				9,900	
Seward Kissel				12,743	
Total Legal Fees				270,285	
Total Fees FY 2016			1	65,643,538	

### SCHEDULE OF BROKERS' COMMISSIONS

Year Ended June 30, 2016

Brokerage Firm	Number of Shares Traded	Total Commissions
ABG SECURITIES LIMITED	17,700	\$ 302
ABEL NOSER	26,779	719
ABN AMRO INCORPORATED	13,500	405
ACADEMY SECURITIES INC	81,362	1,627
AGORA CORDE TITUL E VAL MOB	665,728	3,123
ALLEN & COMPANY LLC	73,900	2,209
AMERICAN PORTFOLIOS FINANCIAL	2,967	148
ATTIJARIWAFA BANK	53,774	6,049
AUERBACH GRAYSON AND CO INC	10,450	209
AUTONOMOUS	21,120	634
AVONDALE PARTNERS LLC	43,092	1,593
B RILEY & CO LLC	29,699	1,040
BAADER BANK AG	1,619	465
BANCO SANTANDER CENTRAL HISPANO	614,693	10,467
BANK AM BELLEVUE	1,080	208
BANK J VONTOBEL UND CO AG	44,213	9,813
BARCLAYS CAPITAL	2,471,272	59,959
BARCLAYS CAPITAL INC	2,993	90
BARCLAYS CAPITAL INC/LE	10,027,464	39,023
BARCLAYS CAPITAL LE	641,749	13,300
BARRINGTON RESEARCH ASSOCIATES	910	13,300
BB & T SECURITIES LLC	322,957	6,876
BERENDERG	52,143	•
BLAYLOCK ROBERT VAN LLC	·	1,564
	190,426	5,713
BLOOMBERG TRADEBOOK LLC	2,735,943	63,199
BMO CAPITAL MARKETS	54,230	1,633
BNP PARIBAS SECURITIES INDIA PRIVATE LIM	517,913	4,635
BNP PARIBAS SECURITIES SERVICES	1,989,446	6,980
BNP PARIBAS SECURITIES SERVICES AUSTR BR	77,890	142
BNP PARIBAS SECURITIES SERVICES SA	3,607,511	15,969
BNY BROKERAGE	471,724	17,246
BNY CONVERGEX EXECUTION SOLUTIONS LLC	196,172,737	197,899
BNY CONVERGEX LJR	4,471	89
BREAN CAPITAL LLC	122,536	1,719
BROADCORT CAPITAL (THRU ML)	186,116	3,914
BROADCORT CAPITAL CORP	14,568	429
BTIG LLC	602,224	19,319
BUCKINGHAM RESEARCH GROUP INC	14,724	589
CABRERA CAPITAL MARKETS	1,471,336	23,605
CACEIS BANK DEUTSCHLAND GMBH	18,720	5,821
CANACCORD GENUITY INC	139,780	5,070
CANADIAN IMPERIAL BANK OF COMMERCE	506,990	3,562
CANTOR FITZGERALD & CO	905,985	16,691
CANTOR FITZGERALD & CO / CASTLEOAK SEC	421,033	8,421
CANTON FITZGER ALD FURORE	14,842	132
CANTOR FITZGERALD EUROPE		

#### SCHEDULE OF BROKERS' COMMISSIONS Year Ended June 30, 2016 Number of Total **Brokerage Firm Shares Traded Commissions** \$ 11,172 CAPITAL INSTITUTIONAL SVCS INC EQUITIES 226,278 CELFIN CAPITAL SA CORREDORES DE BOLSA 12,076,999 2,400 CHEEVERS & CO INC 2,477,569 44,784 CHINA INTERNATIONAL CAPITAL CO 112,000 493 CIBC WORLD MARKETS CORP 11,200 446 CIBC WORLD MKTS INC 23,200 719 CIMB GK SECURITIES PTE LTD 27,318 216 CIMB SECURITIES USA INC 46,666 14 CITATION GROUP 244,308 12,198 CITIBANK NA 79.358 3.075 CITIBANK OF COLOMBIA 680,819 1,460 CITICORP SECURITIES THAILAND LTD 426,900 395 CITIGROUP GLOBAL MARKETS AUSTRALIA PTY 161,918 210 CITIGROUP GLOBAL MARKETS INC 44,112,094 74,031 CITIGROUP GLOBAL MARKETS INDIA 3,023,565 3,773 CITIGROUP GLOBAL MARKETS KOREA SECS LTD 7,910 1,399 CITIGROUP GLOBAL MARKETS LIMITED 18,137,876 101,666 CLSA AUSTRALIA PTY LTD 1,471,671 8,443 CLSA SECURITIES KOREA LTD 10,069 67,553 CLSA SINGAPORE PTE LTD 14.212.248 43,491 COMPASS POINT RESEARCH & TRADING LLC 38,402 1,477 CONCEPT CAPITAL MARKETS LLC 7,179 215 CONVERGEX EXECUTION SOLUTIONS LLC 216,679 6,221 CONVERGEX LLC 200,659 6,517 CORNERSTONE MACRO LLC 15,671 470 910,410 CORREVAL SA 3,263 COWEN AND COMPANY LLC 580,246 20,953 **CRAIG HALLUM** 102,482 3,315 CREDIT LYONNAIS SECURITIES (ASIA) 28,716,262 33,066 CREDIT LYONNAIS SECURITIES (USA) INC 61,600 2,464 CREDIT LYONNAIS SECURITIES INDIA 9,534,712 102,160 CREDIT RESEARCH & TRADING LLC 42,735 1,443 CREDIT SUISSE FIRST BOSTON 18,834 24,506,068 CREDIT SUISSE FIRST BOSTON (EUROPE) 53,326 20,501 CREDIT SUISSE SECS INDIA PRIVATE LTD 3,539,039 16,909 CREDIT SUISSE SECURITIES (EUROPE) LTD 11,765,194 82,672 CREDIT SUISSE SECURITIES (USA) LLC 41,552,412 96,941 CS FIRST BOSTON (HONG KONG) LIMITED 1,373,320 3,024 CSFB AUSTRALIA EOUITIES LTD 399.022 913 CSI US INSTITUTIONAL DESK 167,554 5.465 **CUTTONE & CO** 18,081 464 D CARNEGIE AG 21,400 193 DAEWOO SECURITIES CO LTD 5,370 261 DAIWA SBCM EUROPE 116,100 5.517 DAIWA SECURITIES (HK) LTD 330,208 2,223 DAIWA SECURITIES AMERICA INC 948.114 21,052

Continued on next page

SCHEDULE OF BROKERS' COMMISSIONS Year Ended June 30, 2016					
Brokerage Firm	Number of Shares Traded	Total Commissions			
DAIWA SECURITIES COMPANY LTD	2,150	\$ 574			
DANSKE BANK AS	1,172,098	16,446			
DAVIDSON DA & COMPANY INC	32,096	1,033			
DAVY STOCKBROKERS	243,272	4,673			
DBS VICKERS SECURITIES (SINGAPORE)	97,000	1,597			
DEUTSCHE BANK AG LONDON	2,355,477	15,394			
DEUTSCHE BANK SECURITIES INC	21,639,778	94,078			
DEUTSCHE EQ IN PRVT LIM DB	2,964,397	22,506			
DEUTSCHE MORGAN GRENFELL SECS	636,903	4,148			
DEUTSCHE SECURITIES ASIA LIMITED	6,386,627	3,952			
DOUGHERTY & COMPANY LLC	36,014	1,291			
DOWLING & PARTNERS	4,557	160			
DREXEL HAMILTON LLC	253,228	5,674			
DSP MERRILL LYNCH LTD	1,709,302	23,386			
DZ BANK AG DEUTSCHE ZENTRAL GENOSSE PLAT	18,540	302			
ERSTE BANK BEFEKTETESI RT	145,699	5,857			
EXANE SA	944,561	15,448			
FBN SECURITIES INC	606	24			
FBR CAPITAL MARKETS & CO	74,247	2,329			
FEDERATED MANAGED GROWTH & INCOME 17 A7	190,073	1,425			
FIDELITY CAPITAL MARKETS	22,891	567			
FIDELITY CLEARING CANADA ULC	194,814	3,896			
FIG PARTNERS LLC	37,719	869			
FINANCIAL BROKERAGE GROUP (FBG)	2,395,857	34,300			
FIRST ANALYSIS SECURITIES CORP	1,085	38			
FRANK RUSSELL SEC/BROADCORT CAP CLEARING	20,169	605			
GABELLI & COMPANY	16,294	548			
GOLDMAN SACHS INTERNATIONAL	258,015,372	207,948			
GOLDMAN SACHS (ASIA) LLC	65	35			
GOLDMAN SACHS (INDIA)	2,401,302	9,054			
GOODBODY STOCKBROKERS	109,459	3,230			
GREEN STREET TRADING LLC	17,267	627			
GUGGENHEIM CAPITAL MARKETS LLC	48,951	1,801			
GUZMAN AND COMPANY	452,818	3,752			
HEIGHT SECURITIES LLC	13,938	488			
HONG KONG AND SHANGHAI BANKING CORP	1,653,500	6,998			
HSBC BANK BRASIL SA BANCO MULTIPLO	337,653	2,161			
HSBC BANK PLC	11,715,612	54,478			
HSBC BROKERAGE (USA) INC	4,750	166			
HSBC MEXICO SA INSTITUCION DE BANCA MLT	6,649,269	6,940			
HSBC SECURITIES	1,764,000	1,282			
HSBC SECURITIES (USA) INC	4,068,156	12,656			
HSBC SECURITIES INDIA HOLDINGS	470,750	1,027			
ICAP DO BRASIL DTVM LTDA	4,643,973	12,731			
ICHI DO DICISIE DI VIVI ETDII	,	,			

#### SCHEDULE OF BROKERS' COMMISSIONS Year Ended June 30, 2016 Number of Total **Brokerage Firm Shares Traded** Commissions ICHIYOSHI SECURITIES CO LTD 64,000 178 ICICI BROKERAGE SERVICES 327,691 1,304 IM TRUST SA CORREDORES DE BOLSA 197,511 653 IMPERIAL CAPITAL LLC 2,483 87 INDUSTRIAL AND COMMERCIAL BANK 1,370 48 INSTINET 10,776,713 103.760 INSTINET AUSTRALIA CLEARING SRVC PTY LTD 143,367 917 INSTINET PACIFIC LIMITED 79,092,705 37,916 INSTINET SINGAPORE SERVICES PT 3,166,300 10,402 131,911 INSTINET UK LTD 21,355,451 INVESTEC BANK PLC 23,553,326 5.182 INVESTEC SECURITIES LTD 547,242 1,678 INVESTMENT TECHNOLOGY GROUP INC 4,922,344 49,706 INVESTMENT TECHNOLOGY GROUP LTD 5,151,519 27,223 ISI GROUP INC 24,243 1,117,847 ITG AUSTRALIA LTD 1,138,087 1,590 ITG CANADA 201,123 603 ITG INC 55,013 1,331 ITG SECURITIES (HK) LTD 30,831,795 11,464 IVY SECURITIES INC 890,293 29,359 JANNEY MONTGOMERY SCOTT INC 162,914 3,432 JEFFERIES & COMPANY INC 6,634,442 46,587 JEFFERIES INDIA PRIVATE LIMITED 596,309 1,994 JEFFERIES INTERNATIONAL LTD 138,582,112 47,105 JMP SECURITIES 11,143 407 JNK SECURITIES INC 29.224 962 JOH BERENBERG GOSSLER AND CO 305.835 8.884 JOHNSON RICE & COMPANY LLC 16,739 784 JONESTRADING INSTITUTIONAL SERVICES LLC 983,469 24,873 109,787 JP MORGAN CHASE BANK NA LONDON 362 JP MORGAN CLEARING CORP 4,235,704 30,180 JP MORGAN INDIA PRIVATE LTD 342,648 260 JP MORGAN SECURITIES (ASIA PACIFIC) LTD 5,778,380 13,428 JP MORGAN SECURITIES (FAR EAST) LTD SEOUL 131,303 6,477 JP MORGAN SECURITIES (TAIWAN) LTD 6,152,000 2,980 JP MORGAN SECURITIES AUSTRALIA LTD 99,612 113 JP MORGAN SECURITIES INC 42,574 4,066,213 JP MORGAN SECURITIES LIMITED 784,136 623 JP MORGAN SECURITIES PLC 9,252,762 47,380 JP MORGAN SECURITIES SINGAPORE 69,400 40 KB SECURITIES NV 470,918 3,757 KCG AMERICAS LLC 320.205 1,850 KEEFE BRUYETTE & WOODS INC 749,138 19,005 KEMPEN & CO NV 122,875 3,568 KEYBANC CAPITAL MARKETS INC 386,003 13,840 KING CL & ASSOCIATES INC 15,574 467

Continued on next page

### SCHEDULE OF BROKERS' COMMISSIONS

Year Ended June 30, 2016

Brokerage Firm	Number of Shares Traded	Total Commissions
KNIGHT EQUITY MARKETS LP	753,904	\$ 15,746
KNIGHT SECURITIES INTERNATIONAL	967,656	2,094
KOREA INVESTMENT AND SECURITIES CO LTD	28,352	12,314
KOTAK SECURITIES LTD	1,682,603	17,865
LARRAIN VIAL	11,166,150	2,38
LEERINK PARTNERS LLC	130,685	4,38
LIQUIDNET EUROPE LIMITED	195,514	760
LIQUIDNET INC	2,383,767	37,200
LONGBOW SECURITIES LLC	8,425	319
LOOP CAPITAL MARKETS	52,261,813	537,810
LUMINEX TRADING AND ANALYTICS LLC	14,135	35
M RAMSEY KING SECURITIES INC	1,652,673	23,973
MACQUARIE BANK LIMITED	6,551,337	32,55
MACQUARIE CAPITAL (USA) INC	89,346	828
MACQUARIE SEC NZ LTD	123,317	208
MACQUARIE SECURITIES (INDIA) PVT LTD	75,930	1,659
MACQUARIE SECURITIES (USA) INC	84,550	3,300
MACQUARIE SECURITIES LTD SEOUL	211,743	16,514
MAINFIRST BANK DE	189,531	5,095
MAXIM GROUP	2,923	114
MERRILL LYNCH	292,857	14,643
MERRILL LYNCH AND CO INC	10,557,614	25,00
MERRILL LYNCH CORREDORES DE BOLSA SA	24,211	210
MERRILL LYNCH INTERNATIONAL	104,135,028	295,14
MERRILL LYNCH PIERCE FENNER & SMITH INC	24,172,276	181,754
MERRILL LYNCH PROFESSIONAL CLEARING CORP	90,014	1,255
MESIROW FINANCIAL INC	2,330	23
MILLER TABAK ROBERTS SECS LLC	19,884	849
MISCHLER FINANCIAL GROUP INC EQUITIES	350,649	4,843
MITSUBISHI UFJ SECURITIES	11,880	47:
MITSUBISHI UFJ SECURITIES (USA)	13,800	510
MITSUBISHI UFJ SECURITIES INT PLC	19,000	2,805
MIZUHO SECURITIES ASIA LIMITED	214,300	3,700
MIZUHO SECURITIES USA INC	201,408	5,627
MKM PARTNERS LLC	137,900	4,941
MONTROSE SECURITIES EQUITIES	127,313	1,670
MORGAN STANLEY AND CO INTERNATIONAL	23,542,448	59,592
MORGAN STANLEY AND CO INTL TAIPEI METRO	23,225,891	21,180
MORGAN STANLEY CO INCORPORATED	36,275,032	177,958
MORGAN STANLEY INDIA COMPANY PVT LTD	2,288,592	12,020
NATIONAL FINANCIAL SERVICES CORP	1,714,009	35,483
NATIXIS SECURITIES	223,500	5,887
NBCN CLEARING INC	10,918	455
NEEDHAM & COMPANY	89,289	2,859
NESBITT BURNS	145,983	3,294
NOMURA FINANCIAL ADVISORY & SEC INDIA	5,833,161	41,770
	-,,	,//

