

New York City Police Pension Fund  
A Pension Trust Fund of the City of New York  
Comprehensive Annual Financial Report

*for the fiscal years ended*  
June 30, 2020 and June 30, 2019

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# NEW YORK CITY POLICE PENSION FUND

A Pension Trust Fund of the City of New York



## COMPREHENSIVE ANNUAL FINANCIAL REPORT

for the fiscal years ended

June 30, 2020, and June 30, 2019

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# NEW YORK CITY POLICE PENSION FUND

A Pension Trust Fund of the City of New York  
Comprehensive Annual Financial Report



**Introductory Section  
Part I**

*fiscal year ended  
June 30, 2020*

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Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

**New York City  
Police Pension Fund  
New York**

For its Comprehensive Annual  
Financial Report  
For the Fiscal Year Ended

June 30, 2019

*Christopher P. Morill*

Executive Director/CEO

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## New York City Police Pension Fund

233 Broadway  
New York, NY 10279  
(212) 693-5100

Kevin Holloran  
Executive Director

December 16th, 2020

Board of Trustees  
New York City Police Pension Fund  
233 Broadway, 25th Floor  
New York, New York 10279

Dear Members of the Board of Trustees,

I am pleased to present the Comprehensive Annual Financial Report ("CAFR") of the New York City Police Pension Funds ("the Plan" or "Fund"); a pension trust fund of the City of New York, for the fiscal year ended June 30, 2020. Responsibility for accuracy of the data, the completeness and fairness of the presentation, including all disclosures, rests with the management of the Plan. To the best of the Plan's knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of the operations of the Plan. All disclosures necessary to enable the reader to gain an understanding of the financial activities of the Plan are included.

Management's Discussion and Analysis (MD&A) immediately follows the Independent Auditors' Report and provides a narrative introduction, overview, and analysis of the basic financial statements. MD&A complements this letter of transmittal and should be read in conjunction with it.

### Background of the Funds

The Plan was incorporated on March 1, 1940 and commenced business on March 29, 1940. This incorporation succeeded the Police Pension Fund Article 1, established for uniformed members of the New York City Police Department prior to 1940. By legislation enacted in 1995, Article 1 was merged into the Plan.

The Fund received corpus funding in 2001 to improve service to our active and retired members. Corpus funding has enabled the Fund to establish a new headquarters and initiate major upgrades to its computer infrastructure and capabilities. Over the past twenty years, many Information Technology enhancements have been implemented.

The Plan is governed by a Board of Trustees consisting of twelve members. Voting rights are as follows: The Police Commissioner, a representative of the Mayor, the Comptroller and the Commissioner of Finance all have one and one-half votes each, four specified officers of the Patrolmen's Benevolent Association have one vote each and the president of the Detectives' Endowment Association, the Sergeants Benevolent Association, the Lieutenants Benevolent Association and the Captains Endowment Association, have one-half vote each. Board

meetings are held every month with special meetings called by the Chairman or requested by a quorum of members whose combined votes are at least seven.

### Major Initiatives

The latest accomplishment in FY2020 was the first rollout of the multi-year project to upgrade our operational software system (COPS 2.0) went live. The new software is helping us provide better customer service to our members and is giving our members the ability to access and manage different aspects of their pension via their own internet portal. Rollout 2 - Validation 2 was modified and prepared to be executed during late summer. Project methodology has also been updated based on lessons learned from R1 and VAL2 and feedback.

### Financial and Budgetary Controls

The management of the Fund is responsible for establishing and maintaining an internal control structure, designed to ensure that the assets are protected from loss, theft, or misuse and that preparation of financial statements conforms to Generally Accepted Accounting Principles (GAAP). The cost of a control should not exceed the benefits derived and therefore the objective is to provide reasonable, rather than absolute assurance, that the assets of the Fund are safeguarded and the financial statements are free from any material misstatements. The Fund also maintains budgetary controls. An annual examination of internal controls is performed in accordance with the City Comptroller's Directive # 1 and the latest evaluation on record did not disclose any material weakness. Also, the Audit Committee of the City of New York, which includes experts in Accounting and Municipal Finance from the private sector, oversees the independent audit process. The financial statements for Fiscal Year 2020 was audited in accordance with generally accepted auditing standards and the Fund received an unmodified opinion from external auditor's Grant Thornton, LLP. A copy of the report is presented separately in this CAFR.

The primary financial objective of the Fund is to ensure that member contributions, employer contributions and income from investments support benefit payment obligations. A review of the Qualified Pension Fund ("QPP") assets gives an indication of the current fiscal health and the income potential from investments. It also gives participants reasonable assurance that benefits will continue into the future. According to the Governmental Accounting Standards Board Statements (GASS) Nos. 67 and 68, Schedule of Changes in Net Pension Liability prepared by the Office of the Actuary, Plan Fiduciary Net Position as a Percentage of Total Pension Liability was 81.1% 82.2% as of June 30, 2020 and 2019, respectively.

### Investments

Investment policy is subject to approval of the Board of Trustees and is designed to minimize risks while maintaining a competitive yield. The policy uses a strategic implementation of assets, diversified in a broad array of instruments to limit concentration risks. The operations of the Fund are governed by the Administrative Code of the City of New York and the State Retirement and Social Security Laws. The Comptroller of the City of New York acts as an Investment Advisor to the fund. In addition, several independent investment consultants are employed as investment advisors. The Fund also uses a number of investment managers to

administer long-term debt and equity portfolios. Investment managers are regularly reviewed against performance and adherence to guidelines. There are four main factors influencing the philosophy of the Board of Trustees: Risk-Tolerance, Returns, Diversification, and Liquidity. As of June 30, 2020, the policy mix for the Fund Portfolio Asset Allocation consisted of the following categories; Domestic Equity 31.7%, NYC Core U.S. Fixed 15.4%, International Equities 8.9%, Emerging Markets 6.5%, Private Real Estate and Equities 8.1%, Hedge Funds 7.1% and others 22.3%. With \$46.3 billion under investment management, the June 30, 2020 Total Portfolio Return was 4.7%. Financial information regarding investment activities, policies, safeguards, strategies and yield information of the Fund, accompanied by various charts, schedules and a consolidated performance report, is contained in the CAFR Investment section.

#### Professional Services

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 pages 139 through 150. A listing of brokerage firms and the amounts paid to each firm in the Investment section of the CAFR in the schedule of Broker's Commissions and Fees on Pages 184 through 188. Actuarial services are provided to the Plan by the Chief Actuary of the City of New York, who is appointed by the Board of Trustees. The City's Corporation Counsel provides legal services to the Plan.

#### Financial Highlights

The combined financial statements of the Fund for Fiscal Year 2020 show total net position restricted for benefits increased by \$1.3 billion to \$46.3 billion, or 2.8% over the prior fiscal year. In Fiscal Year 2019 the increase was \$2.4 billion or 5.6% to \$44.9 billion, compared to Fiscal Year 2018. The \$46.3 billion reported in the combined statements, includes net restricted amounts held for benefits under: the New York City Police Qualified Pension Fund ("QPP"), the Police Superior Officers' Variable Supplements Fund ("PSOVSF") and the Police Officers' Variable Supplements Fund ("POVSF") for \$41.3 billion, \$3.1 billion and \$1.9 billion, respectively.

Selected accounts from the combined financial statements for the past two fiscal years are shown below, along with percentage changes for balances reported (in thousands) as of the fiscal year end:

Description	FY 2020	FY 2019	(%) Change
Member Contributions	\$280,129	\$278,087	.73
Employer Contributions	2,458,907	2,558,256	(3.9)
Interest Income	522,881	588,190	(11.1)
Dividend Income	566,323	559,467	1.23
Net Investment Income	2,038,305	2,861,543	(28.8)
Benefits Paid & Withdrawals	3,491,495	3,282,070	6.4

## Economic Conditions

The real gross domestic product (GDP) increased at an annual rate of 33.1% according to the Bureau of Economic Analysis (BEA) on November 25, 2020. This surge was a big change from a decrease of 31.4% at the end of FY 2020.

On March 12, 2020, the Governor declared a state of emergency in New York City due to the outbreak of COVID-19, a national pandemic according to the World Health Organization. This order is still in effect and the future impact on the economy remains uncertain as the virus re-emerges and renewed lockdowns are enforced in the U.S. and Europe.

By December 2020, major focus has turned to how this pandemic will impact trade and the supply chain. U.S. exports and imports both rose 2.2% and 2.1% from the previous month respectively. This reflects a recovery in global commerce driven by strong economic rebound in China. The trade deficit increased 47% from last year, widening to \$63.1 billion.

According to the New York City Comptroller, in lower-wage industries such as hospitality, New York City employment declined by 44.7% between February and October 2020 as compared to job losses in higher-wage industries such as finance, where October employment only decreased 4.9% from February 2020. Additionally, in October 2020 private employment in New York City remained 14.2% below pre-pandemic levels.

## Acknowledgements/Other

The compilation of this CAFR reflects the efforts of the management and staff of the New York City Police Pension Fund. I thank them for their assistance in this endeavor. I also thank the Office of the Actuary, the Office of the Comptroller and the investment advisors of the Plan for the data and other information provided during the preparation of this report. This CAFR is intended to provide sufficient and reliable information that serves as a basis for management decision making; in determining compliance with legal requirements; and as a means of indicating stewardship of the assets of the Plan. I am confident that this goal was achieved.

Very Truly Yours,



Kevin Holloran  
Executive Director

**New York City Police Pension Fund**  
**A Pension Trust Fund of the City of New York**  
**Comprehensive Annual Financial Report**  
**For the Fiscal Year Ended June 30, 2020**

**Prepared by:**

Accounting and Legal Divisions under the direction of Kevin Holloran,  
Executive Director, New York City Police Pension Fund

**Actuary:**

Sherry S. Chan, Chief Actuary

**Custodian of Funds:**

Scott M. Stringer, Comptroller of the City of New York

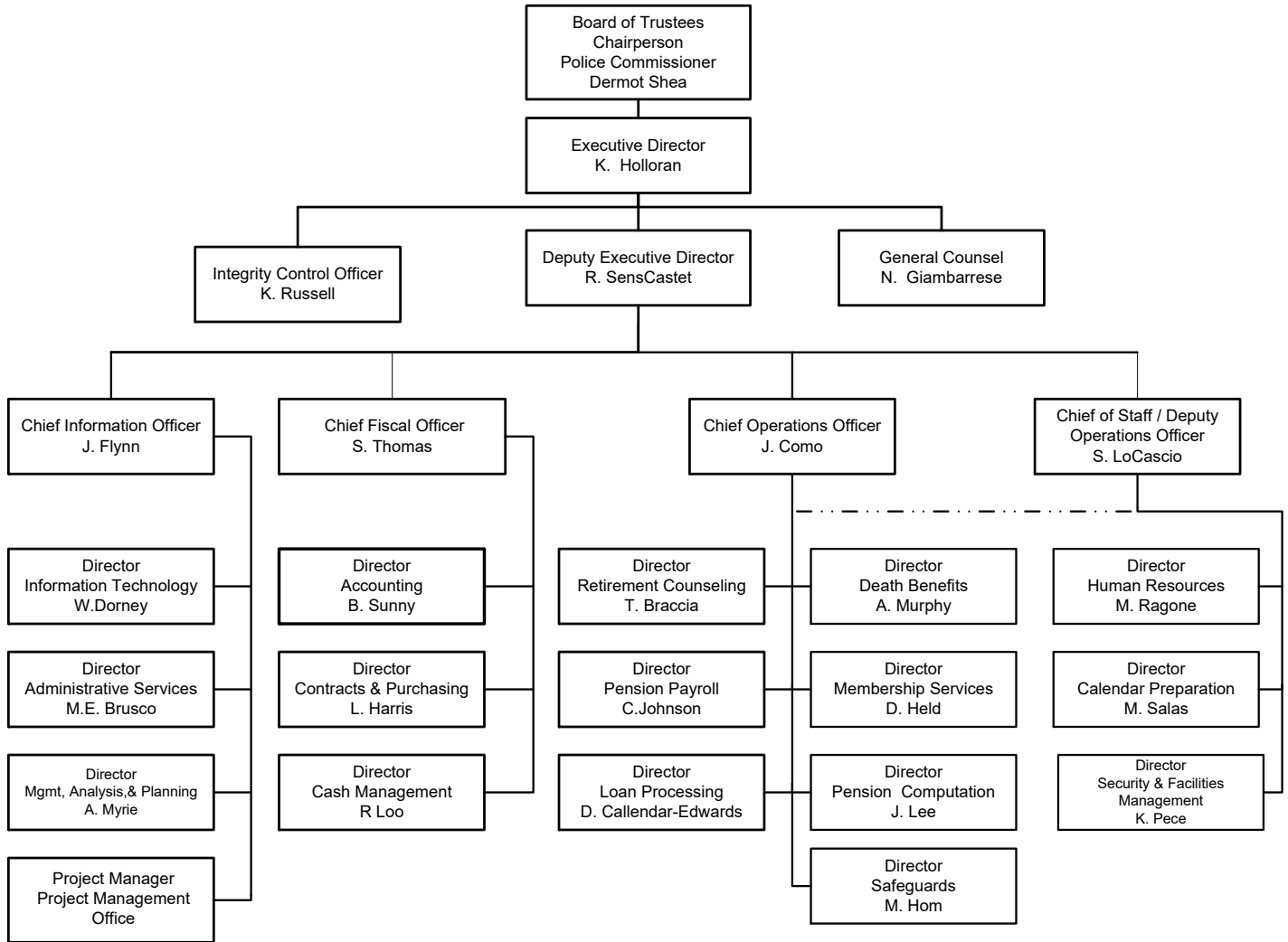
**Headquarters Address:**

233 Broadway, 25<sup>th</sup> Floor  
New York, New York 10279

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Dermot Shea, Police Commissioner  
Jacques Jiha, Commissioner of Finance  
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# NYC POLICE PENSION FUND





# **New York City**

## **Police Pension Fund**

*A Pension Trust Fund of the City of New York*

*Comprehensive Annual Financial Report*



## **Summary Plan Descriptions**

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# **SUMMARY PLAN DESCRIPTION**

New York City Police Pension Fund  
Tier 2 Members

# New York City Police Pension Fund

## Board of Trustees

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**Robert Sens-Castet**

Deputy Executive Director



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## Introduction

This booklet is called the Tier 2 Summary Plan Description (SPD). It is published by the New York City Police Pension Fund (NYCPPF, PPF, Fund), and is intended to summarize all of the provisions relating to the retirement plan, programs and other benefits offered to members employed by the New York City Police Department (NYPD), whose membership date is between July 1, 1973 and June 30, 2009. Laws affecting the plan can be enacted in any given year, which may result in inaccuracies within this SPD. In the event of a conflict between the contents of this booklet and any applicable law and/or rules, including, but not limited to, the Administrative Code of the City of New York (NYCAC), the New York State Retirement and Social Security Law (RSSL), and the Rules of NYCPPF, the applicable Law or Rule will govern.

### *About PPF*

In 2001, legislation provided Corpus Funding for the Pension Fund to begin operations in September, 2002 at its new location at 233 Broadway in New York City. The PPF is governed by the Board of Trustees. The Comptroller of the City of New York is Custodian of the funds of the System, and by delegation of the Board of Trustees, has the power to invest those funds. The Executive Director is the chief administrative officer of the agency. The Chief Actuary for the City of New York provides actuarial services to the PPF. The Office of Corporation Counsel provides legal services to the Fund.

NYCPPF is a defined benefit plan. PPF manages the Fund's invested assets and pays out benefits according to formulas set forth in New York State and New York City laws. In general, Tier 2 members are governed by Title 13 of the NYCAC, the Rules of the Fund and certain other applicable statutes.

## How to Contact PPF

At PPF, protecting and securing the privacy of member data is a top priority. That is why before taking action on private and confidential pension matters, a personal visit to our office, a written and signed (in some cases notarized) communication, or a judicial subpoena is required. PPF staff does not respond to telephone or e-mail inquiries relating to private member information because the identity of the caller or e-mail writer cannot be confirmed.

To communicate with PPF by fax, members are advised to identify a specific staff member in advance and to send the fax directly to the staff member using the fax number specified. Always retain copies of the fax and fax receipt.





For answers to questions of a **general** nature concerning retirement and pensions, please call PPF at (212) 693-5100; or visit the Pension Fund at 233 Broadway, 19th Floor, New York, New York 10279.