SG SECURITIES HK

SIDOTI & COMPANY LLC

SKANDINAVISKA ENSKILDA BANKEN

SMBC NIKKO CAPITAL MARKETS LIMITED

SMBC NIKKO SECURITIES (HONK KONG) LTD

#### SCHEDULE OF BROKERS' COMMISSIONS Year Ended June 30, 2016 Number of Total **Brokerage Firm Shares Traded Commissions** 400,979 \$ 3,226 NOMURA FINANCIAL AND INVESTMENT NOMURA SECURITIES CO LTD 3,155 10,826,764 NORDEA BANK FINLAND PLC 128,800 1,122 NORTH SOUTH CAPITAL LLC 786,446 19,183 NORTHLAND SECURITIES INC 11.735 459 NUMIS SECURITIES LIMITED 214,840 687 ODDO ET CIE 6,400 531 OPPENHEIMER & CO INC 35,000 1,108 22,667 ORD MINNETT LIMITED 48 5.349 25,860 PAVILION GLOBAL MARKETS LTD 790,841 6,232 PEEL HUNT LLP 24,648 21 PENSERRA SECURITIES LLC 8,407,667 76,666 8,470 PEP SERV NOMS 424 PERCIVAL FINANCIAL PARTNERS LTD 580,300 21.154 PERSHING LLC 2,085,189 20,720 PERSHING SECURITIES LIMITED 2,687,903 12,798 PIPER JAFFRAY 360,591 12,549 PIPER JAFFRAY LTD 17,342 867 RABOBANK NETHERLAND 1.500 21 RAYMOND JAMES AND ASSOCIATES INC 349,916 11,726 RBC CAPITAL MARKETS 1,180,456 19,815 RBC DOMINION SECURITIES INC 306,720 6,193 REDBURN PARTNERS LLP 5,481,552 29,801 RENAISSANCE MACRO SECURITIES LLC 29,256 803 ROBERT W BAIRD CO INCORPORATED 788,665 25,646 ROSENBLATT SECURITIES LLC 14.013 397 ROTH CAPITAL PARTNERS LLC 850 28 5,479 ROYAL BANK OF CANADA EUROPE LTD 1,508,689 SAMSUNG SECURITIES CO LTD 406,127 9,832 SAMUEL A RAMIREZ & COMPANY INC 1,243 183,160 SANDLER ONEILL & PART LP 21.372 690 SANDLER ONEILL AND PARTNERS LP 26,131 883 SANFORD C BERNSTEIN CO LLC 4,855,142 86,235 SANFORD C BERNSTEIN LTD 2,897,543 41,801 SANTANDER CENTRAL HISPANO BOLSA 6,945 2,256,960 SCOTIA CAPITAL (USA) INC 66,346 1,577 SEAPORT GROUP SECURITIES LLC 95,520 1,030 SG AMERICAS SECURITIES LLC 2.337.357 10.617 SG ASIA SECURITIES (INDIA) PVT LTD 3,736,266 10,366 SG SECURITIES (LONDON) LTD 3,676,539 1,580

149

133,874,502

156,788

29.088

242,000

18,000

39,671

4,838

10,561

Continued on next page

330

506

#### SCHEDULE OF BROKERS' COMMISSIONS Year Ended June 30, 2016 Number of Total **Brokerage Firm Shares Traded** Commissions SOCIETE GENERALE LONDON BRANCH 13,429,495 29,364 SPEAR LEEDS AND KELLOGG 9,356 468,272 STATE STREET BANK AND TRUST COMPANY 1,691,135 16,254 STATE STREET GLOBAL MARKETS 13,469 1,272,633 STEPHENS INC 347.154 13.213 STERNE AGEE & LEACH INC 69,955 3,464 STIFEL NICOLAUS & CO INC 1,106,946 33,460 STIFEL NICOLAUS AND COMPANY INCORPORATE 14,003 700 STRATEGAS SECURITIES LLC 263,892 6,597 STURDIVANT AND CO INC 2,659 88,627 SUNGARD BROKERAGE & SECURITIES SVCS LLC 31,100 520 SUNTRUST CAPITAL MARKETS INC 288,931 9,698 TAIWAN DEPOSITORY CLEARING CORPORATION 738.844 3,538 TELSEY ADVISORY GROUP LLC 1,438,485 26,741 TERA MENKUL DEGERLER AS 331,401 290 THE HONG KONG AND SHANGHAI BANK 192,315 4,382 THE VERTICAL TRADING GROUP 493 14,556 THOM P REYNOLDS SEC (THRU BEAR STEARNS) 248,531 1,243 TOPEKA CAPITAL MARKETS INC 660,832 14,005 **UBS AG** 7,207,591 87,249 **UBS LIMITED** 138,912 24,288,779 **UBS SECURITIES ASIA LTD** 64,518 48,528,149 **UBS SECURITIES CANADA INC** 186,785 1,296 UBS SECURITIES INDIA PRIVATE LTD 103,999 5,653 **UBS SECURITIES LLC** 5,493,601 38,144 **UBS SECURITIES PTE LTD** 7,034,085 2,033 UBS SECURITIES PTE LTD SEOUL 84,792 20,582 UBS WARBURG AUSTRALIA EOUITIES 713 395,881 VANDHAM SECURITIES CORP 113 5,640 WEDBUSH MORGAN SECURITIES INC 5,450 200,983 WEEDEN & CO 25,771,454 261,921 WELLS FARGO PRIME SERVICES LLC 343,347 2,574 WELLS FARGO SECURITIES LLC 946,898 19.722 WILLIAM BLAIR & COMPANY LLC 512,634 19,240 WILLIAMS CAPITAL GROUP LP (THE) 6,782,358 142,047 **WOLFE TRAHAN SECURITIES** 34,505 1,222 WOORI INVESTMENT SECURITIES 133,088 3,093 WUNDERLICH SECURITIES INC 950 27,152 11,247 XP INVESTIMENTOS CCTVM SA 3,643,680 YAMNER & CO INC (CLS THRU 443) 74,237 742

1,806,229,055

5,845,642

TOTAL



# PART 4 ACTUARIAL SECTION

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#### OFFICE OF THE ACTUARY

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

SHERRY S. CHAN
CHIEF ACTUARY

December 20, 2016

Board of Trustees New York City Employees' Retirement System 335 Adams Street, Suite 2300 Brooklyn, NY 11201-3751

Re: Actuarial Information for the Comprehensive Annual Financial Report (CAFR) for the Fiscal Year Ended June 30, 2016.

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., June 30, 2014 (Lag) actuarial valuation to determine Fiscal Year 2016 Employer Contributions (the Actuarial Contribution)).

Employers are required to contribute statutorily-required contributions (Statutory Contributions) and these contributions are generally funded by Employers within the appropriate fiscal year.

For Fiscal Year 2016, the Actuarial Contributions to NYCERS, are equal to those recommended by the Actuary of the New York City Pension Funds and Retirement Systems (the Actuary) and represent the Statutory Contributions.

Board of Trustees New York City Employees' Retirement System December 20, 2016 Page 2

During June 2012 the Governmental Accounting Standards Board (GASB) released two accounting standards for the public pension plans, Statement No. 67 (GASB67) and Statement No. 68 (GASB68), collectively "GASB67/68".

GASB67, Financial Reporting for Pension Plans, amended GASB Statement No. 25 (GASB25) and is effective for financial statements for fiscal years beginning after June 15, 2013 (i.e., Fiscal Year 2014 for NYCERS).

GASB68, *Accounting and Financial Reporting for Pensions*, amended GASB Statement No. 27 (GASB27) and is effective for financial statements for fiscal years beginning after June 15, 2014 (i.e., Fiscal Year 2015 for the City).

On October 11, 2016, the Actuary published the "GASB 67/68 Report for the City of New York and the New York City Retirement Systems For Fiscal Year Ended June 30, 2016" (the Fiscal Year 2016 GASB67/68 Report). Appendix A of the Fiscal Year 2016 GASB67/68 Report contains information developed in accordance with GASB67 for NYCERS.

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

Provided in this Actuarial Section of the CAFR is a "Summary of Actuarial Assumptions and Methods in Effect for the June 30, 2014 (Lag) Actuarial Valuation." These actuarial assumptions and methods (the 2012 A&M) were first employed in the June 30, 2010 (Lag) actuarial valuation that was used to determine Fiscal Year 2012 Employer Contributions to the Plan.

These 2012 A&M were developed after reviewing the results of independent actuarial studies dated December 2011 by the The Hay Group (Hay) and November 2006 by The Segal Company (Segal) in accordance with Section 96 of the New York City Charter, after which the Actuary issued a February 10, 2012 Report entitled "Proposed Changes in Actuarial Assumptions and Methods for Determining Employer Contributions for Fiscal Years Beginning on and After July 1, 2011 for the New York City Employees' Retirement System" (February 2012 Report).

Board of Trustees New York City Employees' Retirement System December 20, 2016 Page 3

The Board of Trustees of the Plan adopted those changes in actuarial assumptions that require Board approval. The State Legislature and the Governor enacted Chapter 3 of the Laws of 2013 (Chapter 3/13) to provide for those changes to the actuarial assumptions and methods that require legislation, including the Actuarial Interest Rate (AIR) assumption of 7.0% per annum, net of investment expenses.

In October 2015 the independent actuarial auditor, Gabriel, Roeder, Smith & Company (GRS), issued a report on their NYC Charter-mandated actuarial experience studies for the four-year and ten-year periods ended June 30, 2013 (the GRS Report).

Based, in part, on the GRS Report, on published studies of mortality improvement, and on input from the City's outside consultants and auditors, the Actuary proposed, and the Board of Trustees of NYCERS adopted, new post-retirement mortality tables for use in determining employer contributions beginning in Fiscal Year 2016. The new tables of post-retirement mortality are based primarily on the experience of NYCERS (the Base Tables) and the application of Mortality Improvement Scale MP-2015, published by the Society of Actuaries in October 2015 (the Valuation Tables). Scale MP-2015 replaced Mortality Improvement Scale AA.

In addition, beginning in Fiscal Year 2016, the Actuary revised the Actuarial Asset Valuation Method to constrain the Actuarial Asset Value to be within a 20% corridor of the Market Value of Assets.

The 2012 A&M reflecting the above revisions is referred to as the "2016 A&M."

For the June 30, 2014 actuarial valuation, the New York City Off-Track Betting Corporation (OTB) was valued on a going-concern basis.

Tier III assumptions are applied to Tier VI members.

These actuarial assumptions and methods (2016 A&M) used for funding purposes meet the parameters set by the Actuarial Standards of Practice (ASOPs).

Board of Trustees New York City Employees' Retirement System December 20, 2016 Page 4

#### **Benefits and Census Data**

A summary of the benefits applicable to Plan members included in the June 30, 2014 (Lag) actuarial valuation is shown earlier in the Introductory Section of the CAFR.

Census data is submitted by the Plan's administrative staff and by the employer's payroll facilities and is reviewed by the Office of the Actuary (OA) for consistency and reasonability.

A summary of the census data used in the June 30, 2014 (Lag) actuarial valuation is included in this CAFR. A summary of the census data used in the June 30, 2013 (Lag) actuarial valuation of the Plan is available in the June 30, 2015 CAFR.

#### **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 CAFR is a schedule of Funded Status based on the Entry Age Actuarial Cost Method (Table 9).

Also included in the Actuarial Section of the CAFR is a Solvency Test (i.e., Comparative Summary of Aggregate Accrued Liabilities Funded by Actuarial Value of Assets) (Table 10) 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 being presented in a manner believed to be consistent with the requirements of the GFOA, and, where applicable, with GASB67.

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

- Summary of Actuarial Assumptions and Methods in Effect for the June 30, 2014 (Lag) Actuarial Valuation.
- Contributions.

Board of Trustees New York City Employees' Retirement System December 20, 2016 Page 5

- Tabulations of Membership and Beneficiaries.
- Funded Status based on Entry Age Actuarial Cost Method.
- Comparative Summary of Aggregate Accrued Liabilities Funded by Actuarial Value of Assets Solvency Test.
- Statutory vs Actuarial Contributions.
- Active Member Valuation Data.
- Participating Employers.
- Number and Salary of Active Members by Occupational Position as of June 30, 2014 (Lag) Actuarial Valuation.
- Number of Active Members by Occupational Position and Age as of June 30, 2014 (Lag) Actuarial Valuation.
- Number of Active Members by Occupational Position and Years of Service as of June 30, 2014 (Lag) Actuarial Valuation.
- Retirants and Beneficiaries Added to and Removed from Rolls.

The following items in the Financial Section of the CAFR 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.

Board of Trustees New York City Employees' Retirement System December 20, 2016 Page 6

If you have any questions about any of the information in this Actuarial Section or any of the actuarial information presented elsewhere in this CAFR, please do not hesitate to contact Mr. Michael Samet, Mr. Edward Hue or me.

#### **Acknowledgement of Qualification**

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

Respectfully submitted,

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

SSC: mm

Att:

cc: Ms. Diane D'Alessandro - New York City Employees' Retirement System

Mr. Michael Goldson - New York City Employees' Retirement System

Mr. John Hartman - New York City Employees' Retirement System

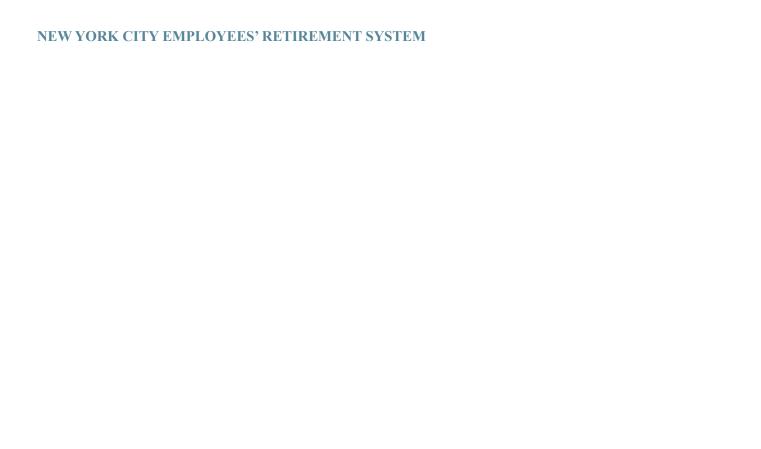
Mr. Edward Hue - New York City Office of the Actuary

Ms. Michele Levine - New York City Office of the Comptroller

Mr. Sam Rumley - New York City Office of the Actuary

Mr. Michael Samet - New York City Office of the Actuary

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### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2014 (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 (ACNY), the Boards of Trustees of the five actuarially-funded NYCRS are to periodically review and adopt actuarial assumptions as proposed by the Actuary for use in the determination of Employer Contributions.