The Fund will respond promptly and completely to pension questions. PPF's ongoing mission is to provide excellent service to every member.

## Serving the Finest Online



Members can also find the answers to many questions quickly and conveniently by visiting the PPF website: [www.nyc.gov/nycppf](http://www.nyc.gov/nycppf). A host of information can be found there regarding benefits, recent pension legislation, and frequently asked questions.

In the Forms and Publications area, forms may be downloaded for most changes members wish to make, such as beneficiary, guardian, and buyback applications for active members and retiree forms for change of address, direct deposit and Municipal Credit Union deduction actions, among others.



Members can also ask general questions by emailing the Fund directly at [policepensioninquiries@nycppf.org](mailto:policepensioninquiries@nycppf.org). The Fund cannot answer member specific questions regarding financial information or provide legal or tax advice.



The Fund is also now on Facebook! Members, their beneficiaries, and fans of the Fund can “like” us on Facebook at [www.facebook.com/nycppf](http://www.facebook.com/nycppf).

In person and online, PPF is proud to be serving the FINEST.

## Membership

Uniformed members of the New York City Police Department with membership dates between July 1, 1973 and June 30, 2009 are considered Tier 2 members. Contributions to the Fund are made while employed with the NYPD in accordance with the “Contributions” section.

Membership in the Fund ceases upon withdrawal of contributions.

### Credited Service

Credited service is classified as Allowable Police Service or other credited service. Members may buy back any missing service under Chapter 552, as described below.

## Allowable Police Service

Twenty years of Allowable Police Service are required for Service Retirement. Allowable Police Service includes:

- ✓ All service rendered as a uniformed member of the NYC Police Department.
- ✓ Credit for service rendered as a uniformed member of the NYC Fire Department.
- ✓ Credit for service rendered while a member of the New York City Employees' Retirement System uniformed force service immediately preceding appointment as a uniformed member of the New York City Police Department. Such uniformed service includes: service in the Housing Police Department, Transit Police Department, Department of Correction, Sanitation Department, and as an Emergency Medical Technician (EMT).
- ✓ Credit for uniformed service rendered while a member of the New York State Employees' Retirement System or New York State Police and Fire Retirement System.
- ✓ Credit for service as a Peace Officer in accordance with New York State Criminal Procedure Law §2.10
- ✓ Service in the United States Military
  - Members may be entitled to receive up to five years of credited service for military service. To be eligible, the member must have been a member of a city retirement system upon entering military service and immediately returned to city service upon discharge. Upon request, the Police Pension Fund will provide members with information about other circumstances that may be eligible for military service credit.
  - Under RSSL §1000, members may purchase up to three (3) years of certain wartime military service performed prior to appointment.
  - Under Chapter 606 of the Laws of 2000, members may purchase up to four years of combined military service and service as a police officer in a foreign country for the United States Government.
- ✓ Up to one year for each authorized Child Care Leave purchased pursuant to Chapter 594 of the Laws of 2000.

## Other Credited Service

Other credited service is any service other than Allowable Police Service. This service counts as additional service credit beyond the required twenty years and will provide an additional monetary benefit.

Other credited service includes membership service rendered while a member in a non-uniformed position. In addition, uniformed service credit that does not immediately precede

uniformed service in the New York City Police Department is considered to be Other Credited Service.

Please note buybacks and transfers must be completed within prescribed time limits. For further information please contact Membership Services at (212) 693-5850.

### **Retroactive Military Seniority (RMS)**

Retroactive Military Seniority (RMS) is awarded to a member after being appointed to the NYPD from a special list, retroactive to the date the member would have been appointed had the member not been serving in the military. Members who receive RMS from the Department of Citywide Administrative Services (DCAS) receive pension credit retroactive to the date awarded by DCAS.

Upon receipt of a letter from DCAS stating the member has RMS, the member is immediately entitled to the same rights, privileges and obligations as if he had served continuously in such position from the date of his appointment. A member's membership date will be adjusted to reflect the RMS Date (RMSD) found in the letter from DCAS; the member's tier and contribution rate are also adjusted accordingly. Members with RMS must, however, make pension contributions that were missed during the period between the RMSD and appointment to the NYPD. Contributions must be completed within the repayment period prescribed by law; the maximum repayment period is the time from the RMSD to the NYPD appointment multiplied by 3, up to a maximum of 5 years. Once contributions are completed within the repayment period, the Pension Fund is required to credit the member's contribution account with the interest that would have credited during this period.

Tier 2 members may elect to not make their contributions, forgoing the interest the Fund would have paid, thereby creating a shortage in their contribution account. If a shortage exists in the contribution account at the time of retirement, the pension will be offset by an actuarial equivalent to the shortage. Payments must be completed by the end of the repayment period, which is calculated as time from the RMSD to the NYPD appointment multiplied by 3, up to a maximum of 5 years.

Members may also elect to make voluntary contributions, i.e., the ITHP Waiver, and/or 50% Additional Contributions, as if they were made during the RMS period. The Fund is responsible for interest on such voluntary contributions. Members who make this election must elect to participate in one or both programs for the entire RMS period.

Please note a member cannot receive RMS and credit for the same military service through a buyback. Members who have already completed a military buyback for time covering the RMS period, will receive a refund for the buyback or the Fund will credit the money toward the RMS payment.

Inquiries regarding eligibility for RMS pension credit should be submitted in writing to the Police Pension Fund, attention Membership Services, 233 Broadway, 19th Floor, New York,

New York 10279. General questions may be directed to the Membership Services division at (212) 693-6860.

### **Prior Transit and Housing Service**

Former Transit and Housing Police Officers who became members of the Police Pension Fund Article II due to the 1995 merger, or a rollover, maintain their eligibility based on their original dates of membership in NYCERS. Members should contact Membership Services at (212) 693-5850 to verify membership dates with NYCERS versus their appointment dates.

### **Transfer of Service**

Members with a previous membership in New York City or State public retirement system may be eligible to transfer their prior service to PPF. Members transferring uniformed Police or Fire time, Peace Officer status or EMT time will be granted allowable police service provided the application for such credited service was made within prescribed time limits and such credited service was properly transferred to PPF.

Members should discuss potential transfers with PPF, as well as a representative from the former retirement system to determine eligibility.

**Prior State of New York service may be transferred to PPF for up to seven years** from the termination of state service, after which point the member must purchase the time to obtain service credit or a pension benefit, as permitted by law. All properly transferred state time is uniformed time. Please note that the New York State Teachers' Retirement System does not allow system-to-system transfers; such prior time must be purchased. Members should initiate the transfer process with PPF Membership Services.

**Prior City of New York service may be transferred to PPF for up to one year** from termination of city service, after which point the member must purchase the time to obtain service credit or a pension benefit, as permitted by law. Members should initiate the transfer process with the former retirement system.

**Under Chapter 498 of the Laws of 2005**, active members who properly transferred City or State time that immediately preceded appointment to the NYPD may count this time as uniformed time, provided it is considered to have peace officer status under New York State Criminal Procedure Law § 2.10 or is service as a NYC Emergency Medical Technician (EMT). This law is not retroactive, and it will impact a member's contribution rate. Members who wish to have this time count as uniformed time must ask the Police Pension Fund's Membership Services Unit for application assistance. This time, if properly transferred to the New York City Police Pension Fund as an active member, shall be credited as uniformed time.

To receive credit for this time, PPF members must have had a preceding membership in either NYCERS or the Board of Education Retirement System. See Operations Order 13, dated 03/06/2006, found on the Police Pension Fund website.

## **Buyback Information**

There are several statutory provisions that allow for the purchase of prior service. Some of these buybacks merely grant service credit that will provide an additional monetary benefit at retirement, while others may count toward the number of years necessary to reach Service Retirement. However, those that grant such service credit as “allowable” police service, typically must be immediately preceding the NYPD service (including service in the uniformed transit police force, the housing police force, uniformed corrections force or the uniformed force of the Department of Sanitation).

### ***Prior Service, Chapter 646, Laws of 1999***

Chapter 646 allows PPF members with former membership in a New York City or State public retirement system to receive credited service by repaying contributions that system refunded (if any) with interest.

Service purchased pursuant to Chapter 646 can either be non-uniformed service, which increases the pension’s value but does not change the retirement date, or it can be uniformed service, which changes the retirement date. Both types of service change the contribution rate and may cause a shortage due to the rate change.