The most recently completed study was published by Gabriel Roeder Smith & Company (GRS) dated October 2015 and analyzed experience for Fiscal Years 2010 through 2013. GRS made recommendations with respect to the actuarial assumptions and methods based on their analysis.

Based, in part, on the GRS Report, on published studies of mortality improvement, and on input from the City's outside consultants and auditors, the Actuary proposed, and the Board of Trustees of NYCERS adopted, new post-retirement mortality tables for use in determining employer contributions beginning in Fiscal Year 2016. The new tables of post-retirement mortality are based primarily on the experience of NYCERS (the Base Tables) and the application of Mortality Improvement Scale MP-2015, published by the Society of Actuaries in October 2015 (the Valuation Tables). Scale MP-2015 replaced Mortality Improvement Scale AA.

In addition, beginning in Fiscal Year 2016, the Actuary revised the Actuarial Asset Valuation Method to constrain the Actuarial Asset Value to be within a 20% corridor of the Market Value of Assets.

The previously completed studies were published by The Hay Group (Hay), dated December 2011 and by The Segal Company (Segal), dated November 2006. Hay analyzed experience for Fiscal Years 2006 through 2009 and made recommendations with respect to the actuarial assumptions and methods based on their analysis. Segal analyzed experience for Fiscal Years 2002 through 2005 and made recommendations with respect to the actuarial assumptions and methods based on their analysis.

#### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2014 (LAG) ACTUARIAL VALUATION (Cont'd)

Based, in part, upon a review of the Segal and Hay studies, the Actuary issued a February 10, 2012 Report entitled "Proposed Changes in Actuarial Assumptions and Methods for Determining Employer Contributions for Fiscal Years Beginning on and After July 1, 2011 for the New York City Employees' Retirement System" (February 2012 Report).

The Board of Trustees of the Plan adopted those changes to actuarial assumptions that require Board approval. The State Legislature and the Governor enacted Chapter 3 of the Laws of 2013 (Chapter 3/13) to provide for those changes to the actuarial assumptions and methods that require legislation, including the Actuarial Interest Rate (AIR) assumption of 7.0% per annum, net of investment expenses, the Entry Age Actuarial Cost Method and the amortization of Unfunded Actuarial Accrued Liabilities.

- (2) The investment rate of return assumption is 7.0% per annum, net of investment expenses.
- (3) The mortality tables for service and disability pensioners were developed from an experience study of the Plan's pensioners. Sample probabilities by certain occupational groups are shown in Table 1a and 1b. The mortality tables for beneficiaries were developed from an experience study of the Plan's beneficiaries. Sample probabilities are shown in Table 1c.
- (4) Active Service tables by certain occupational groups are used to estimate various withdrawals from Active Service. Sample probabilities are shown in Table 2a for members withdrawing from Active Service due to Death or Disability who did not elect an improved retirement program and in Table 2b for members who elected an improved retirement program, in Table 3 for members withdrawing from Active Service for Other than Death or Disability or Retirement and in Table 4 for members withdrawing from Active Service for Service Retirement.
- (5) Salary Scales are used to estimate salaries at termination, retirement or death. Sample percentage increases are shown in Table 5 by certain occupational groups. The Salary Scales include a General Wage Increase (GWI) assumption of 3.0% per annum.
- (6) 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.

#### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2014 (LAG) ACTUARIAL VALUATION (Cont'd)

- (7) The valuation assumes a closed group of members.
- (8) Beginning with the June 30, 2010 (Lag) actuarial valuation, the Entry Age Actuarial Cost Method (EAACM) of funding is utilized by the Plan's Actuary to calculate the contribution required of the Employer.

Under this method, the Actuarial Present Value (APV) of Benefits (APVB) 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 APV allocated to a valuation year is the Employer Normal Cost. The portion of this APV not provided for at a valuation date by the APV of Future Employer Normal Costs or future member contributions is the Actuarial Accrued Liability (AAL).

The excess, if any, of the AAL over the Actuarial Asset Value (AAV) is the Unfunded Actuarial Accrued Liability (UAAL).

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

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

Chapter 105 of the Laws of 2010 established, as of June 30, 2011, an Early Retirement Incentive (ERI) for certain NYCERS members. The UAAL attributable to the ERI is amortized on a level basis over a period of five years (4 payments under the One-Year Lag Methodology).

#### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2014 (LAG) ACTUARIAL VALUATION (Cont'd)

(9) One-Year Lag Methodology (Lag or OYLM) uses a June 30, XX-2 valuation date to determine Fiscal Year XX Employer Contributions.

The June 30, 2014 (Lag) actuarial valuation uses a June 30, 2014 valuation date to determine Fiscal Year 2016 Employer Contributions.

This methodology requires technical adjustments to certain components used to determine Fiscal Year 2016 Employer Contributions as follows:

• Present Value of Future Salary (PVFS)

The PVFS at June 30, 2014 is reduced by the value of salary projected to be paid during Fiscal Year 2015.

• Salary for Determining Employer Contributions

Salary used to determine the employer normal contribution is the salary projected to be paid during Fiscal Year 2016 to members on payroll at June 30, 2014.

UAAL Payments

For determining the UAAL payments for Fiscal Year 2016, and to be consistent with OYLM, the UAAL as of June 30, 2014 is adjusted by the discounted value of employer normal contributions paid during Fiscal Year 2015 and the discounted value of the administrative expenses reimbursed during Fiscal Year 2015 and 2016.

(10) The Actuary reset the Actuarial Asset Value (AAV) to the Market Value of Assets (MVA) as of June 30, 2011 (i.e., Market Value Restart).

Beginning with the June 30, 2012 (Lag) actuarial valuation, the Actuarial Asset Valuation Method (AAVM) recognizes investment returns greater or less than expected over a period of six years.

#### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2014 (LAG) ACTUARIAL VALUATION (Cont'd)

In accordance with this AAVM, actual Unexpected Investment Returns (UIR) are phased into the AAV at rates of 15%, 15%, 15%, 15%, 20% and 20% per year, respectively, (i.e., cumulative rates of 15%, 30%, 45%, 60%, 80% and 100%).

Beginning with the June 30, 2014 (Lag) actuarial valuation, the AAV is constrained to be within a 20% corridor of the Market Value.

The obligations of the New York City Employees' Retirement System (NYCERS) to the Housing Police Officer's Variable Supplements Fund (HPOVSF), Housing Police Superior Officers' Variable Supplements Fund (HPSOVSF), Transit Police Officer's Variable Supplements Fund (TPOVSF), Transit Police Superior Officers' Variable Supplements Fund (TPSOVSF) and Correction Officers' Variable Supplements Fund (COVSF) (referred to collectively as NYCERS VSFs) are recognized through the Liability Valuation Method.

Under this method, the APV of Future SKIM from NYCERS to the NYCERS VSFs is included directly as an actuarial liability of NYCERS. SKIM is either a portion of the excess earnings on equity securities of NYCERS that are transferrable to an individual NYCERS VSF or the amount in excess of existing assets needed in any given Fiscal Year by an individual NYCERS VSF to pay expected and/or guaranteed benefits. The APV of Future SKIM is computed as the excess, if any, of the APV of expected benefits of each individual NYCERS VSF over the AAV of that individual NYCERS VSF. Under the EAACM, a portion of the APV of Future SKIM is reflected in the APV of Future Normal Costs and a portion is reflected in the AAL.

- (12) The APVB as of June 30, 2014, used to determine the Fiscal Year 2016 Employer Contributions, includes estimates of liabilities for World Trade Center (WTC) Post-Retirement Reclassifications.
- (13) The salary data was adjusted to reflect overtime earnings. Sample Baseline Overtime percentage increases are shown in Table 6 for certain occupational groups.
- (14) A Dual Overtime assumption (i.e., a Baseline Overtime assumption for most years and a separate overtime assumption for the years included in the calculation of Final Salary or Final Average Salary) was introduced as of June 30, 1995. Sample Dual Overtime percentages are shown in Table 7 for certain occupational groups.
- (15) For the June 30, 2014 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, namely: (1) General (for calculation purposes, these are further subdivided into Plan Groups), (2) Transit Operating positions, (3) MTA Bridges and Tunnels members, (4) Sanitation members, (5) members of the Housing and Transit Police Forces, and (6) members of the Correction Force.
- (17) As discussed herein, the actuarial assumptions and methods are unchanged from those used in the June 30, 2013 (Lag) actuarial valuation except for the adoption of revised post-retirement mortality tables and a 20% corridor constraining the Actuarial Asset Value as described in sections (1) and (10) above, respectively.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2014 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 1a  Deaths among Service Pensioners  Percentage of Pensioners Dying within Next Year					
Housi	All Except ing Police and Transi	t Police		Police and e (HP and TP)	
Age	Males	Females	Males	Females	
40	0.0947%	0.0687%	0.0856%	0.0573%	
45	0.2684	0.1202	0.1344	0.1002	
50	0.4203	0.2512	0.1995	0.1938	
55	0.8245	0.4448	0.5175	0.3406	
60	1.0827	0.7377	0.7655	0.5317	
65	1.4619	1.0274	1.1153	0.7739	
70	1.9843	1.4161	1.8286	1.2155	
75	2.9181	2.2280	3.0317	2.2554	
80	5.3467	3.7564	5.0953	3.7065	
85	8.2155	6.2437	8.4494	6.2035	
90	14.2568	10.7174	14.2368	10.2717	
95	22.8721	18.1287	22.7565	17.2618	
100	31.4230	21.7021	31.4230	21.6851	
105	37.5244	27.6686	37.5244	27.6686	
110	100.0000	100.0000	100.0000	100.0000	

Society of Actuaries Mortality Improvement Scale MP-2015 is applied to these rates.

# SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2014 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 1b  Deaths among Disability Pensioners  Percentage of Pensioners Dying within Next Year						
All Except HP and TP, Sanitation and HP and TP Correction Officers  HP and TP Correction Officers						
Age	Males	Females	Males	Females	Males	Females
40	1.1736%	1.1939%	0.1388%	0.0691%	0.7222%	0.7704%
45	1.3564	1.4101	0.2089	0.1305	0.7751	0.8419
50	1.8659	1.8411	0.3860	0.2646	0.9330	1.0027
55	2.8504	2.2618	0.6305	0.4865	1.3203	1.0940
60	3.1129	2.5435	0.9480	0.6255	1.6602	1.2471
65	3.5053	2.7082	1.3130	0.9356	2.0386	1.5404
70	3.6520	2.9707	2.2450	1.5714	2.7067	2.1530
75	4.9119	4.1068	3.6136	2.7691	4.0933	3.1948
80	7.4252	5.9299	5.9941	4.7161	6.5350	5.0518
85	11.2538	9.0986	10.0934	7.8681	10.0412	8.2093
90	14.4918	13.7068	17.3879	12.9631	15.6825	12.4213
95	23.8591	20.1982	26.1305	18.7612	24.9556	19.8630
100	31.4230	22.6011	34.2380	21.9277	31.4230	22.6011
105	37.5244	27.6686	37.7237	27.6686	37.5244	27.6686
110	100.0000	100.0000	100.0000	100.0000	100.0000	100.0000

Society of Actuaries Mortality Improvement Scale MP-2015 is applied to these rates.

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2014 (LAG) ACTUARIAL VALUATION (Cont'd)

	Table 1c  Deaths among Beneficiaries				
Percentage	e of Beneficiaries Dying within	n Next Year			
Age	Males	Females			
40	0.0947%	0.0687%			
45	0.2684	0.1202			
50	0.4203	0.2512			
55	0.8245	0.4448			
60	1.0827	0.7377			
65	1.4619	1.0274			
70	1.9843	1.4161			
75	2.9181	2.2280			
80	5.3467	3.7564			
85	8.2155	6.2437			
90	14.2568	10.7174			
95	22.8721	18.1287			
100	31.4230	21.7021			
105	37.5244	27.6686			
110	100.0000	100.0000			

Society of Actuaries Mortality Improvement Scale MP-2015 is applied to these rates.

	Table 2a Withdrawals from Active Service (Due to Death or Disability) Members Who Do Not Elect An Improved Retirement Program Percentage of Eligible Active Members Separating Next year						
Age		dental Retirement	Ordir Disability R		Accidental Death	Ordinary	Death
			Gene	rai*			
	Males	Females	Males	Females	All	Males	Females
20 25 30 35 40 45 50 55 60 65 70	0.04% 0.04 0.04 0.04 0.04 0.04 0.04 0.04	0.02% 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.02	0.20% 0.20 0.20 0.30 0.40 0.50 0.60 0.70 0.70 0.70	0.20% 0.20 0.20 0.25 0.30 0.50 0.70 0.70	0.00% 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.040% 0.040 0.060 0.080 0.100 0.150 0.200 0.300 0.400 0.500 NA	0.030% 0.030 0.040 0.050 0.060 0.100 0.150 0.200 0.250 0.300 NA
			Transit Op	erating*			
20 25 30 35 40 45 50 55 60 65 70	0.02% 0.02 0.02 0.02 0.02 0.02 0.02 0.02	0.02% 0.02 0.02 0.02 0.02 0.02 0.02 0.02	0.10% 0.10 0.10 0.20 0.30 0.40 0.50 0.60 0.60 0.60 NA	0.10% 0.10 0.10 0.20 0.30 0.40 0.50 0.60 0.60 0.60 NA	0.01% 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	0.040% 0.040 0.060 0.080 0.100 0.150 0.200 0.300 0.400 0.500 NA	0.030% 0.030 0.040 0.050 0.060 0.100 0.150 0.200 0.250 0.300 NA
	MTA Bridges and Tunnels*						
20 25 30 35 40 45 50 55 60 65 70	0.04% 0.04 0.04 0.04 0.04 0.04 0.04 0.04	0.04% 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04	0.40% 0.40 0.40 0.40 0.40 0.40 0.40 0.40 0.40 0.40 0.40 NA	0.40% 0.40 0.40 0.40 0.40 0.40 0.40 0.40	0.01% 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 NA	0.050% 0.040 0.050 0.050 0.100 0.150 0.200 0.250 0.300 0.400 NA	0.030% 0.024 0.030 0.030 0.060 0.090 0.120 0.160 0.200 0.250 NA

<sup>\*</sup>Assumed to retire immediately at age 70.

	Table 2a (Cont'd)  Withdrawals from Active Service (Due to Death or Disability) Members Who Do Not Elect An Improved Retirement Program  Percentage of Eligible Active Members Separating Next year						
Age		dental Retirement	Ordi Disability F		Accidental Death	Ordinary	Death
	1		Sanit	ation			
	Males	Females	Males	Females	All	Males	Females
20 25 30 35 40 45 50 55 60 65 70	0.10% 0.10 0.15 0.20 0.25 0.30 0.50 0.80 1.20 1.70 NA	0.10% 0.10 0.15 0.20 0.25 0.30 0.50 0.80 1.20 1.70 NA	0.10% 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 NA	0.10% 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 NA	0.01% 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 NA	0.050% 0.040 0.050 0.050 0.100 0.150 0.200 0.250 0.300 0.400 NA	0.030% 0.024 0.030 0.030 0.060 0.090 0.120 0.160 0.200 0.250 NA
			Correction	n Officers			
20 25 30 35 40 45 50 55 60 63	0.20% 0.25 0.30 0.35 0.40 0.45 0.50 0.60 0.70 NA	0.20% 0.25 0.30 0.35 0.40 0.45 0.50 0.60 0.70 NA	0.10% 0.10 0.10 0.20 0.30 0.40 0.50 0.60 0.70 NA	0.10% 0.10 0.10 0.20 0.30 0.40 0.50 0.60 0.70 NA	0.01% 0.01 0.01 0.01 0.01 0.01 0.01 0.01	0.050% 0.040 0.050 0.050 0.100 0.150 0.200 0.250 0.300 NA	0.030% 0.024 0.030 0.030 0.060 0.090 0.120 0.160 0.200 NA

	Table 2b  Withdrawals from Active Service (Due to Death or Disability) Members Who Elected An Improved Retirement Program  Percentage of Eligible Active Members Separating Next year						
Age		dental Retirement	Ordir Disability R		Accidental Death	Ordinary	Death
			Gene	rai*			
	Males	Females	Males	Females	All	Males	Females
20 25 30 35 40 45 50 55 60 65 70	0.04% 0.04 0.04 0.04 0.04 0.04 0.04 0.04	0.02% 0.02 0.02 0.02 0.02 0.02 0.02 0.02	0.20% 0.20 0.20 0.30 0.40 0.50 0.60 0.70 0.70 0.70	0.20% 0.20 0.20 0.25 0.30 0.50 0.70 0.70	0.00% 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.040% 0.040 0.060 0.080 0.100 0.150 0.200 0.300 0.400 0.500 NA	0.030% 0.030 0.040 0.050 0.060 0.100 0.150 0.200 0.250 0.300 NA
			Transit Op	erating*			
20 25 30 35 40 45 50 55 60 65 70	0.02% 0.02 0.02 0.02 0.02 0.02 0.02 0.02	0.02% 0.02 0.02 0.02 0.02 0.02 0.02 0.02	0.10% 0.10 0.10 0.20 0.30 0.40 0.50 0.60 0.60 0.60 NA	0.10% 0.10 0.10 0.20 0.30 0.40 0.50 0.60 0.60 0.60 NA	0.01% 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01	0.040% 0.040 0.060 0.080 0.100 0.150 0.200 0.300 0.400 0.500 NA	0.030% 0.030 0.040 0.050 0.060 0.100 0.150 0.200 0.250 0.300 NA
	MTA Bridges and Tunnels*						
20 25 30 35 40 45 50 55 60 65 70	0.04% 0.04 0.04 0.04 0.04 0.04 0.04 0.04	0.04% 0.04 0.04 0.04 0.04 0.04 0.04 0.04	0.40% 0.40 0.40 0.40 0.40 0.40 0.40 0.40 0.40 0.40 0.40	0.40% 0.40 0.40 0.40 0.40 0.40 0.40 0.40	0.01% 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 NA	0.050% 0.040 0.050 0.050 0.100 0.150 0.200 0.250 0.300 0.400 NA	0.030% 0.024 0.030 0.030 0.060 0.090 0.120 0.160 0.200 0.250 NA

<sup>\*</sup>Assumed to retire immediately at age 70.

			Table	e 2b			
			(Cor	nt'd)			
		Withdrawa	s from Active Servi	•	or Dieability)		
			Who Elected An Im				
					- • •		
		Percentage	of Eligible Active N	iembers Separatii	ng Next year		
Age		dental Retirement	Ordi Disability F		Accidental Death	Ordinary	Death
	l		Sanit	ation			
	Males	Females	Males	Females	All	Males	Females
20	0.10%	0.10%	0.10%	0.10%	0.01%	0.050%	0.030%
25	0.10	0.10	0.10	0.10	0.01	0.040	0.024
30	0.15	0.15	0.20	0.20	0.01	0.050	0.030
35	0.20	0.20	0.30	0.30	0.01	0.050	0.030
40	0.25	0.25	0.40	0.40	0.01	0.100	0.060
45 50	0.30 0.50	0.30 0.50	0.50 0.60	0.50 0.60	0.01 0.01	0.150 0.200	0.090 0. <b>12</b> 0
50 55	0.80	0.80	0.60	0.60	0.01	0.200 0.250	0.120
60	1.20	1.20	0.80	0.80	0.01	0.300	0.200
65	1.70	1.70	0.90	0.90	0.01	0.400	0.250
70	NA	NA	NA	NA	NA	NA	NA
			Correction	n Officers	<u>.                                      </u>		
20	0.20%	0.20%	0.10%	0.10%	0.01%	0.050%	0.030%
25	0.25	0.25	0.10	0.10	0.01	0.040	0.024
30	0.30	0.30	0.10	0.10	0.01	0.050	0.030
35	0.35	0.35	0.20	0.20	0.01	0.050	0.030
40	0.40	0.40	0.30	0.30	0.01	0.100	0.060
45 50	0.45 0.50	0.45 0.50	0.40 0.50	0.40 0.50	0.01 0.01	0.150 0.200	0.090 0. <b>12</b> 0
50 55	0.60	0.60	0.60	0.60	0.01	0.200 0.250	0.120
60	0.70	0.70	0.70	0.70	0.01	0.300	0.200
63	NA	NA	NA	NA	NA	NA	NA
63	NA	NA	NA	NA	NA	NA	NA

Tab	le 3			
Withdrawals from Other Than D	eath or Disability or Retirement			
Percentage of Active Members	Withdrawing within Next Year			
General E	mployees			
Years of Service	Probability of Withdrawal			
0 5 10 15 20 25 30 35 40 45	6.00% 3.00 2.00 1.50 1.00 1.00 1.00 1.00 1.00 1.00			
Transit Employees				
Years of Service	Probability of Withdrawal			
0 5 10 15 20 25 30 35	8.00% 1.00 1.00 0.50 0.50 0.50 0.50			
MTABT E	mployees			
Years of Service	Probability of Withdrawal			
0 5 10 15 20 25 30 35	4.00% 1.00 1.00 1.00 1.00 1.00 1.00			

Table 3 (Cont'd) Withdrawals from Other Than Death or Disability or Retirement Percentage of Active Members Withdrawing within Next Year Sanitation Employees			
Years of Service	Probability of Withdrawal		
0 5 10 15 20 25 30 35	4.00% 1.00 0.50 0.50 0.50 0.50 0.50		
Correction	Employees		
Years of Service	Probability of Withdrawal		
0 5 10 15 20 25 30 35	5.00% 1.00 0.50 0.50 0.50 0.50 0.50		

Table 4  Withdrawals from Active Service (For Service Retirement)  Percentage of Eligible Active Members Retiring  With Unreduced Service Retirement Benefits								
			bers Not Electing O of Service Since Firs		Members Electing ORP <sup>(1)</sup> Years of Service Since First Elig.			
Age	With Reduced Benefits <sup>(2)</sup>	0-1	1-2	2+	0-1	1-2	2+	
	General <sup>(3)</sup>							
50 55 60 65 70	0.00% 2.00 4.00 0.00 NA	20.00% 20.00 20.00 30.00 100.00	15.00% 15.00 15.00 25.00 100.00	10.00% 10.00 10.00 20.00 100.00	40.00% 40.00 40.00 60.00 100.00	20.00% 20.00 20.00 25.00 100.00	15.00% 15.00 15.00 25.00 100.00	
			Transit Op	erating <sup>(3)</sup>				
50 55 60 65 70	0.00% 2.00 4.00 0.00 NA	25.00% 25.00 30.00 50.00 100.00	15.00% 15.00 15.00 40.00 100.00	15.00% 15.00 15.00 40.00 100.00	25.00% 25.00 30.00 50.00 100.00	15.00% 15.00 15.00 40.00 100.00	15.00% 15.00 15.00 40.00 100.00	
MTA Bridges and Tunnels <sup>(3)</sup>								
50 55 60 65 70	0.00% 2.00 4.00 0.00 NA	30.00% 30.00 30.00 40.00 100.00	00.00% 20.00 20.00 40.00 100.00	00.00% 20.00 20.00 40.00 100.00	60.00% 60.00 60.00 60.00 100.00	00.00% 30.00 30.00 40.00 100.00	00.00% 30.00 30.00 40.00 100.00	

<sup>(1)</sup> Optional Retirement Programs (ORP) such as under Chapter 96 of the Laws 1995.

<sup>(2)</sup> Applicable only for certain Tier II, Tier IV and Tier VI members prior to eligibility for unreduced Service Retirement benefits.

<sup>(3)</sup> Assumed to retire immediately at age 70.

	Table 4								
	(Cont'd)								
	Withdrawals from Active Service (For Service Retirement)								
	Williamais Hottle Settice (Lot Settice Retilement)								
		Percen	tage of Eligible /	Active Members	Retiring				
	With Unreduced Service Retirement Benefits								
	Members Not Electing ORP <sup>(1)</sup> Years of Service Since First Elig.  Members Electing ORP <sup>(1)</sup> Years of Service Since First Elig.								
Age	With Reduced Benefits <sup>(2)</sup>	0-1	1-2	2+	0-1	1-2	2+		
			Sanita	ation <sup>(3)</sup>					
40	0.00%	40.00%	20.00%	20.00%	40.00%	20.00%	15.00%		
45	0.00	40.00	20.00	20.00	40.00	20.00	15.00		
50	0.00	40.00	20.00	20.00	50.00	20.00	15.00		
55	2.00	40.00	20.00	20.00	60.00	20.00	15.00		
60	4.00	40.00	20.00	20.00	60.00	20.00	20.00		
65	0.00	60.00	40.00	40.00	60.00	40.00	30.00		
70	NA	100.00	100.00	100.00	100.00	100.00	100.00		
	Correction Officers <sup>(3)</sup>								
40	0.00%	60.00%	20.00%	20.00%	70.00%	20.00%	20.00%		
45	0.00	60.00	20.00	20.00	70.00	20.00	20.00		
50	0.00	60.00	20.00	20.00	70.00	20.00	20.00		
55	2.00	60.00	20.00	20.00	70.00	20.00	20.00		
60	4.00	60.00	20.00	20.00	70.00	20.00	20.00		
63	NA	100.00	100.00	100.00	100.00	100.00	100.00		

Optional Retirement Programs (ORP) under Chapter 547 of the Laws of 1992, Chapter 936 of the Laws of 1990 and Chapter 631 of the Laws of 1993 for Sanitation and Corrections (Officers and Captains), respectively.

<sup>(2)</sup> Applicable only for certain Tier II, Tier IV and Tier VI members prior to eligibility for unreduced Service Retirement benefits.

<sup>(3)</sup> Assumed to retire immediately at age 70 and Correction Officers at age 63.

#### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2014 (LAG) ACTUARIAL VALUATION (Cont'd)

#### Table 5 **Salary Scales Assumed Annual Percentage Increases in Coming Year\*** MTA **Bridges** Years of **Transit** Correction **Service** General **Operating And Tunnels Sanitation Officers** 0 9.00% 19.00% 11.00% 7.00% 14.00% 5.00 4.00 6.00 25.00 5 4.20 10 4.50 3.50 3.50 5.00 5.00 3.50 3.50 4.50 4.50 15 4.50 20 3.50 3.50 4.00 4.00 4.25 25 4.00 3.50 3.50 3.50 3.50 30 4.00 3.50 3.50 3.50 3.50 35 3.50 3.50 3.50 3.50 4.00 40 4.00 3.50 3.50 3.50 3.50 45 4.00 3.50 3.50 3.50 3.50

<sup>\*</sup> Salary Scales include a General Wage Increase assumption of 3.0% per annum.

Table 6  Baseline Overtime							
Years of Service General Operating And Tunnels Sanitation Officers							
0	4.00%	8.00%	20.00%	12.00%	10.00%		
5	4.00	8.00	20.00	12.00	10.00		
10	4.00	8.00	20.00	12.00	10.00		
15	4.00	8.00	20.00	12.00	10.00		
20+	4.00	8.00	20.00	12.00	15.00		

Table 7							
	Dual Overtime  General Transit Operating						
Years of Service	All Tiers	Tier I Service					
0+	4.00%	12.00%	10.00%	6.00%			

Table 7						
Dual Overtime (Cont'd)						
	MTA Bridges and Tunnels					
Years of Service	Tier I Service FAS 1	All Tiers Service FAS 3	Tier I Disability FAS 1	All Tiers Disability FAS 3		
0+	30.00%	24.00%	15.00%	18.00%		

Table 7							
Dual Overtime (Cont'd)							
	Sanit	ation	Correction Officers				
Years of Service	All Tiers Service	All Tiers Disability	All Tiers Service	Tier I Disability	All Other Tiers Disability		
0-15	16.00%	8.00%	10.00%	5.00%	8.00%		
20+	16.00	8.00	15.00	10.00	13.00		

# **CONTRIBUTIONS**

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

# A. Member Contributions

A member of Article 15 who joined NYCERS on or after April 1, 2012 (Tier 6) and is not a member of the 22-Year Plan is required to contribute between 3.0% and 6.0% of salary, depending on salary level, for all years of service. Members in the 22-Year Plan contribute 3.0% of salary. A member of Article 15 (Coordinated Retirement Plan) who joined NYCERS on or before March 31, 2012, is mandated to contribute 3% of salary during all years of coverage. 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 ten years of credited service, whichever is earlier. A member of Article 14 (currently only Correction Officers) is mandated to contribute 3% of salary for not more than thirty years. Effective October 1, 2000, these members are not required to make contributions after the 10th anniversary of their membership date or completion of ten years of credited service, whichever is earlier. This is in addition to the Social Security contribution. Should a member die, resign or be otherwise terminated from city-service prior to completing five years of credited service, all of the members' contributions, with 5% interest, will be refunded for Article 14 members and Article 15 members upon request, or may be left on deposit for a maximum period of 5 years earning interest, so that the member retains membership.