Former Police Pension Fund members with a lapse in service also can buy back time under Chapter 646. See Operations Order 2-25, c.s. dated 12/11/2002, found on the PPF website.

### ***Military Service, RSSL § 1000***

Chapter 548 of the Laws of 2000 created New York State Retirement and Social Security Law (“RSSL”)§ 1000; this allowed former members of the Armed Forces of the United States during certain periods of conflict or in certain combat areas to buy back their military service as uniformed time.

On May 31, 2016, Chapter 41 of the Laws of 2016 was enacted, amending RSSL §1000 by removing the specified periods of time, medal requirements, and theaters of operation in which military service would have to have been rendered for a pre-membership service purchase. Members need only have been honorably discharged from the military to be eligible to purchase pre-membership service credit pursuant to RSSL §1000. This law is not retroactive and does not permit retired members to purchase service credit.

RSSL §1000 service purchases grant an active member who has five years of credited service, not including the military service being purchased, the eligibility to purchase up to three years of military service for pension credit. The member must be able to produce a DD-214 demonstrating an honorable discharge from any branch of the U.S Armed Forces.

The member must render payment for the service credit as follows: 3% of the member’s compensation earned during the 12 months of credited service immediately preceding the application date multiplied by years of military service claimed

The member must apply and remit payment for service credit before the effective date of retirement. In the event of retirement prior to completing payment for the service credit purchase, the amount of service credited to the member shall be proportional to the total amount paid. If upon death, retirement, or separation, the service purchase does not produce a greater benefit, the cost of the service purchase must be refunded to the member with interest.

### ***Prior Service, Chapter 552, Laws of 2000***

Chapter 552 allows members to buy back previous service while employed by New York City, State or political subdivisions of the State prior to becoming a member of the Police Pension Fund. Service bought back under Ch. 552 can be uniformed or non-uniformed service, but only uniformed service will change the retirement date. The contribution rate under Chapter 552 always is unchanged. See Operations Order 2-24, c.s. dated 12/11/2002, found on the PPF website.

### ***Child Care, Chapter 594, Laws of 2000***

Chapter 594 allows members who were on leave without pay for purposes of authorized child care leave to purchase uniformed credited service. A member must file an application not later than ninety (90) days from the final date of the leave. See Operations Order 11, dated 1/22/01, found on the Police Pension Fund website.

### ***Bosnia Bill, Chapter 606, Laws of 2000***

Chapter 606 permits PPF members to purchase police duty rendered on behalf of the U. S. Government that is located in a foreign country (e.g., Bosnia). When such police service is combined with qualifying military service under Chapter 606, a maximum of four years of service may be purchased. See Operations Order 35, dated 05/21/2001, found on the Police Pension Fund website.

## **Contributions**

Tier 2 members contribute a certain percentage of pensionable earnings. Pensionable earnings consist of: base salary, overtime, night differential, holiday pay, worked vacation, portal to portal and allowable longevity. These contributions, and the interest earned, are deposited in the Annuity Savings Fund (ASF). The contribution rate is a percentage assigned based on the member's age at appointment. This contribution rate when multiplied by a member's pensionable earnings and the applicable interest rate creates the required amount. For instance, the required amount is the amount that needs to be in a member's ASF at retirement for the member to be entitled to full pension benefits.

## Essential Contributions

The member and the City of New York each contribute a portion of the contribution rate. This arrangement increases member take-home pay (ITHP) because the City relieves the member from paying the full required contribution rate. Currently, the City assumes 5% of member contributions, effectively reducing the required contribution rate by 5%. The member is responsible for contributing the remaining percentage, which is deducted each pay period.

Member contributions and the interest they earn are known as accumulated contributions. The Tier 2 rate of interest is currently 8.25%. A member's accumulated contributions must equal the required amount to be eligible for a full Service Retirement pension benefit.

Per IRS Code § 414(h), member contributions made on or after December 1, 1989, are not subject to federal taxation, but are subject to state and local income taxes. Member contributions made before December 1, 1989 are subject to federal, state and local taxation. ASF interest earned is federally taxable, regardless of when it was earned.

## Contribution Rates

This chart shows current rates by age at appointment and how the three contribution rate types relate to one another:

Age at Appointment	Required Rate	=	City/ITHP Rate	+	Member Rate
17	8.55%		5.00%		3.55%
18	8.40%		5.00%		3.40%
19	8.20%		5.00%		3.20%
20	8.05%		5.00%		3.05%
21	7.85%		5.00%		2.85%
22	7.65%		5.00%		2.65%
23	7.50%		5.00%		2.50%
24	7.30%		5.00%		2.30%
25	7.15%		5.00%		2.15%
26	6.95%		5.00%		1.95%
27	6.80%		5.00%		1.80%
28	6.65%		5.00%		1.65%
29	6.45%		5.00%		1.45%

30	6.30%	5.00%	1.30%
31	6.15%	5.00%	1.15%
32	6.00%	5.00%	1.00%
33	5.85%	5.00%	0.85%
34	5.65%	5.00%	0.65%
35	5.50%	5.00%	0.50%
36	5.35%	5.00%	0.35%
37	5.20%	5.00%	0.20%
38	5.05%	5.00%	0.05%
39	4.90%	5.00%	0.00%
40	4.75%	5.00%	0.00%

## Voluntary Employee Contributions

### *Waive ITHP*

To increase pension contributions a member may waive ITHP. By waiving ITHP, the member agrees to contribute 100% of the contribution rate; contributions assumed by the City still remain in effect when a member waives ITHP. *For example*, a member with a required rate of 7.5% who waives ITHP will have 12.5% contributed to his pension: 7.5% by the member and 5% by the City.

### *50% Additional*

Members may make additional contributions equal to 50% of the required rate by participating in 50% Additional. Contributions made in the 50% Additional program are after-tax funds; accordingly, these contributions may be withdrawn tax-free at retirement.

## Stop or Reinstate Member Contributions

If necessary, a member may also stop contributing the member portion. Even if a member stops making pension contributions, the City will continue making the ITHP contribution. **It is important to note that stopping member contributions will create a shortage in the ASF account; if that shortage is not repaid it will result in a lower pension upon retirement.** See the “Shortages” section for further information.



Members may only stop member contributions until earnings for the year reach the level upon which FICA (Social Security) taxes are no longer imposed. If and when a member's earnings reach that level, member contributions are automatically reinstated.

A member may reinstate member contributions at any time.

Example: In March, 2012, a member with 17 years of service, decided to stop member contributions. Later that year, when this officer's earnings for the year reached \$110,100, the member contribution was automatically reinstated. (Note: In 2012, \$110,100 was the earnings level above which the FICA tax was no longer imposed.)

## **Member Contributions While on Military Leaves**

Members may take military leaves with or without pay during their career with the NYPD. The settlement in the case of Goodman, et al. v. City of New York, et al., took effect on March 17, 2014. At issue was the calculation of pensionable earnings and member contributions for members on active duty military leaves from the NYPD.

Under the Uniformed Services Employment and Reemployment Rights Act of 1994 ("USERRA") military service members' pensions—as well as employer and employee contributions to pension plans—are required to be computed based on the rate of compensation the employees would have received but for their periods of military service. Pursuant to the Settlement Agreement in the Goodman case, PPF must impute, for purposes of pension calculations, overtime and night-shift differential compensation that members would have earned had they not taken military leaves during their careers with the NYPD. Active Military Service is defined as "active duty, active duty for training, initial active duty for training, inactive duty for training, full-time National Guard duty, a period for which a person is absent from a position of employment for the purpose of an examination to determine the fitness of the person to perform any such duty, and a period for which a person is absent from employment for the purpose of performing funeral honors duty."

### ***Who is Affected by this Settlement Agreement?***

Any PPF member who completed military leaves after September 11, 2001.

Active PPF members who performed Active Military Service and returned to NYPD service between September 11, 2001 and March 17, 2014 may voluntarily elect to have their pensionable earnings recalculated. Such members may schedule a counseling session with a military advisor by contacting Membership Services at (212) 693-6860 and/or complete PPF Form 86: Recalculation Request, which is available at [www.nyc.gov/nycppf](http://www.nyc.gov/nycppf).

Active PPF members who return to the NYPD from Active Military Service on or after March 18, 2014 must have their pensionable earnings calculated pursuant to the agreement.