All other members contribute by salary deductions on the basis of a rate of contribution which is assigned by the System at the time they elect their plan. This rate, which is dependent upon the member's age and plan as well as the tables in effect for such purpose, is determined so as to provide an annuity of 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 so as to provide an annuity equal to 1% 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.

# CONTRIBUTIONS (Cont'd)

Member contributions are accumulated with interest in individually maintained accounts. Except under Articles 14 and 15, upon retirement the amount so credited (i.e., accumulated deductions) is used to purchase an annuity on the basis of the tables adopted by the Board of Trustees (Board). Upon death, 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 two, two and one half, four or five percent of salary. At present, the reduction is two and one-half percent of salary for Sanitation and Correction members and two percent 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.

In addition to the member contributions described previously, there are certain Additional Member Contributions ranging from 1.85% to 7.46% required for improved early retirement benefits.

# **B.** Employer Contributions

The Entry Age Actuarial 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.

# TABULATIONS OF MEMBERSHIP AND BENEFICIARIES

The Board maintains complete records of every member of the retirement system. Some of the information is obtained from payrolls which show each member's salary and contributions, status, title, leave of absence and cessation of service. Records are maintained in numerical order according to the register number of each member. Valuation records were prepared from these records and each year they are updated to reflect terminations, additions and changes in status and salary.

Table 8 SUMMARY OF PLAN MEMBER	Table 8 SUMMARY OF PLAN MEMBERSHIP								
Group	June 30, 2014 (Lag)	June 30, 2013 (Lag)							
Retirees and beneficiaries currently receiving benefits	142,095	139,399							
Terminated vested members not yet receiving benefits	9,674	10,086							
Other Inactives*	16,527	16,482							
Active members	184,762	185,971							
Total	353,058	351,938							

<sup>\*</sup> Represents members who are no longer on payroll but not otherwise classified.

# FUNDED STATUS BASED ON ENTRY AGE ACTUARIAL COST METHOD

This Schedule is being provided by the Actuary for the Plan to improve the transparency and decision usefulness of this financial report.

Prior to the June 30, 2010 (Lag) Actuarial Valuation, the Actuarial Cost Method (ACM) used to develop the funding requirements for the Plan was the Frozen Initial Liability (FIL) ACM. Under this ACM, following establishment of any Initial Unfunded Actuarial Accrued Liabilities (UAAL), actuarial gains and losses are financed over the working lifetimes of active participants and are not identified as separate UAAL.

The funding status and funding progress information provided in this Schedule has been prepared using the Entry Age ACM where the Actuarial Present Value (APV) of any obligations of the Plan not provided by the APV of Future Contributions (Employer and Employee), as determined under the Entry Age ACM, equals the Actuarial Accrued Liability (AAL). Under the Entry Age ACM, the UAAL equals the AAL minus the Actuarial Value of Assets.

		Tab	le 9								
	FUNDED ST	ATUS BASED ON ENTR	Y AGE ACTUARIAL CO	OST METHOD							
	(Dollar Amounts in Thousands)										
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) <sup>(1)</sup> Entry Age (b)	Unfunded AAL (UAAL) Entry Age (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage Of Covered Payroll ((b-a)/c)					
June 30, 2014 (Lag)(2)	\$50,505,971	\$74,123,437	\$23,617,466	68.1%	\$12,672,387	186.4%					
June 30, 2013 (Lag)(2)	47,282,884	70,028,252	22,745,368	67.5	12,642,483	179.9					
June 30, 2012 (Lag)(2)	44,676,721	67,417,018	22,740,297	66.3	12,478,130	182.2					
June 30, 2011 (Lag)(2)	42,409,059	65,269,251	22,860,192	65.0	12,233,573	186.9					
June 30, 2010 (Lag)(2)	40,433,344	62,935,267	22,501,923	64.2	12,101,417	185.9					
June 30, 2009 (Lag)	41,710,159	53,052,658	11,342,499	78.6	11,880,994	95.5					
June 30, 2008 (Lag)	40,722,228	51,114,399	10,392,171	79.7	11,305,974	91.9					
June 30, 2007 (Lag)	38,925,725	49,253,216	10,327,491	79.0	10,761,963	96.0					
June 30, 2006 (Lag)	38,367,102	46,602,030	8,234,928	82.3	10,128,689	81.3					

This schedule is based on actuarial assumptions used for determining Employer Contributions.

<sup>(1)</sup> AAL includes the accrued liabilities attributable to the Variable Supplements funds, net of their Actuarial Asset Values, if any.

<sup>(2)</sup> Reflects revised actuarial assumptions and methods based on experience review, including an AIR assumption of 7.0% per annum, net of investment expenses.

# COMPARATIVE SUMMARY OF AGGREGATE ACCRUED LIABILITIES FUNDED BY ACTUARIAL VALUE OF ASSETS

# Table 10

# **SOLVENCY TEST**

(Dollar Amounts in Thousands)

	Agg	regate Accrued Liabil					
As of June 30	Accumulated Member Contributions <sup>1</sup> (A)	Member         Retirants and Contributions¹         Employer           Beneficiaries         Financed		Actuarial Value of Assets (D)	Accrued	ntage of Agg I Liabilities For Irial Value of (B)	unded by
2005 (Lag)	\$5,140,216	\$23,194,237	\$13,611,941	\$39,692,426	100%	100%	83%
2006 (Lag)	5,446,376	23,929,616	14,277,635	38,367,102	100	100	63
2007 (Lag)	5,739,890	25,020,637	15,514,393	38,925,725	100	100	53
2008 (Lag)	5,984,631	25,700,882	21,020,157	40,722,228	100	100	43
2009 (Lag)	6,336,353	26,124,122	22,459,541	41,710,159	100	100	41
2010 (Lag)	6,712,979	31,446,478	28,431,003	40,433,344	100	100	8
2011 (Lag)	7,010,301	33,116,897	29,062,680	42,409,059	100	100	8
2012 (Lag)	7,261,912	35,028,113	29,336,710	44,676,721	100	100	8
2013 (Lag)	7,611,951	36,181,288	30,646,015	47,282,884	100	100	11
2014 (Lag)	7,958,544	38,662,825	32,009,068	50,505,971	100	100	12

June 30, 2008 and later amounts provided by NYCERS' Accountant. For all prior years, the amounts are derived from Annual Statements of Financial Services New York State Department.

Also, see following "SOLVENCY TEST - NOTES."

# COMPARATIVE SUMMARY OF AGGREGATE ACCRUED LIABILITIES FUNDED BY ACTUARIAL VALUE OF ASSETS

# **SOLVENCY TEST - NOTES**

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

- (A) Accumulated Member Contributions
- (B) Current Retirants and Beneficiaries; and
- (C) Employer Financed Portion of Active Members' Benefits

The Aggregate Accrued Liabilities are the APV of projected benefits produced by the projected benefit attribution approach prorated on service. The Aggregate Accrued Liabilities were calculated in accordance with Governmental Accounting Standards Board Statement No. 5 (GASB 5).

This comparative summary allocates assets as if they were priority groups, somewhat similar to (but not identical to) the priority categories of Section 4044 of the Employee Retirement Income Security Act of 1974 (ERISA).

The values in the table are dependent upon census data, benefit levels (which have changed on occasion over the past years), and the actuarial assumptions and methods employed at each valuation date. The two most recent changes in assumptions and methods occurred in the June 30, 2014 (Lag) valuation used to compute the Employer Contributions for Fiscal Year 2016 and in the June 30, 2010 (Lag) valuation used to compute the Employer Contributions for Fiscal Year 2012. These underlying bases can be found within the Comprehensive Annual Financial Report for each respective year.

To fully evaluate trends in financial soundness, changes in assumptions need to be evaluated. Beginning with the June 30, 2010 (Lag) actuarial valuation, the Actuarial Interest Rate assumption equals 7.0% per annum, net of investment expenses and the General Wage Increase assumption equals 3.0% per annum. Prior to the June 30, 2010 (Lag) actuarial valuation, the Actuarial Interest Rate assumption was 8% per annum, gross of expenses.

Table 11
STATUTORY VS ACTUARIAL CONTRIBUTIONS

(Dollar Amounts in Thousands)

Fiscal Year Ended	Statutory Contribution <sup>(1)</sup>	Actuarial Contribution	Employer Rate of Contribution <sup>(2)</sup>
6/30/07	\$1,471,029,609	\$1,471,029,609	15.556%
6/30/08	1,874,242,487	1,874,242,487	19.001
6/30/09	2,150,438,042	2,150,438,042	20.570
6/30/10	2,197,717,073	2,197,717,073	20.020
6/30/11	2,387,215,772	2,387,215,772	20.820
6/30/12	3,017,004,318	3,017,004,318	25.540
6/30/13	3,046,845,264	3,046,845,264	25.486
6/30/14	3,114,068,148	3,114,068,148	25.561
6/30/15	3,160,257,868	3,160,257,868	25.662
6/30/16	3,365,454,212	3,365,454,212	27.279

- (1) Generally, represents total employer contributions accrued for fiscal year. Beginning Fiscal Year 2006, the Statutory Contributions were computed using a One-Year Lag Methodology in accordance with Chapter 152/06 which also eliminated the use of ten-year phase-in of Chapter 278/02 for funding the additional actuarial liabilities attributed to Chapter 125/00.
- (2) 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.

		Table 12		
	ACTIVE MEI	MBER VALUATION	DATA	
Valuation Date	Number	Annual Payroli <sup>(1)</sup>	Annual Average Salary	Percentage Increase in Average Pay
6/30/05 (Lag)	175,332	\$ 9,670,785,683	\$55,157	3.1%
6/30/06 (Lag)	178,741	10,128,688,853	56,667	2.7
6/30/07 (Lag)	180,482	10,761,963,324	59,629	5.2
6/30/08 (Lag)	183,654	11,305,974,384	61,561	3.2
6/30/09 (Lag)	186,284	11,880,993,974	63,779	3.6
6/30/10 (Lag)(2)	184,982	12,101,416,579	65,419	2.6
6/30/11 (Lag)	182,021	12,233,572,536	67,210	2.7
6/30/12 (Lag)	187,114	12,478,129,812	66,687	(0.8)
6/30/13 (Lag)	185,971	12,642,482,697	67,981	1.9
6/30/14 (Lag)	184,762	12,672,386,846	68,588	0.9

<sup>(1)</sup> Annual Payroll was increased by a percentage to reflect overtime earnings, and, where applicable, adjusted to be consistent with collective bargaining agreements estimated to be achieved.

<sup>(2)</sup> Beginning with the June 30, 2010 (Lag) actuarial valuation, the annualized covered payroll is based on revised actuarial assumptions.

Table 13 PARTICIPATING EMPLOYERS										
	June 30, 2014 (Lag) <sup>(1)</sup> June 30, 2005 (Lag									
Employer	Number of Employees	Annual Payroll	Number of Employees	Annual Payroll						
City of New York	97,861	\$ 6,609,762,299	88,688	\$4,855,241,078						
NYC Transit	37,984	2,930,112,395	38,731	2,376,403,612						
NYC Housing Authority	10,334	627,142,986	12,316	593,757,176						
NYC Health and Hospitals Corporation	32,638	2,137,364,834	28,686	1,522,177,817						
MTA Bridges and Tunnels	1,433	133,895,314	1,670	109,930,269						
NYC Off-Track Betting Corporation	0	0	1,148	42,583,744						
NYC School Construction Authority	56	6,017,071	48	4,122,482						
NYC Housing Development Corporation	110	9,790,407	54	4,623,117						
City University of New York – Senior Colleges	4,332	217,088,375	3,975	160,588,351						
New York State	0	0	5	316,814						
NYC Municipal Water Authority	14	1,213,165	11	1,041,223						
Total	184,762	\$12,672,386,846	175,332	\$9,670,785,683						

<sup>(1)</sup> The Number of Employees and their corresponding salaries (Annual Payroll) include only those who were on the payroll as of June 30.

# Table 14

# NUMBER AND SALARY OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION AS OF JUNE 30, 2014 (LAG) ACTUARIAL VALUATION(1)

Occupation – Main Groups	Number	Annual Payroll	Average Annual Salary
General	132,452	\$8,423,550,643	\$63,597
Transit Operating Positions	35,222	2,688,885,325	76,341
MTA Bridges and Tunnels	1,433	133,895,314	93,437
Uniform Sanitation	7,043	642,828,438	91,272
Uniform Correction Force	8,612	783,227,126	90,946
Total	184,762	\$12,672,386,846	\$68,588

<sup>(1)</sup> The number of members (Number) and their corresponding salaries (Annual Payroll) include only those who were on the payroll as of June 30, 2014.

Table 15

# NUMBER OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION AND AGE AS OF JUNE 30, 2014 (LAG) ACTUARIAL VALUATION(1)

Age	Total	General	Transit Operating	MTA Bridges & Tunnels	Sanitation	Correction
Under 20	13	8	5	0	0	0
20 - 24	1,823	1,563	158	6	16	80
25 - 29	10,384	7,891	1,037	54	494	908
30 - 34	16,666	12,012	2,084	111	1,081	1,378
35 - 39	19,006	13,129	2,948	205	1,347	1,377
40 - 44	22,170	14,726	4,255	272	1,379	1,538
45 - 49	28,225	18,824	6,406	251	1,140	1,604
50 - 54	32,753	22,824	7,711	238	893	1,087
55 - 59	28,414	21,397	5,923	159	451	484
60 - 64	17,153	13,422	3,291	93	206	141
65 - 69	6,038	4,841	1,121	33	29	14
70 +	2,117	1,815	283	11	7	1
Total	184,762	132,452	35,222	1,433	7,043	8,612

<sup>(1)</sup> Member count for this schedule represents only members receiving salary as of June 30, 2014.