### ***What Does the Calculation Entail?***

For each period of time when a member performed active military service after September 11, 2001, PPF will determine how much compensation the member would have earned, but for the

period of military service. For example, the member may ordinarily have earned overtime or night-shift differential compensation, but missed the opportunity to do so because of military obligations. Military service begins on the day a member begins his or her leave from the NYPD for the purposes of military service; this may include use of annual leave and/or compensatory time. The military service is deemed completed on the day before the member returns to the NYPD.

To determine the amount of earnings a member would have earned, PPF will average any additional differential payments and overtime the member earned during the 12 months immediately preceding his or her active military service. PPF will then add the base pay to the imputed earnings to reach the pensionable earnings for the military leave. Members are responsible for making additional pension contributions to the Fund.

### **Excess Contributions/Refund of Excess**

A member with twenty or more years of service and no shortage may make an application for a refund of any excess funds in the member's account. If no refund request is made by the time of retirement, the pension will be increased by the actuarial value of the excess.

A refund of excess is the return of any funds in a member's account above the amount required on the member's 20<sup>th</sup> anniversary. **All taxable distributions are subject to a 20% withholding tax as of January 1, 1993.** The withholding tax is credited toward the payment of the tax on the distribution. **Members under the age of 59 ½ are also subject to a 10% penalty on the distribution;** however, if a member is retiring from the service, the age for the 10% penalty is reduced from 59 ½ to age 50. Members retiring are eligible to roll over a taxable distribution into an IRA, thereby avoiding the 20% withholding and 10% penalties.

A member who requests a refund of excess will receive a 1099 from the Comptroller's Office at the end of the year for the distribution.

### **Refund of Contributions upon Separation From The Fund**

If a member separates from the Fund for reasons other than retirement (resignation, termination, or death) a request for a refund of accumulated contributions plus interest may be made. If contributions are left with the Fund, the money will continue to earn interest for a maximum of five years from the date of separation. After this time, the contributions will no longer accrue interest and will be refunded. If a member has a taxable outstanding loan balance, a Form 1099-R will be generated at the end of the separation year.

For further information on refunds, please refer to the Fund's website ([www.nyc.gov/nycppf](http://www.nyc.gov/nycppf)) or call (212) 693-5100 for assistance.

## Loans

### Overview

To be eligible to take a pension loan, a member must have three years of continuous service. The maximum allowable loan for members with less than ten years, including any outstanding loans, cannot exceed 50% of accumulated contributions, or \$10,000; for members with over ten years of uniformed service, the maximum allowable loan is 90% of accumulated contributions, plus interest.

Qualified members may borrow up to \$50,000 maximum including Pension Fund and Deferred Compensation Plan loans. Amounts in excess of \$50,000 will be considered taxable distributions and are subject to Federal taxes and penalties.

Loans are issued in multiples of \$10.00 with a minimum amount of \$100. Members are limited to holding 10 outstanding loans at one time, and no more than two new loans may be granted during any 12-month period, unless previously paid in full.

Repayments are automatically deducted from salary checks in the amount specified by the member, but in no event less than 2% of the bi-weekly gross check. Payments may not exceed 10% of the bi-weekly gross check without written authorization from the member. Repayment on all loans must occur prior to a member's 63<sup>rd</sup> birthday. Members must appear in person at the Pension Fund if they desire to repay loans prior to termination.

Loans with a repayment schedule of five years (130 payments) or less are treated as separate loans for purposes of repayment, tax liability and tracking. Loans being repaid with a term of five years or more will be combined, resulting in a single repayment on the combined loan. If there is a prior loan outstanding, a new loan will have a separate repayment schedule unless the consolidated loan will be repaid in full by the original repayment date.

### Why Pension Loans Cause Shortages

A pension loan causes a shortage even if the loan is repaid. The interest on a member's ASF account is 8.25%, whereas the interest on a pension loan 4.0%. Accordingly, making regular pension contributions during the loan repayment period, or even fully repaying the loan, does not prevent the shortage from occurring because the loan is repaid at 4.25 percentage points lower than what the borrowed funds would have earned in the account.

When a member's ASF account falls below the required amount there is a shortage in the account. If not repaid, a shortage will reduce the member's pension at retirement.

**The Police Pension Fund recommends that members carefully evaluate whether taking a pension loan is the best option.**

## Loan Repayment and Insurance

Members may repay a loan in full or in part at any time; the minimum partial payment is \$500. Additionally, members may change the loan payment amount during the months of May and November.

If a member dies prior to retirement, loans with a combined balance up to \$25,000 are insured, subject to how long each loan has been outstanding, as follows:

Days Loan Outstanding	Percentage of Loan Insured
Less than 30 days	0%
30-59 days	25%
60-89 days	50%
90 or more days	100%

## Deferred Compensation Plan Loans

The NYC Deferred Compensation Loan Program (DCLP) works in conjunction with Loans taken at the Police Pension Fund.

The maximum DCLP loan is the lesser of:

- 50% of a participant's DCP account balance; or
- \$50,000, reduced by the highest outstanding principal at the Police Pension Fund during the 12-month period ending on the date of the proposed DCLP loan.

Police Pension Fund members seeking a DCP loan must have the Police Pension Fund certify their highest outstanding PPF loan balance during the above period. NYC Deferred Compensation will not issue a loan if the combined PPF/DCP loan balance exceeds the \$50,000 DCLP maximum.

For more information visit [www.nyc.gov/nycppf](http://www.nyc.gov/nycppf) and click the Loan Services link, then click the Deferred Compensation Loans link.

## Loan Taxability

A pension loan will be taxed when the member borrows taxable contributions (i.e., 414(h) contributions made after December 1, 1989) and:

- **For members with 10 years or more of uniformed service:**
  - The cumulative loan principal is greater than \$50,000; or
  - The term of repayment exceeds five years.

➤ **For members with over three years but under 10 years of uniformed service:**

- The loan exceeds the greater of 50% of accumulated deductions or \$10,000; or
- The term of repayment exceeds five years.

The taxable portion of a loan is the portion of the principal consisting of untaxed contributions and associated interest. A member under the age of 59 ½ will incur an additional 10% penalty on the taxable loan amount.

If you borrow previously taxed contributions, the loan is not considered a taxable distribution and is therefore not subject to the maximum five-year repayment term above. Previously taxed contributions include 50% Additional contributions and contributions made before December 1, 1989.

An IRS Form 1099-R is issued if taxable contributions are borrowed. The Fund sends a 1099-R to the address listed on the member’s loan application unless an address change is requested in writing to: The New York City Police Pension Fund, 233 Broadway, New York, NY 10279 (attention: Loan Services Unit).

Example: A member with an outstanding loan of \$34,997 (Loan 1) requests a new loan (Loan 2) of \$15,000 to be repaid in five years with 130 payments of \$127.15. These loans may not be combined. When the member starts to repay Loan 2, there will now be two outstanding loans and the following payments will be made each pay period:

	<b>Payment</b>	<b>Number of Payments</b>	<b>Current Principal</b>
<b>Loan 1</b>	<b>\$135.98</b>	<b>326</b>	<b>\$34,997</b>
<b>Loan 2</b>	<b>\$127.15</b>	<b>130</b>	<b>\$15,000</b>

***Principal Residence Exception***

Internal Revenue Code §72(p)(2)(B)(ii) provides an exception to the five-year rule mentioned in “Loan Taxability” above, if the loan is used to purchase a principal residence. If it can be demonstrated that the loan falls within this exception, the IRS will allow deferral of the tax payable on the loan. PPF is required by law to send an IRS Form 1099-R for this loan.

To establish the right to this exception, the IRS requires documentation of the residence purchase. Documentation examples may include: the HUD-1 Settlement Statement, an Affidavit of Occupancy, the Deed of Trust, Mortgage Terms/Note and the Home Insurance Policy. Members wishing to use this exception should consult a tax professional to ensure the appropriate documentation is provided.

## ***Taxability of the Final Withdrawal***

**A member may elect to withdraw up to 90% of the required amount at retirement.** This is called the final withdrawal (sometimes called the “final loan”). The final withdrawal can consist of both taxable and/or non-taxable funds. The final withdrawal will also create a shortage.

The portion of the final withdrawal made up of taxable contributions is subject to federal tax withholding at 20%. Taxable contributions withdrawn are also subject to a possible 10% tax penalty for members younger than 50.