Table 16

# NUMBER OF ACTIVE MEMBERS BY OCCUPATIONAL POSITION AND YEARS OF SERVICE AS OF JUNE 30, 2014 (LAG) ACTUARIAL VALUATION(1)

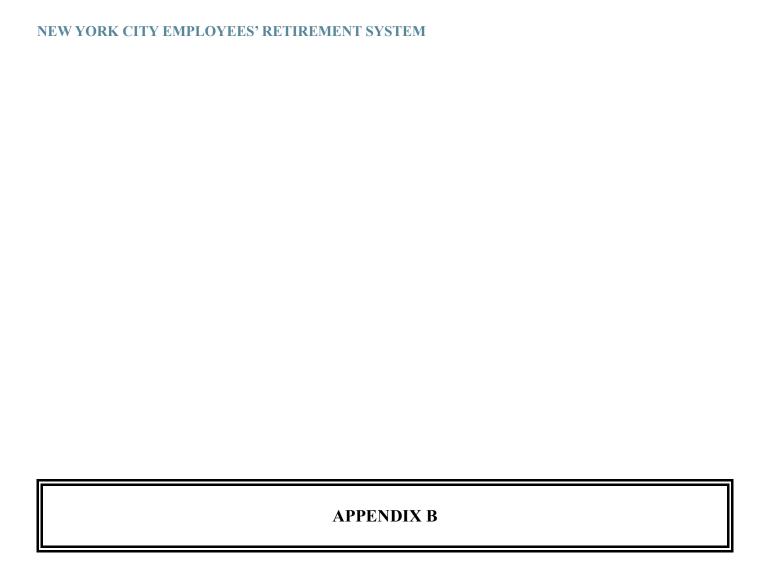
Years Of Service	Total	General	Transit Operating	MTA Bridges & Tunnels	Sanitation	Correction
Under 5	41,453	32,498	5,859	154	1,171	1,771
5 - 9	42,912	31,701	6,688	302	1,738	2,483
10 - 14	31,407	21,840	5,620	570	1,926	1,451
15 - 19	23,790	15,794	5,375	118	1,072	1,431
20 - 24	20,766	14,258	5,076	157	553	722
25 - 29	15,945	10,124	4,622	76	470	653
30 - 34	6,488	4,526	1,734	44	96	88
35 - 39	1,130	918	189	8	7	8
40 +	871	793	59	4	10	5
Total	184,762	132,452	35,222	1,433	7,043	8,612

<sup>(1)</sup> Member count for this schedule represents only members receiving salary as of June 30, 2014.

				Tal	Table 17				
		RETIRANT	S AND BEP	VEFICIARIES AI	DDED TO AN	RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS	M ROLLS		
	Add	Added to Rolls	Remov	Removed from Rolls	Rolls	Rolls End of Year			
Fiscal Year Ended	Number	Annual Allowances <sup>(1)</sup>	Number	Annual Allowances	Number <sup>(1)</sup>	Annual Allowances <sup>(2)</sup>	% Increase In Annual Allowances	Average Annual Allowances	% Increase In Average Annual Allowances
90/08/9	6,274	\$161,299,370	5,905	\$91,199,924	127,714	\$2,676,047,872	2.7%	\$20,953	2.4%
90/0ε/9	6,457	194,343,590	5,382	95,257,483	128,789	2,775,133,979	3.7	21,548	2.8
6/30/07	6,580	236,949,056	6,088	105,839,523	129,281	2,906,243,512	4.7	22,480	4.3
80/08/9	666'9	222,985,559	5,616	142,159,662	130,664	2,987,069,409	2.8	22,861	1.7
60/08/9	5,821	147,278,673	5,454	70,493,395	131,031	3,063,854,687	2.6	23,383	2.3
6/30/10	6,997	201,129,110	5,541	72,297,965	132,487	3,192,685,832	4.2	24,098	3.1
6/30/11	8,564	261,133,473	5,583	101,421,090	135,468	3,352,398,215	2.0	24,747	2.7
6/30/12	7,628	274,865,758	5,109	95,823,182	137,987	3,531,440,791	5.3	25,893	3.4
6/30/13	7,334	244,447,724	5,922	116,360,332	139,399	3,659,528,183	3.6	26,252	2.6
6/30/14	8,132	276,606,560	5,436	107,547,552	142,095	3,828,587,191	4.6	26,945	2.6

Balancing item - amounts shown include changes due to benefit finalization, change in benefit type (e.g., Service to Accidental Disability), COLA increases and other changes. <u>6</u>

Number and Annual Allowances at End of Year include all those and only those retirants on pension payroll for purposes of the amounts used in the actuarial valuation for the given fiscal year and are not adjusted for anticipated changes due to finalization of benefit calculations or contract settlements.



### NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM DATA USED IN THE JUNE 30, 2014 (LAG) ACTUARIAL VALUATION FOR DETERMINING FINAL FISCAL YEAR 2016 EMPLOYER CONTRIBUTIONS SUMMARY OF ACTIVES

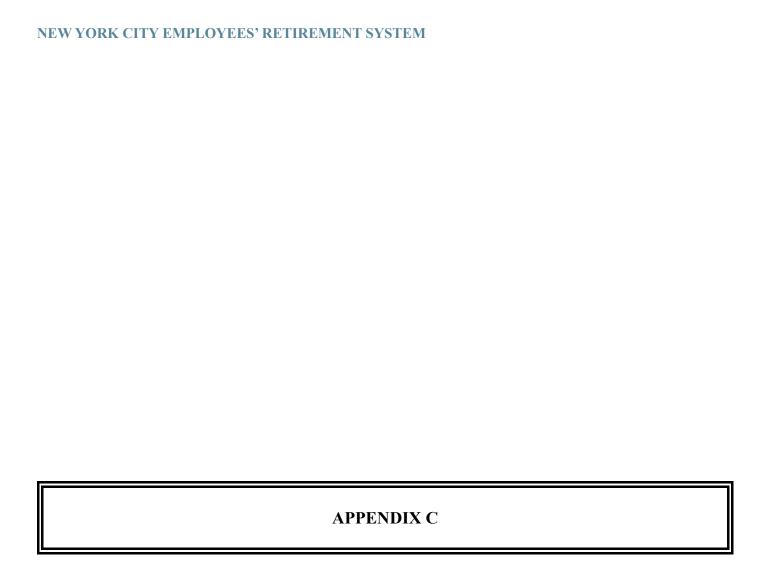
N 1

GROUP:	ALL							TIER: ALL	GE	NDER: M&F
AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
NUMBER:										
UNDER 20	13	0	0	0	0	0	0	0	0	13
20 TO 24	1,746	77	0	0	0	0	0	0	0	1,823
25 TO 29	8,059	2,281	44	0	0	0	0	0	0	10,384
30 TO 34	8,488	6,941	1,203	34	0	0	0	0	0	16,666
35 TO 39	6,385	7,434	4,329	823	35	0	0	0	0	19,006
40 TO 44	4,911	6,917	5,703	3,507	1,077	55	0	0	0	22,170
45 TO 49	4,208	6,215	5,847	5,266	4,599	1,996	94	0	0	28,225
50 TO 54	3,544	5,434	5,497	5,462	5,921	5,463	1,396	36	0	32,753
55 TO 59	2,356	4,045	4,614	4,520	4,910	4,725	2,809	401	34	28,414
60 TO 64	1,251	2,424	2,690	2,736	2,991	2,640	1,615	480	326	17,153
65 TO 69	366	923	1,149	1,079	910	758	405	160	288	6,038
70 & UP	126	221	331	363	323	308	169	53	223	2,117
TOTAL	41,453	42,912	31,407	23,790	20,766	15,945	6,488	1,130	871	184,762
	,	-		-		,	,			
CALABIEC (DI	THOUGAND	a)								
SALARIES (IN			0	0	0		0	0	0	464
UNDER 20	464	0	0	0	0	0	0	0	0	464
20 TO 24	68,990	4,869	0	0	0	0	0	0	0	73,860
25 TO 29	390,835	135,176	3,420	0	0	0	0	0	0	529,431
30 TO 34	463,953	446,672	85,730	2,718	0	0	0	0	0	999,072
35 TO 39	371,916	497,841	315,150	62,177	2,657	0	0	0	0	1,249,740
40 TO 44	293,953	470,815	410,812	275,607	86,139	4,563	0	0	0	1,541,889
45 TO 49	251,659	415,420	414,749	403,612	363,008	168,008	8,635	0	0	2,025,090
50 TO 54	213,725	353,100	386,646	413,533	461,320	442,481	114,712	2,813	0	2,388,330
55 TO 59	144,449	261,270	319,241	338,363	379,908	366,293	220,131	31,812	2,332	2,063,798
60 TO 64	79,858	157,594	181,525	202,881	224,939	199,642	123,580	38,883	24,405	1,233,308
65 TO 69	23,638	58,493	76,635	78,219	66,005	54,298	30,572	14,776	23,571	426,209
70 & UP	6,973	13,409	20,748	24,382	21,737	21,225	11,764	3,427	17,533	141,197
TOTAL *	2,310,413	2,814,659	2,214,656	1,801,491	1,605,713	1,256,509	509,394	91,710	67,842	12,672,387
AVERAGE SA	LARIES: **									
UNDER 20	35,721	0	0	0	0	0	0	0	0	35,721
20 TO 24	39,513	63,239	0	0	0	0	0	0	0	40,515
25 TO 29	48,497	59,262	77,732	0	0	0	0	0	0	50,985
30 TO 34	54,660	64,353	71,263	79,933	0	0	0	0	0	59,947
35 TO 39	58,248	66,968	72,800	75,549	75,921	0	0	0	0	65,755
40 TO 44	59,856	68,066	72,034	78,588	79,981	82,961	0	0	0	69,548
45 TO 49	59,805	66,841	70,934	76,645	78,932	84,172	91,858	0	0	71,748
50 TO 54	60,306	64,980	70,338	75,711	77,912	80,996	82,172	78,133	0	72,919
55 TO 59	61,311	64,591	69,190	74,859	77,374	77,522	78,366	79,331	68,582	72,633
60 TO 64	63,836	65,014	67,481	74,153	75,205	75,622	76,520	81,006	74,863	71,900
65 TO 69	64,585	63,373	66,698	72,493	72,533	71,633	75,486	92,350	81,845	70,588
70 & UP	55,342	60,673	62,683	67,167	67,296	68,911	69,610	64,660	78,623	66,697
TOTAL	55,736	65,591	70,515	75,725	77,324	78,803	78,513	81,160	77,889	68,588

Note: Age is last birthday. Service is completed years.

\* Total may not add up due to rounding.

\*\* Average based on unrounded salary.



# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM DATA USED IN THE JUNE 30, 2014 (LAG) ACTUARIAL VALUATION FOR DETERMINING FINAL FISCAL YEAR 2016 EMPLOYER CONTRIBUTIONS SUMMARY OF PENSIONERS BY CAUSE AND GENDER

N 1

		MALE			FEMALE	<u>-</u>	ВОТ	ALL FILES (AL	
AGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
ACCIDENTAL DIS	SABILITY:								
UNDER 30	3	71,359	23,786	1	25,048	25,048	4	96,407	24,102
30 TO 34	9	469,904	52,212	3	140,831	46,944	12	610,735	50,895
35 TO 39	42	2,032,345	48,389	6	167,973	27,996	48	2,200,318	45,840
40 TO 44	116	4,726,001	40,741	31	1,120,782	36,154	147	5,846,783	39,774
45 TO 49	331	13,968,145	42,200	78	2,828,137	36,258	409	16,796,282	41,067
50 TO 54	454	18,579,330	40,924	108	3,526,771	32,655	562	22,106,101	39,335
55 TO 59	418	15,729,089	37,629	93	3,142,552	33,791	511	18,871,641	36,931
60 TO 64	513	18,607,518	36,272	50	1,238,560	24,771	563	19,846,078	35,251
65 TO 69	679	21,572,675	31,771	53	1,231,103	23,228	732	22,803,778	31,153
70 TO 74	583	16,739,558	28,713	51	949,744	18,622	634	17,689,302	27,901
75 TO 79	305	8,719,130	28,587	37	474,931	12,836	342	9,194,061	26,883
80 TO 84	200	5,280,365	26,402	21	319,964	15,236	221	5,600,329	25,341
85 TO 89	120	3,286,358	27,386	10	188,606	18,861	130	3,474,964	26,730
90 & UP	33	757,417	22,952	9	136,500	15,167	42	893,917	21,284
TOTAL	3,806	130,539,194	34,298	551	15,491,502	28,115	4,357	146,030,696	33,516
ORDINARY DISAI	BILITY:								
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	4	145,046	36,262	2	22,350	11,175	6	167,396	27,899
35 TO 39	17	351,594	20,682	13	201,454	15,496	30	553,048	18,435
40 TO 44	86	1,655,318	19,248	56	940,486	16,794	142	2,595,804	18,280
45 TO 49	286	5,574,326	19,491	179	2,866,795	16,016	465	8,441,121	18,153
50 TO 54	748	14,373,990	19,217	506	8,290,856	16,385	1,254	22,664,846	18,074
55 TO 59	1,054	20,484,969	19,435	700	11,938,649	17,055	1,754	32,423,618	18,486
60 TO 64	1,206	22,906,850	18,994	727	12,029,518	16,547	1,933	34,936,368	18,074
65 TO 69	1,214	22,668,022	18,672	543	8,217,976	15,134	1,757	30,885,998	17,579
70 TO 74	915	17,030,323	18,612	385	5,171,791	13,433	1,300	22,202,114	17,079
75 TO 79	464	8,097,193	17,451	193	2,359,649	12,226	657	10,456,842	15,916
80 TO 84	209	3,445,209	16,484	82	801,658	9,776	291	4,246,867	14,594
85 TO 89	123	2,118,444	17,223	38	413,580	10,884	161	2,532,024	15,727
90 & UP	39	765,377	19,625	24	250,756	10,448	63	1,016,133	16,129
TOTAL	6,365	119,616,661	18,793	3,448	53,505,518	15,518	9,813	173,122,179	17,642
SERVICE RETIRE	MENT:								
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	0	0	0	0	0	0
35 TO 39	1	7,600	7,600	0	0	0	1	7,600	7,600
40 TO 44	49	2,386,289	48,700	22	993,822	45,174	71	3,380,111	47,607
45 TO 49	896	39,623,842	44,223	459	20,033,207	43,645	1,355	59,657,049	44,027
50 TO 54	2,431	102,577,655	42,196	893	36,759,286	41,164	3,324	139,336,941	41,918
55 TO 59	5,211	209,559,976	40,215	2,042	64,104,225	31,393	7,253	273,664,201	37,731
60 TO 64	10,396	386,402,183	37,168	5,701	160,405,174	28,136	16,097	546,807,357	33,970
65 TO 69	14,369	502,422,297	34,966	9,398	245,773,766	26,152	23,767	748,196,063	31,480
70 TO 74	13,562	429,041,458	31,636	8,179	194,605,991	23,793	21,741	623,647,449	28,685
75 TO 79	10,024	280,754,287	28,008	5,956	120,691,316	20,264	15,980	401,445,603	25,122
80 TO 84	6,652	172,223,580	25,890	4,289	76,663,585	17,874	10,941	248,887,165	22,748
85 TO 89	4,555	111,916,515	24,570	3,322	52,281,152	15,738	7,877	164,197,667	20,845
90 & UP	2,341	52,049,980	22,234	2,800	36,339,905	12,979	5,141	88,389,885	17,193
TOTAL	70,487	2,288,965,662	32,474	43,061	1,008,651,429	23,424	113,548	3,297,617,091	29,042

# NEW YORK CITY EMPLOYEES' RETIREMENT SYSTEM DATA USED IN THE JUNE 30, 2014 (LAG) ACTUARIAL VALUATION FOR DETERMINING FINAL FISCAL YEAR 2016 EMPLOYER CONTRIBUTIONS SUMMARY OF PENSIONERS BY CAUSE AND GENDER

N 2

		MALE			FEMALE		BOT	ALL FILES (AL' H MALE & FEMA	
AGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
ACCIDENTAL DEAT	H:								
UNDER 30	2	55,448	27,724	0	0	0	2	55,448	27,724
30 TO 34	1	34,441	34,441	1	23,630	23,630	2	58,071	29,036
35 TO 39	1	16,241	16,241	1	25,386	25,386	2	41,627	20,814
40 TO 44	1	39,086	39,086	5	176,247	35,249	6	215,333	35,889
45 TO 49	0	0	0	9	314,691	34,966	9	314,691	34,966
50 TO 54	1	32,672	32,672	13	457,651	35,204	14	490,323	35,023
55 TO 59	0	0	0	14	453,699	32,407	14	453,699	32,407
60 TO 64	0	0	0	19	695,430	36,602	19	695,430	36,602
65 TO 69	2	58,492	29,246	16	425,174	26,573	18	483,666	26,870
70 TO 74	4	132,216	33,054	17	400,282	23,546	21	532,498	25,357
75 TO 79	1	23,582	23,582	10	188,246	18,825	11	211,828	19,257
80 TO 84	0	0	0	4	70,940	17,735	4	70,940	17,735
85 TO 89	0	0	0	6	121,641	20,274	6	121,641	20,274
90 & UP	0	0	0	4	56,398	14,100	4	56,398	14,100
TOTAL	13	392,178	30,168	119	3,409,415	28,651	132	3,801,593	28,800
OTHER DEVERIGIAN	HDQ.								
OTHER BENEFICIAR		012 512	11.406	00	1 222 200	12.057	1.00	2 1 45 001	12 (07
UNDER 30	80	912,513	11,406		1,233,288	13,857	169	2,145,801	12,697
30 TO 34	51	649,886	12,743	67	560,408	8,364	118	1,210,294	10,257
35 TO 39	74	1,029,107	13,907	109	1,334,334	12,242	183	2,363,441	12,915
40 TO 44	87	913,942	10,505	149	1,734,332	11,640	236	2,648,274	11,222
45 TO 49	99	1,167,235	11,790		2,719,164	12,085	324	3,886,399	11,995
50 TO 54	136	1,238,524	9,107	338	4,212,280	12,462	474	5,450,804	11,500
55 TO 59	123 130	959,119	7,798 10,669	534 815	9,411,560	17,625	657 945	10,370,679	15,785 17,240
60 TO 64		1,387,003			14,905,048	18,288		16,292,051	
65 TO 69	138 122	1,193,482	8,648	1,134	20,863,636	18,398	1,272	22,057,118	17,341
70 TO 74 75 TO 79	95	1,347,664 1,050,397	11,046	1,497	25,438,755	16,993	1,619 1,694	26,786,419	16,545 15,772
	95 92		11,057	1,599	25,667,970	16,053		26,718,367	,
80 TO 84	92 86	798,716	8,682	2,005	30,835,623	15,379	2,097	31,634,339	15,086
85 TO 89		774,908	9,011	2,148	29,324,022	13,652	2,234	30,098,930	13,473
90 & UP TOTAL	70 1,383	610,932 14,033,428	8,728 10,147	2,153 12,862	25,741,784 193,982,204	11,956 15,082	2,223 14,245	26,352,716 208,015,632	11,855 14,603
TOTAL	1,565	14,033,426	10,147	12,002	193,982,204	13,062	14,243	208,013,032	14,003
ALL PENSIONERS AT	ND BENEFICIA	RIES:				İ			
UNDER 30	85	1,039,320	12,227	90	1,258,336	13,982	175	2,297,656	13,129
30 TO 34	65	1,299,277	19,989	73	747,219	10,236	138	2,046,496	14,830
35 TO 39	135	3,436,887	25,458	129	1,729,147	13,404	264	5,166,034	19,568
40 TO 44	339	9,720,636	28,674	263	4,965,669	18,881	602	14,686,305	24,396
45 TO 49	1,612	60,333,548	37,428	950	28,761,994	30,276	2,562	89,095,542	34,776
50 TO 54	3,770	136,802,171	36,287	1,858	53,246,844	28,658	5,628	190,049,015	33,768
55 TO 59	6,806	246,733,153	36,252	3,383	89,050,685	26,323	10,189	335,783,838	32,956
60 TO 64	12,245	429,303,554	35,059	7,312	189,273,730	25,885	19,557	618,577,284	31,629
65 TO 69	16,402	547,914,968	33,405	11,144	276,511,655	24,813	27,546	824,426,623	29,929
70 TO 74	15,186	464,291,219	30,574	10,129	226,566,563	22,368	25,315	690,857,782	27,290
75 TO 79	10,889	298,644,589	27,426	7,795	149,382,112	19,164	18,684	448,026,701	23,979
80 TO 84	7,153	181,747,870	25,409	6,401	108,691,770	16,980	13,554	290,439,640	21,428
85 TO 89	4,884	118,096,225	24,180	5,524	82,329,001	14,904	10,408	200,425,226	19,257
90 & UP	2,483	54,183,706	21,822	4,990	62,525,343	12,530	7,473	116,709,049	15,617
TOTAL	82,054	2,553,547,123	31,120	60,041	1,275,040,068	21,236	142,095	3,828,587,191	26,944

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PART 5
STATISTICAL SECTION

# **Statistical Section Overview**

The Statistical Section assists users in understanding the basic financial statements by presenting 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 201	<ul> <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 202 - 205	<ul> <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 206 - 209	<ul> <li>Service Retirement Experience</li> <li>Average Annual Benefit         Payments (6 year summary)</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 2015, 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 210 - 211	Disability Retirement Experience     Ordinary Disability     Accidental Disability	10 year history of the average ages, benefit payments, and salary bases of new disability recipients of each calendar year
Page 212 - 213	<ul> <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 214 - 215	<ul> <li>Pensioners and Beneficiaries</li> <li>Active Members</li> <li>Number of Recipients (VSF)</li> </ul>	Changes over the last ten years in the number of active members, retirees, and beneficiaries of the Plan; and the recipients of five Variable Supplements Funds

			(in thousands)				
	NYCERS	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	TOTAL
Cash Balance July 1, 2015	\$ 40,548	\$ 3,631	\$ 30	38	\$ 16	\$ 33	\$ 44,296
Receipts							
Member Contributions	484,424	1	•		•	ı	484,424
Employer Contributions	3,423,040	1	•	ı	•	1	3,423,040
Member Loan Payments	400,209	ı		1		1	400,209
Interest and Dividends	1,509,377	162				1	1,509,539
Investments Redeemed	96,370,262	123,725		ı		ı	96,493,987
Transfers to Variable Supplement Funds	1	27,000	2,022	2,684	3,997	3,045	38,748
Miscellaneous		51	•	5	4	2	62
Total Cash Receipts	102,187,312	150,938	2,022	2,689	4,001	3,047	102,350,009
Total Cash Available	102,227,860	154,569	2,052	2,727	4,017	3,080	102,394,305
Disbursements							
Benefit Payments and Withdrawals	4,251,593	79,958	2,021	2,682	3,987	3,039	4,343,280
Transfers to other Retirement Systems	7,605	•		ı	•	ı	7,605
Transfers to Variable Supplement Funds	5,023	33,725	1	ı	•	ı	38,748
Loans to Members	391,461	ı	1	ı	1	ı	391,461
Investments Purchased	97,134,550	40,662	1	ı	•	ı	97,175,212
Investment Expenses	211,510	ı			•	ı	211,510
Administrative Expenses	56,249	ı	1	ı	1	ı	56,249
Miscellaneous	4,184	111	1	1	1	1	4,199
Total Cash Disbursements	102,062,175	154,356	2,022	2,683	3,988	3,040	102,228,264
Cash Balance June 30, 2016	165,685	213	30	44	29	40	166,041

			IABLE OF KEVENUE BY SOUKCE (QFF & VSF) Fiscal Years 2007 through 2016 (in thousands)	SOURCE (QF hrough 2016 nds)			
Fiscal Year Ended June 30	Member Contributions	<b>Employer</b> Contributions	Net Investment Income (QPP)	Net Investment Income (VSF)	Net Investment Income (QPP+VSF)	Other Income	Total Revenue
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
2011	413,740	2,387,216	7,851,456	n/a	7,851,456	4,707	10,657,119
2010	398,964	2,197,717	4,318,810	n/a	4,318,810	4,696	6,920,187
2009	382,356	2,150,495	(7,036,151)	n/a	(7,036,151)	3,709	(4,499,591)
2008	366,144	1,874,242	(1,883,669)	n/a	(1,883,669)	3,096	359,813
2007	351,073	1,471,030	6,670,857	n/a	6,670,857	2,997	8,495,957

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

	TAI	[ABLE OF CHANGES IN FIDUCIARY NET POSITION (QPP & VSF)         Fiscal Years 2007 through 2016         (in thousands)	GES I Fis	N FIDU( cal Years (in t	DUCIARY N ears 2007 thro (in thousands)	S IN FIDUCIARY NET PO Fiscal Years 2007 through 2016 (in thousands)	SITIO	N (QPP &	VSF)		
				Deduct	tions fron	Deductions from Plan Net Position	Position	1			
Fiscal Year Ended June 30	Additions to Fiduciary Net Position <sup>1</sup>	Benefit Payments <sup>2</sup>	Ref	Refunds	Payme Other   Syster Fu	Payments To Other Pension Systems and Funds	Admii Exj	Administrative Expenses	Total Deductions	Net (Fidu	Net Change in Fiduciary Net Position
2016	\$ 5,025,794	\$ 4,382,120 <sup>3</sup>	<b>↔</b>	72,135	<b>↔</b>	7,440	↔	56,683	\$ 4,518,378 <sup>3</sup>	<del>\$</del>	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	Ū	66,747		7,228		50,431	4,098,104		7,379,325
2013	8,456,748	3,803,312	Ü	60,179		5,250		48,666	3,917,407	,	4,539,341
2012	4,004,310	3,642,520	4,	59,151		17,418		51,385	3,770,474		233,836
2011	10,657,119	3,518,109	Ŭ	63,148		16,773		46,374	3,644,404		7,012,715
2010	6,920,187	3,332,785	47	58,325		11,710		49,676	3,452,496	•	3,467,691
2009	(4,499,591)	3,209,397	7,	55,451		12,922		48,822	3,326,592	Ú	(7,826,183)
2008	359,813	2,967,373	17	142,132		13,685		46,999	3,170,189	·	(2,810,376)
2007	8,495,957	3,175,672	4,	51,883		11,909		41,695	3,281,159		5,214,798

Notes:

<sup>1)</sup> Per Table of Revenue by Source

<sup>2)</sup> Per Table of Benefit Payments by Type. Includes payments from Variable Supplements Funds. For details, please refer to Table of Benefit Payments (VSF).

<sup>3)</sup> 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		PAYMENTS I Years 2007 through (in thousands)	BY TYPE (QPP gh 2016	% VSF)	
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
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
2011	3,384,811	12,550	3,397,361	96,192	24,556	3,518,109
2010	3,220,938	12,687	3,233,625	121,586	(22,426)	3,332,785
2009	3,116,945	12,773	3,129,718	77,960	1,719	3,209,397
2008	2,983,004	12,873	2,995,877	90,415	(118,919)	2,967,373
2007	2,914,609	11,367	2,925,976	71,992	177,704	3,175,672

		TAB	LE OF BI Fiscal Y	Years 2	TT PAYN 2007 throug nousands)				
Fiscal Year Ended June 30	COVSF	]	HPOVSF	Н	PSOVSF	TPOVSF	Т	PSOVSF	Total
2016	\$ 40,2242	\$	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
2011	-		2,323		2,878	4,191		3,158	12,550
2010	9		2,344		2,902	4,242		3,190	12,687
2009	10		2,393		2,911	4,275		3,184	12,773
2008	-		2,424		2,929	4,318		3,202	12,873
2007	6		2,111		2,665	3,752		2,833	11,367

### 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 2007 through 2016 (in thousands)

ıl Year	Dativament	Member	Loans		Death I	Benefits
nded ne 30	Benefits	Amount Paid	No. Loans	Refunds	In Service	After Retirement
016	\$ 4,207,387	\$ 389,619	49,142	\$ 72,135	\$ 72,354	\$ 46,025
015	4,148,711	381,243	48,449	66,738	60,493	34,575
014	3,905,714	397,705	51,702	66,747	63,598	34,934
013	3,705,266	392,580	52,952	60,179	57,590	27,542
012	3,556,519	359,882	52,461	59,151	58,955	26,591
011	3,397,361	374,382	51,881	63,148	69,659	26,533
010	3,233,625	376,319	52,923	58,325	81,074	40,512
009	3,129,718	337,231	49,336	55,451	56,329	21,631
800	2,995,877	279,754	45,882	142,132	67,699	22,716
007	2,925,976	295,146	45,771	51,883	46,815	25,177
	016 015 014 013 012 011 010 009	Retirement Benefits  016 \$4,207,387  015 4,148,711  014 3,905,714  013 3,705,266  012 3,556,519  011 3,397,361  010 3,233,625  009 3,129,718  008 2,995,877	Anded ne 30         Retirement Benefits         Amount Paid           016         \$ 4,207,387         \$ 389,619           015         4,148,711         381,243           014         3,905,714         397,705           013         3,705,266         392,580           012         3,556,519         359,882           011         3,397,361         374,382           010         3,233,625         376,319           009         3,129,718         337,231           008         2,995,877         279,754	Added ne 30         Retirement Benefits         Amount Paid         No. Loans           016         \$ 4,207,387         \$ 389,619         49,142           015         4,148,711         381,243         48,449           014         3,905,714         397,705         51,702           013         3,705,266         392,580         52,952           012         3,556,519         359,882         52,461           011         3,397,361         374,382         51,881           010         3,233,625         376,319         52,923           009         3,129,718         337,231         49,336           008         2,995,877         279,754         45,882	Anded ne 30         Retirement Benefits         Amount Paid         No. Loans         Refunds           016         \$ 4,207,387         \$ 389,619         49,142         \$ 72,135           015         4,148,711         381,243         48,449         66,738           014         3,905,714         397,705         51,702         66,747           013         3,705,266         392,580         52,952         60,179           012         3,556,519         359,882         52,461         59,151           011         3,397,361         374,382         51,881         63,148           010         3,233,625         376,319         52,923         58,325           009         3,129,718         337,231         49,336         55,451           008         2,995,877         279,754         45,882         142,132	Ideal ne 30         Retirement Benefits         Amount Paid         No. Loans         Refunds         In Service           016         \$ 4,207,387         \$ 389,619         49,142         \$ 72,135         \$ 72,354           015         4,148,711         381,243         48,449         66,738         60,493           014         3,905,714         397,705         51,702         66,747         63,598           013         3,705,266         392,580         52,952         60,179         57,590           012         3,556,519         359,882         52,461         59,151         58,955           011         3,397,361         374,382         51,881         63,148         69,659           010         3,233,625         376,319         52,923         58,325         81,074           009         3,129,718         337,231         49,336         55,451         56,329           008         2,995,877         279,754         45,882         142,132         67,699

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).