Any portion of the final withdrawal that is made up of tax-free funds may pass directly to you tax-free. Contributions made before December 1, 1989, lump sum contributions made to pay off a shortage, and/or 50% Additional contributions are all made using post-tax funds; accordingly, these contributions may be withdrawn tax-free at retirement.

Members have the option of choosing a direct rollover for the final withdrawal. By choosing a direct rollover, the Fund will make the payment of a final withdrawal directly to the IRA or employer’s plan selected by the member. Part of the payment can be made to an IRA or employer’s plan with the remainder paid directly to the member.

Members also have the option of receiving the entire payment directly; however, if any taxable money is paid directly to the member, the Fund will withhold 20% of the taxable amount as federal withholding taxes. Members may want to consult a professional tax adviser to assist in making this decision. Questions regarding direct rollovers may be directed to the Pension Fund’s Retirement Counseling Unit at (212) 693-5733.

At retirement, the Police Pension Fund provides every retiree with the tax-free/taxable breakdown of their ASF contributions as well as the tax-free/taxable composition of the final withdrawal and any outstanding pension loans, as applicable.

## **Pension Shortages**

### **Shortage Causes**

A shortage occurs whenever a member’s ASF balance falls below its required amount. If a member’s ASF balance is higher than the required amount, the ASF has an excess. There are four possible causes of a shortage in your ASF:

#### **1. Pension loan**

This creates a shortage because loans are repaid at 4% interest, whereas the ASF earns 8.25% interest. Accordingly, the ASF does not earn the additional 4.25% the loan principal would have earned had it stayed in the member’s account (8.25% minus 4% = 4.25%). The lost interest creates a shortage, even if the member repays the loan before retirement and continues to make pension contributions.

## 2. Insufficient member contributions

A shortage may be created anytime a member stops pension contributions. Some members choose to stop making pension contributions and contribute to the NYC Deferred Compensation Plan; by doing so, the member may have a pension shortage at retirement.

## 3. Service transfers and most buybacks

With service transfers and most service buybacks, the required rate must be adjusted to the rate corresponding to the member's age at the start of the service transferred or purchased, creating a shortage. PPF will inform members of any change in the required amount.

Example: A member appointed on January 9, 1996 at age 24 (7.30% required rate) purchased three years of uniformed service (January 1, 1991 to December 31, 1993), which changes the membership date to January 1, 1991. As the member was 19 years old on January 1, 1991, the new required contribution rate becomes 8.20%. Because the member was contributing at a lower rate before the buyback occurred, the member now has a shortage.

## 4. Contract settlement

Receiving back pay from a contract settlement can also create a shortage. At the time a member receives back pay, member contributions are deposited into the ASF account. However, the ASF account did not earn the interest on these contributions while the contract was being settled. Since interest earned on contributions is part of a member's required amount, a shortage may occur.

## Effects of a Shortage

If a member has a shortage that has not been repaid prior to retirement, the pension will be reduced by the actuarial value of the shortage. When a member has a pension shortage, the member is given the opportunity to pay back the shortage before retirement. Shortages may be caused in any number of ways, as described above.

Example: A 45-year-old member retires for Service with a \$50,000 shortage. To create the actuarial value of this shortage, it is multiplied by the age-driven actuarial factor (per thousand dollars of shortage) of \$81.78, resulting in a pension reduction of \$4,088 per year.

## Reducing a Shortage

Members can reduce or eliminate a shortage in any of the following ways:

### 1. Waive ITHP

By waiving ITHP, the member agrees to contribute 100% of the required rate; contributions assumed by the City still remain in effect when a member waives ITHP.

City ITHP does not appear on your pay stub, but City ITHP plays a major role in funding your pension. Waiving ITHP can help decrease a shortage and may even result in an account excess.

2. **Choose 50% Additional**

Choosing 50% Additional has similar benefits to waiving ITHP, but 50% Additional contributions are made from after-tax income rather than pre-tax income. Reducing a shortage by choosing 50% Additional may result in ASF funds that can be withdrawn tax-free at retirement.

3. **Lump Sum Contribution**

A member may also eliminate a shortage by making a lump sum payment. The Fund will only accept a lump sum payment of \$500 or more. This may be done at any time either in person or by mail. The member must request a shortage evaluation at the time of the payment and submit a personal check to the Membership Services Unit payable to the New York City Police Pension Fund. This payment is then credited to the member's ASF account. **Note:** Members may only make lump sum contributions if a shortage exists in the ASF account.

## Effect of the Final Withdrawal

At retirement, a member may take a final withdrawal (sometimes called a "final loan"). Members may withdraw up to 90% of their required amount, as well as some or all of their excess, if applicable. Taking a final withdrawal has the same effect as creating a shortage; therefore the member's pension will be reduced for the life of the pension. Having an outstanding loan balance at the time of retirement may also have the effect of creating a shortage.

## Retirement

Applicants for Service Retirement should call the Retirement Counseling Unit at the Fund at (212) 693-5733 for an appointment three to four weeks before filing for retirement. Filing for retirement must be done in person at least ten days prior to the start of terminal leave and at least 30 days prior to the retirement date. Patrol Guide Procedure 205-42 authorizes that an administrative tour be granted to members appearing at PPF to file for retirement.

Pension checks are mailed to the home address on file with the Fund unless a member requests otherwise. Members may have pension payments directly deposited to any bank upon the submission of an Electronic Funds Transfer (EFT) Form. Change of address forms and EFT forms are available on the Fund's website ([www.nyc.gov/nycppf](http://www.nyc.gov/nycppf)). It is the member's responsibility to keep address information current with the Fund, even after retirement.



## Procedures for all members applying for retirement

### ***Property Receipt—Discontinuance of Service (PD 520-013)***

This form must be completed and signed by the Commanding Officer of the member's permanent command, or an officer at least a rank above the member within the command, and delivered by the member to the PPF's Retirement Counseling Unit. The field, "Next Scheduled Tour After Leaves, Except Terminal Leave" must be filled out on this form. The date in this field is the starting date of terminal leave. All NYPD equipment listed on the Property Receipt (PD-520-013) must be turned in at the member's command. A member appearing at PPF for retirement must be in possession of his shield and identification card.

### ***Firearms***

Members who are New York City residents and wish to obtain a New York City Pistol License must submit a notarized NYPD Handgun License Application (PD-643-041) to be delivered in person to the NYPD License Division, Room 110, 1 Police Plaza (8:30 a.m. to 3:00 p.m., Monday-Friday). The Application should be submitted two weeks prior to the member's scheduled appointment for retirement processing, otherwise the member may be subject to vouchering firearms until the permit is processed.

To obtain the Handgun License Application, visit [www.nyc.gov/nypd](http://www.nyc.gov/nypd), and select "Permits" at the left of the page. Additionally, complete the "Acknowledgement of Person Agreeing to Safeguard Firearms" and, if necessary, "Affidavit of Co-habitant." Questions regarding the Handgun License Application should be directed to the License Division at (646)610-5536. Members who are not New York City residents must provide a copy of the Property Clerk Invoice (PD 521-141) for all firearms listed on the NYPD Force Record Card.

If the member is not returning to work, a copy of the Handgun License Application must be provided to PPF before the retirement process begins. In all other cases, a copy of this form must be provided before terminal leave begins. If terminal leave is waived, PPF requires the form before the retirement date. For questions regarding firearm licenses outside New York City, please contact the relevant county or municipality.

### ***Health Insurance Information***

Members, and in some cases beneficiaries, may be eligible for health benefits from the City of New York. Members appointed on or before December 27, 2001 need at least five years of credited service; members appointed on or after December 28, 2001 need at least ten years of credited service. Please note members who retire on an Accidental Disability Retirement are eligible for health benefits immediately; members who retire on an Ordinary Disability Retirement need at least five years of credited service to be eligible for health benefits.

Health benefits are only available to a person actually collecting a pension. For example, a member who vests with 10 years of service and does not collect a retirement allowance until what would have been the member's 20<sup>th</sup> anniversary is not eligible for health benefits until the Fund begins to disburse the retirement allowance. Members should contact Employee Health Benefits at the NYC Office of Labor Relations at 40 Rector Street, New York, NY 10006 or (212) 306-7390 for further information regarding health benefits.

For health insurance purposes, the following information must be provided when a member appears at the Fund to retire:

- ✓ GHI, HIP or other health plan card;
- ✓ Spouse's date of birth and Social Security Number;
- ✓ Date of marriage;
- ✓ Dates of birth and Social Security Numbers of dependent children;
- ✓ If spouse is employed and has health insurance, bring pertinent information (name of employer, health plan, and policy number).

### ***Counseling Process***

During the counseling process at the PPF, members are advised regarding health insurance, pension options, employment restrictions, withholding tax and other important retirement issues. The member's retirement date will be set, and questions unique to the member's situation will be answered. In addition, estimates for both final pension and pre-finalization pension will be provided.

### ***Estimate of Final Pension***

An applicant for retirement will receive a pension estimate after meeting with a retirement counselor—this is only an estimate. Any additional overtime, night differential and worked vacation earned between the estimated retirement date and the actual retirement date will be included at finalization. Any difference in monthly average earnings between the retirement processing date and the finalization date will be disbursed as a retroactive payment.

### ***Terminal Leave***

Members are entitled to take all accrued time and terminal leave after the last day on active duty. All accrued time must be used prior to the start of terminal leave. During terminal leave, members remain on the active payroll. Terminal leave will not be granted if a member has charges pending with the Police Department.

### ***Application Withdrawal***

A member being processed for Vested or Service Retirement may withdraw the retirement application while it is still pending by appearing at the Fund in person at least one business day prior to the scheduled retirement date. Any terminal or annual leave used prior to

withdrawal of the retirement application may not be restored; however, unused terminal leave may be used toward a future retirement. A member must work 30 days after withdrawing an application for retirement to be eligible for annual leave in the next calendar year.

## Final Average Salary

- **Members appointed before July 1, 2000**—Final average salary is the greater of pensionable earnings in one of the following periods:
  - Final 12 months immediately preceding the retirement date; or
  - Average of the final 36 months immediately preceding the retirement date; or
  - Average of the best three consecutive calendar years.
- **Members appointed on or after July 1, 2000**—Final average salary is defined as pensionable earnings in the final 12 months of service.

## Pensionable Earnings

Pensionable earnings are made up of salary, overtime, night shift differential, worked vacation and allowable longevity. If the final 12 months immediately preceding the retirement date are used to calculate final average salary, pensionable earnings may not exceed 120% of the previous 12 months' pensionable earnings. If the average of the final 36 months immediately preceding the retirement date or average of the best three consecutive calendar years is used to calculate the final average salary, no single year's pensionable earnings may exceed 120% of the average of the two previous years' pensionable earnings.

A member's uniform allowance, Fair Labor Standards Act (FLSA) payments and excluded longevity are not pensionable earnings. After 20 years of service, longevity is pensionable only at the 5- and 10-year levels. After 25 years of service, full longevity is pensionable.

## Vested Retirement

A member "vests" after five years of uniformed service and becomes eligible for pension benefits. The member may apply for Vested Retirement at any point between "vesting" and eligibility for Service Retirement. The application for Vested Retirement must be filed at the Police Pension Fund at least 30 days before discontinuance of active police service.

A Vested Retirement Pension starts on the earliest date the member would have been able to retire for Service. Vested retirees are not entitled to terminal leave before separation from service, Variable Supplements Fund payments or the Reserve for Increased Take-Home Pay.

Note: New York State service may not be counted for vesting purposes until after the completion of five years of New York City uniformed service.

**A Vested Retirement pension benefit is as follows:**

1/40 x final average salary x years of uniformed service

plus

75% x 1/60th x last five-year average earnings  
x years (to the day) of all prior non-uniform service

plus

Annuity value of ASF in excess of the required amount

less

Annuity value of ASF balance shortage

*A member decides to vest at age 36 with 10 years of uniformed service, a final average salary of \$46,705 (which excludes longevity of \$4,745), final 12-month earnings of \$51,450 and five-year average earnings of \$49,800. The member also has a shortage of \$54,000 and two years of non-uniform prior city service. The Vested benefit is calculated as follows:*

$$1/40 \times \$46,705 \times 10.0 = \$11,676$$

plus

$$75\% \times 1/60 \times \$49,800 \times 2.0 = \$1,245$$

less

$$\text{Annuity value of } \$54,000 = (\$4,460)$$

**Annual Vested Retirement Pension = \$8,461**

**Health benefits note:** Health benefits stop on the vested separation date, but vested retirees become eligible to receive health benefits beginning on their 20th anniversary. However, the credited service required in order to receive health benefits varies by appointment date.

## **Service Retirement**

Members are eligible for Service Retirement upon completion of 20 years of Allowable Police Service. The application for Service Retirement must be filed at the Police Pension Fund at least 30 days before discontinuance of active police service.

**A Service Retirement pension benefit is as follows:**

50% of final average salary  
plus  
1/60<sup>th</sup> of total earnings after the 20<sup>th</sup> anniversary  
plus  
75% x 1/60<sup>th</sup> x average earnings for the last five years x  
number of years (to the day) of all prior non-uniform service  
plus  
Annuity value of City ITHP contributions after the 20<sup>th</sup> anniversary  
plus  
Annuity value of ASF in excess of the required amount  
less  
Annuity value of ASF shortage

*A member elects to retire at age 44 with 23 years of uniformed service, a final average salary of \$63,288, \$141,233 in total earnings after the 20th anniversary and average earnings of \$50,379 over the last five years. The member also has a shortage of \$69,120 and two years of non-uniform prior service. The Service benefit is calculated as follows:*

$$50\% \times \$63,288 = \$31,644$$

*plus*

$$1/60 \times \$141,223 = \$2,354$$

*plus*

$$75\% \times 1/60 \times \$50,379 \times 2.0 = \$1,260$$

*plus*

$$\text{Annuity value of City ITHP contributions} = \$235$$

*less*

$$\text{Annuity value of } \$69,120 = (\$5,600)$$

**Annual Service Retirement Pension = \$29,893**

## Termination

Pursuant to Chapter 514 of the Laws of 2011, if a member is dismissed from the NYPD, for any reason other than a felony conviction, and the member has at least 20 years of Allowable Police Service, the member will be deemed to have retired as of the date of his dismissal and will suffer no loss of rights or benefits from the PPF. If a member is convicted of a felony, the member may forfeit any right to a retirement benefit. This law applies only to members who are terminated after September 23, 2011.

## Variable Supplements Fund

Members who **retire for Service** on or after October 1, 1968 are eligible to receive an annual statutorily defined Variable Supplements Fund (VSF) payment in addition to regular pension payments. The VSF is prorated based upon the number of full months of retirement. The annual VSF benefit for 2011 and every year thereafter is \$12,000. **Vested members and members who retire for Ordinary or Accident Disability are not eligible for VSF benefits.**

### VSF DROP (Deferred Retirement Option Plan)

In addition to the annual VSF benefit discussed above, members who continue on active duty beyond the 20<sup>th</sup> anniversary, and ultimately retire for Service, may be entitled to the VSF DROP (Deferred Retirement Option Plan), also known as the “Banked Variable.” The VSF DROP was designed to retain experienced members of the NYPD by guaranteeing a lump sum payment upon retirement for each year the member remains in active service beyond the member’s twentieth police anniversary. Accrued VSF DROP funds are eligible for rollover, subject to IRS regulations.

The VSF DROP is not payable to members who die in active service or retire for a disability.

### VSF Payment Schedule

VSF payments and VSF DROP payments will be made or credited on or about December 15<sup>th</sup> of the retirement year. Members who retire in the month of December are not eligible for a prorated VSF for the month; however, if the member is eligible for the VSF DROP, it will not be paid until December of the following year.

## Disability Retirement

An application for Ordinary or Accident Disability may be made by a member who is incapacitated from performing the duties of a police officer.

A disability application may be filed by the member or a legally authorized person acting on the member's behalf; or by a committee or conservator duly appointed by a court of competent jurisdiction; or by the Police Commissioner.

Applications for ODR and ADR are made at the Medical Division, 1 Lefrak City Plaza, 59-17 Junction Boulevard, Corona, New York, 11368. Applicants will be notified of the time to appear before the Medical Board for examination.

After the examination, the Medical Board will report to the NYCPPF Board of Trustees with a recommendation for approval or disapproval of the disability application. After the Board of Trustees meeting, members are informed of the decision and other necessary information.