	TABLE O	SERVICE RETIREMENT EXPERIENCE – 6 YEAR HISTORY TABLE OF AVERAGE ANNUAL BENEFIT PAYMENTS BY YEARS OF SERVICE Calendar Years 2010 through 2015	KETIREMI E ANNUA Cale	ENT EXPI L BENEFI ndar Years 2	CE RETIREMENT EXPERIENCE – 6 YEAR HISTORY AGE ANNUAL BENEFIT PAYMENTS BY YEARS OF Calendar Years 2010 through 2015	- 6 YEAR INTS BY 7	HISTORY	Y F SERVIC	H	
	Calendar				Years of Service	ervice				Total
	Year	5 - 9.9	10 - 14.9	15 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 & Up	Population
	2015	152	499	371	946	2,043	1,095	285	171	5,565
	2014	134	456	347	1,075	1,884	966	250	189	5,331
Misselve of Dotings	2013	149	447	322	1,239	1,709	915	216	204	5,201
Number of Nemees	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
	2010	215	447	413	1,778	1,578	650	375	204	2,660
	2015		\$ 13,223		\$ 35,501 \$	46,515			\$ 81,760	\$ 41,968
	2014	7,243	13,312	18,431	35,761	44,660	52,326	61,222	89,189	41,316
Average Retirement	2013	6,741	12,536	17,987	34,628	42,273	50,889	59,072	77,790	38,980
Benefit	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
	2010	6,525	11,190	16,338	33,473	39,011	47,948	61,042	76,812	36,024
	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
Average Calary Base	2013	58,112	61,601	64,599	76,020	80,120	82,524	80,735	77,442	76,392
Monte Sainty Dass	2012	54,558	966,396	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
	2010	54,375	55,950	58,350	72,767	73,606	78,603	77,268	76,051	70,655
	2015	12%	20%	78%	45%	54%	61%	%02	106%	52%
	2014	12%	21%	28%	45%	53%	61%	70%	104%	52%
Average Ketirement Benefit As A % of	2013	12%	20%	28%	46%	23%	62%	73%	101%	21%
Salary Base	2012	12%	20%	78%	47%	53%	97.	29%	106%	51%
	2011	12%	20%	29%	47%	53%	61%	46/	%66	52%
	2010	12%	20%	28%	46%	53%	61%	%62	101%	51%

TABL	E OF AVI	SERVICE RETIREMENT EXPERIENCE TABLE OF AVERAGE RETIREMENT ALLOWANCE BY AGE AND YEARS OF SERVICE Calendar Year 2015	ERVICE R	SERVICE RETIREMENT EXPERIENCE ETIREMENT ALLOWANCE BY AGE Al Calendar Year 2015	ENT EXP WANCE I	ERIENC 3Y AGE.	E AND YEA	RS OF SE	ERVICE	
	Age				Years of Service	service				Total
	at Retirement	5 - 9.9	10 - 14.9	15 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 & Up	Population
	Under 50	0	0	0	80	95	3	0	0	178
	50-54	0	0	0	51	278	72	3	0	404
Mumbor of Datingo	55-59	25	73	50	110	542	344	38	3	1,185
nullibel of Reflecs	60-64	64	163	130	355	713	482	166	75	2,148
	69-59	45	191	140	260	325	152	53	<i>L</i> 9	1,233
	70 & Over	18	72	51	93	06	42	25	26	417
	Under 50	• <del>\$</del>	· ·	<del>\$</del>	56,438 \$	60,918	\$ 72,072	· •	· S	\$ 59,093
	50-54	1	ı	ı	52,661	59,805	59,975	52,834	ı	58,882
Average Retirement	55-59	6,524	12,025	21,926	33,204	46,854	55,262	52,374	73,312	44,224
Allowance	60-64	7,656	13,837	18,956	32,567	43,114	53,043	60,837	72,719	41,262
	69-59	8,487	12,956	19,307	32,417	40,278	50,848	59,310	83,892	35,338
	70 & Over	7,094	13,760	17,962	30,615	37,677	53,087	57,891	103,321	35,098
	Under 50	%0	%0	%0	51%	55%	62%	%0	%0	54%
: f	50-54	%0	%0	%0	20%	25%	%09	28%	%0	25%
Average Retirement	55-59	12%	21%	28%	42%	52%	%65	93%	%98	51%
% of Salary Base	60-64	12%	20%	28%	45%	53%	62%	%02	%26	52%
i.	69-59	12%	20%	28%	44%	54%	93%	74%	104%	48%
	70 & Over	12%	21%	28%	45%	25%	%99	74%	141%	51%

# SERVICE RETIREMENT EXPERIENCE TABLE OF DISTRIBUTION OF RETIREMENT ALLOWANCE BY AGE AT RETIREMENT

Calendar Year 2015

			man I cai				
Allowance / Age	Under 50	50-54	55-59	60-64	65-69	70 & Up	Total
\$4,999 or Less	-	-	14	20	10	10	54
5,000 - 9,999	-	-	47	88	104	36	275
10,000 - 14,999	-	1	54	115	106	40	316
15,000 - 19,999	-	1	57	144	131	52	385
20,000 - 24,999	-	5	68	201	136	49	459
25,000 - 29,999	2	12	92	183	128	32	449
30,000 - 34,999	1	21	85	182	101	33	423
35,000 - 39,999	3	24	95	193	104	36	455
40,000 - 44,999	7	30	92	170	74	27	400
45,000 - 49,999	21	35	121	147	64	22	410
50,000 - 54,999	42	39	94	178	63	16	432
55,000 - 59,999	31	40	94	139	55	13	372
60,000 - 64,999	18	56	82	108	33	13	310
65,000 - 69,999	16	43	62	70	26	10	227
70,000 - 74,999	16	25	44	53	26	4	168
75,000 - 79,999	13	24	25	42	13	3	120
80,000 - 84,999	1	14	21	32	9	1	78
85,000 - 89,999	4	17	13	20	14	2	70
90,000 - 94,999	3	6	8	18	13	1	49
95,000 - 99,999	-	4	1	6	4	4	19
\$100,000 or more	-	7	16	39	19	13	94
Total	178	404	1,185	2,148	1,233	417	5,565

		TABLE OF DISTRIBUTION OF RETIREMENT ALLOWANCE BY YEARS OF SERVICE Calendar Year 2015	DISTRIBUT BY Y C	BY YEARS OF SERVICE Calendar Year 2015	TREMENT ERVICE 2015				
Allowance / Service 5-	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	48	9							54
5,000 - 9,999	<i>L</i> 9	192	16						275
10,000 - 14,999	26	143	119	27	1				316
15,000 - 19,999	∞	68	06	148	45	S			385
20,000 - 24,999	7	37	92	137	173	32	1		459
25,000 - 29,999		23	41	101	188	77	14	4	449
30,000 - 34,999		8	12	106	194	84	21	3	423
35,000 - 39,999		8	7	87	226	103	28	-	455
40,000 - 44,999		3	3	70	207	87	23	7	400
45,000 - 49,999			1	79	198	103	22	7	410
50,000 - 54,999			3	84	192	107	27	19	432
55,000 - 59,999			7	43	175	112	31	6	372
60,000 - 64,999				21	140	109	23	17	310
65,000 - 69,999			1	19	101	80	18	∞	227
70,000 - 74,999				14	09	64	14	16	168
75,000 - 79,999				7	50	38	14	11	120
80,000 - 84,999				3	30	33	∞	4	78
85,000 - 89,999				2	28	17	10	13	70
90,000 - 94,999				1	18	11	10	6	49
95,000 - 99,999					9	33	5	5	19
\$100,000 or more					11	30	16	37	94
Total	152	499	371	949	2,043	1,095	285	171	5,565

	of											
	Average Retirement Benefit As A % of Salary Base	37%	36%	36%	36%	36%	35%	36%	35%	35%	35%	
XPERIENCE PAYMENTS	Average Salary Base	\$ 67,952	66,522	64,447	61,419	60,242	59,397	55,194	54,649	52,520	52,009	
ORDINARY DISABILITY RETIREMENT EXPERIENCE TABLE OF AVERAGE ANNUAL BENEFIT PAYMENTS Calendar Years 2006 through 2015	Average Retirement Benefit	\$ 25,142	23,948	23,201	22,111	21,687	20,789	19,870	19,127	18,382	18,203	
ABILITY RET RAGE ANNU endar Years 200	Average Years of Service	18	18	18	18	18	18	18	17	17	17	
INARY DISA LE OF AVEI Cald	Average Age	54	54	54	54	54	53	53	52	53	52	
ORDIN	Number of Retirees	357	400	446	436	475	516	464	428	437	465	
	Calendar Year	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	

<b>⊡</b>	Average Retirement Benefit As A % of Salary Base	74%	74%	74%	74%	74%	74%	75%	74%	75%	74%
<b>EXPERIENC PAYMENTS</b>	Average Salary Base	\$ 91,621	94,157	85,434	86,728	83,945	75,600	70,204	68,551	63,856	63,050
AL BENEFIT 6 through 2015	Average Retirement Benefit	8 67,799	929,69	63,221	64,179	62,119	55,944	52,653	50,728	47,892	46,657
CCIDENTAL DISABILITY RETIREMENT EXPERIENCE FABLE OF AVERAGE ANNUAL BENEFIT PAYMENTS Calendar Years 2006 through 2015	Average Years of Service	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ENTAL DIS E OF AVER Cale	Average Age	47	47	45	48	49	46	46	48	47	46
ACCID	Number of Retirees	108	70	77	68	68	75	80	101	94	111
	Calendar Year	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006

Notes: Certain accidental disability benefits are reduced by amounts awarded by the New York State Workers' Compensation Board.

TABLE OF RECIPIENTS BY BENEFIT TYPE AND PENSION OPTION Year Ended June 30, 2016	(TS BY BENEFIT TYPE A Year Ended June 30, 2016	FIT TYPE AN une 30, 2016	AD PENSION OPT	HON
Pension Option	Service	Disability (Non-Duty)	Disability and Deaths (Duty)	Total <sup>1</sup>
Single Life	72,787	6,376	4,064	83,227
Joint and Survivor	27,163	1,099	151	28,413
Lump Sum or Term Certain	13,653	2,049	437	16,139
Advanced Payments <sup>2</sup>	4,022	235	87	4,344
Surviving Annuitants	15,546	2,062	209	17,817
Total	133,171	11,821	4,948	149,940

<sup>1)</sup> Total includes retirees and beneficiaries who received a retirement payment on the pensioners' payroll as of June 30, 2016. These statistics exclude suspended recipients and those who have died and the pension number has not yet been terminated from the roster. 2) Retirees have not yet selected a retirement option.

		es e ce	41	299	783	690	165	36	171	.43	518	860
		Average Annual Allowance	28,141	27,567	26,783	26,069	25,365	24,636	23,971	23,243	22,618	21,998
	Total	,	40 \$	12	37	89	99	24	20	61	20	44
		No. of Recipients	149,940	146,812	144,537	143,868	140,366	137,824	135,050	133,661	133,070	132,144
	iciaries	Average Annual Allowance	18,121	17,694	16,903	16,314	15,339	14,881	14,146	13,741	12,974	12,595
	Benef	,	<del>\$</del>									
TABLE OF RETIREMENT BENEFITS BY TYPE 10 YEAR HISTORY Fiscal Years 2007 through 2016	Surviving Beneficiaries	No. of Recipients	17,817	17,177	16,652	16,360	16,110	15,834	15,765	15,677	15,612	15,575
EFITS ]	uty)	Average Annual Allowance	34,513	33,328	31,974	31,882	31,351	29,563	28,833	28,325	29,866	28,689
BEN TOR	Disability (Duty)	,	\$									
RETIREMENT BENEFIT 10 YEAR HISTORY Fiscal Years 2007 through 2016	Disabi	No. of Recipients	4,739	4,701	4,681	4,637	4,583	4,581	4,550	4,555	3,941	3,956
RETIR 10 Y Fiscal Ye	uty)	Average Annual Allowance	18,485	18,056	17,771	17,560	17,086	16,581	16,080	15,887	15,301	14,859
OF	(Non-L	Averago Annual Allowano	\$ 1	—	_		-	—	-		_	1
TABLE	Disability (Non-Duty)	No. of Recipients	9,759	9,795	6,697	9,580	9,468	9,248	9,024	8,852	9,245	9,107
	e .	Average Annual Allowance	30,203	29,613	28,788	27,959	27,292	26,544	25,900	25,069	24,437	23,785
	Service	,	\$ \$2	39	7.0	91	)5	51	-	11	72	9(
		No. of Recipients	117,625	115,139	113,507	113,291	110,205	108,161	105,711	104,577	104,272	103,506
	Voor	Ended June 30	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007

TABLE OF PENSIONERS AND BENEFICIARIES Fiscal Years 2007 through 2016											
Fiscal Year Ended June 30	New Pensioners	Terminated Pensioners	Net Change	Total Number	Percentage Change						
2016	7,274	2,871	4,403	167,702	2.70						
2015	6,977	4,180	2,797	163,299	1.74						
2014	7,112	3,316	3,796	160,502	2.42						
2013	6,225	4,019	2,206	156,706	1.43						
2012	6,515	3,245	3,270	154,500	2.16						
2011	7,838	3,786	4,052	151,230	2.75						
2010	6,140	3,470	2,670	147,178	1.85						
2009	4,952	2,785	2,167	144,508	1.52						
2008	5,444	3,812	1,632	142,341	1.16						
2007	5,802	3,569	2,233	140,709	1.61						

		<b>TABLE OF ACT Fiscal Years 200</b>		RS	
Fiscal Year Ended June 30	New Entrants	Withdrawals	Net Change	Total Membership	Percentage Change
2016	12,857	10,365	2,492	237,712	1.06
2015	13,001	10,028	2,973	235,220	1.28
2014	11,334	9,416	1,918	232,247	0.83
2013	8,118	12,016	(3,898)	230,329	(1.66)
2012	19,791	10,774	9,017	234,227	4.00
2011	9,332	16,542	(7,210)	225,210	(3.10)
2010	9,509	9,181	328	232,420	0.14
2009	11,454	9,793	1,661	232,092	0.72
2008	14,180	13,876	304	230,431	0.13
2007	13,743	15,950	(2,207)	230,127	(0.95)

			F RECIPIENT ears 2007 throug			
Fiscal Year Ended June 30	COVSF	HPOVSF	HPSOVSF	TPOVSF	TPSOVSF	Total
2016	7,0642	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
2011	-	195	250	361	273	1,079
2010	-	200	253	368	276	1,097
2009	-	206	256	374	279	1,115
2008	-	214	258	380	281	1,133
2007	-	216	265	384	283	1,148

# 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

<sup>2)</sup> 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.



# **MAIL**

30-30 47th Ave., 10th Floor Long Island City, NY 11101

# **VISIT**

Customer Service Center: 340 Jay Street, Mezzanine Level

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