If a member has 20 years or more of allowable police service, the application for Ordinary Disability Retirement may be withdrawn and the member may retire for Service, provided the Police Pension Fund Board of Trustees has not made a final disability determination. The application withdrawal request must be sent in writing to the Executive Director of the Police Pension Fund. This request also requires the approval of the Chairman of the Police Pension Fund Board of Trustees.

**Note:** Under either Ordinary Disability or Accident Disability Retirement, a member may choose either the Maximum Retirement Allowance or a pension option to provide for a beneficiary upon the death of the member.

### Ordinary Disability Retirement (ODR)

Members are eligible to apply for an Ordinary Disability Pension regardless of age or years of uniformed service. To be granted an Ordinary Disability Retirement, a member must be found to be physically or mentally unable to perform regular job duties by the Medical Board. If the Medical Board finds the member to be disabled, the Police Pension Fund Board of Trustees then makes the final determination for or against Ordinary Disability Retirement.

The ODR benefit is calculated differently depending on a member's length of credited service.

**Member with less than ten years of credited service:**

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

**Member with ten or more years of credited service:**

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

**Member with twenty or more years of credited service:**

Pension equal to (years of all credited service) /40 x final average  
salary  
plus  
An annuity based on ASF balance in excess of required amount  
less  
Annuity value of any shortage

*A member retires on an Ordinary Disability at age 44. The member has 21 years of uniformed service, two years of non-uniformed service, a final average salary of \$63,288 and \$69,120 shortage. The Ordinary Disability benefit is calculated as follows:*

$$23 \text{ (yr.)} / 40 \times \$63,288 = \$36,391$$

*less*

$$\text{Annuity value of } \$69,120 \quad (\$5,917)$$

$$\text{Annual Ordinary Disability Retirement Pension} = \$30,474$$



## Accident Disability Retirement (ADR)

Members are eligible to apply for an Accident Disability Pension regardless of age or years of uniformed service. In order to be granted Accident Disability Retirement, the Medical Board must find the member to be physically or mentally unable to perform police duties as the result of an accident sustained in the line of duty. If the member is found to be disabled in this way, the Police Pension Fund Board of Trustees then makes the final determination regarding ADR. An ADR pension becomes effective after the last day a member is on the active NYPD payroll.

**An ADR pension benefit is as follows:**

75% of final average salary  
plus  
1/60<sup>th</sup> of total earnings after the 20th anniversary  
plus  
Annuity value of ITHP Reserve Account  
plus  
Annuity value of ASF account balance

*A member retires on an Accident Disability at age 44 with 23 years of uniformed service. The member has a final average salary of \$63,288, total earnings after the 20th anniversary of \$141,233 and an ASF balance of \$23,040. The ADR pension is calculated as follows:*

$$75\% \times \$63,288 = \$47,466$$

*plus*

$$1/60 \times \$141,223 = \$2,354$$

*plus*

$$\text{Annuity value of ITHP reserve account} = \$4,854$$

*plus*

$$\text{Annuity value of } \$23,040 = \$1,972$$

*Annual Accident Disability Retirement Pension = \$56,646*

## ***World Trade Center Disability Law***

Active and retired Police Pension Fund members who participated as active member in the World Trade Center rescue, recovery, and clean-up operations may receive an Accident Disability Pension if found to be disabled as a result of such participation. A Notice of Participation must be filed by September 11, 2022 to preserve eligibility applying.

## ***2009 Taxability Change***

Pension benefits are non-taxable for members who retired on ADR before January 1, 2009.

Members who retired on ADR on or after January 1, 2009 are subject to taxation on the following portions of the Accident Disability Pension:

- ✓ The portion of the pension that is attributable to member contributions under IRC § 414 (h) and accumulated interest on all member contributions; and
- ✓ ITHP attributable to years after 20 years of service; and
- ✓ The additional 1/60<sup>th</sup> benefit for years after 20 years of service.

All other pensions (Service, Ordinary Disability and Vested) are subject to the Internal Revenue Code, but are exempt from New York City, New York State and Social Security taxes.

Members are required to ensure that federal income taxes are withheld from their pensions. The tax laws of all states are different and subject to change; when relocating after retirement, the Fund recommends researching the state's tax laws, or consulting a tax professional.

## **Cost of Living Adjustments (COLA)**

A retiree becomes eligible for Cost of Living Adjustments (COLA) at age 62 if retired for at least five years, or at age 55 if retired for at least ten years, and all disability retirees are eligible for COLA after being retired for five years. The COLA amount is calculated at ½ the Federal Consumer Price Index (CPI), with the minimum amount being 1% and the maximum being 3%.

Spouses collecting a benefit under a joint and survivor option may also be eligible to receive COLA; however, the beneficiary receives 50% of the amount that the member/retiree would have received.

The COLA amount is applied to the first \$18,000 of the retirement allowance, or to the full retirement allowance if less than \$18,000. COLA payments to Service retirees are subtracted from their VSF payments until attainment of age 62, after which point the retiree will receive both the full COLA and full VSF payments.

## Pension Options

Through a pension option, a member may elect to receive a smaller retirement allowance while alive in order to provide a benefit for a beneficiary upon the member's death. There are nine options that provide such benefits; a member may elect one at the time of retirement. Each option has a cost, determined by the member's age and the beneficiary's age at the time of the member's retirement. Option selection is generally irrevocable.

To receive the Maximum benefit and yet still provide for a beneficiary, commercial life insurance policies or annuities should be considered.

### Maximum Retirement Allowance

The Maximum Retirement Allowance is the highest pension to which a member is entitled by law. Under the Maximum Retirement Allowance, the pension ceases upon the member's death, and no further pension payments may be made to any survivors.

### Option Two: 100% Joint and Survivor

Upon the member's death, the designated beneficiary receives 100% of the member's total monthly benefit for the rest of his or her life. Only one beneficiary may be named and may not be changed. If the beneficiary predeceases the member, pension payments continue at the reduced rate unchanged; a new beneficiary may not be named and benefits cease upon the death of the member.

Note: Option 4-2 below has the same beneficiary and payment structure as Option 2, 100% Joint and Survivor, except that Option 4-2 allows the pension to revert to the Maximum Retirement Allowance should the beneficiary predecease the member.

### Option Three: 50% Joint and Survivor

Upon the member's death, the designated beneficiary receives 50% of the total monthly benefit for the rest of his or her life upon the death of the member. Only one beneficiary may be named, and that beneficiary may not be changed. If the beneficiary predeceases the member, pension payments continue at the reduced rate unchanged; a new beneficiary may not be named and all benefits cease upon the death of the member.

Note: Option 4-3 below has the same beneficiary and payment structure as Option 3, 50% Joint and Survivor, except that Option 4-3 allows the pension to revert to the Maximum Retirement Allowance should the beneficiary predecease the member.

## **Option 4: Lump Sum**

Upon the member's death, the designated beneficiary, or beneficiaries, will receive a specific amount (lump sum), determined at the time of finalization. More than one beneficiary may be designated, and such beneficiaries can be changed at any time.

## **Option 4: Annuity**

Upon the member's death, the designated beneficiary receives a retirement allowance specified by the member payable for the life of the designated beneficiary. Only one beneficiary may be named, and that beneficiary may not be changed. If the beneficiary predeceases the member, pension payments continue at the reduced rate unchanged; a new beneficiary may not be named and all benefits cease upon the death of the member.

Note: Option 4-4 below has the same beneficiary and payment structure as Option 4, Annuity, except that Option 4-4 allows the pension to revert to the Maximum Retirement Allowance should the beneficiary predecease the member.

## **Option 4-2: 100% Joint and Survivor with "Pop-Up"**

Upon the member's death, the designated beneficiary receives 100% of the member's total monthly benefit for the rest of his or her life. Only one beneficiary may be named and may not be changed. If the beneficiary predeceases the member, pension payments revert to the Maximum Retirement Allowance.

## **Option 4-3: 50% Joint and Survivor with "Pop-Up"**

Upon the member's death, the designated beneficiary receives 50% of the member's total monthly benefit for the rest of his or her life. Only one beneficiary may be named and may not be changed. If the beneficiary predeceases the member, pension payments revert to the Maximum Retirement Allowance.

## **Option 4-4: Annuity with "Pop-Up"**

Upon the member's death, the designated beneficiary receives a retirement allowance specified by the member payable for the life of the designated beneficiary. Only one beneficiary may be named, and that beneficiary may not be changed. If the beneficiary predeceases the member, pension payments revert to the Maximum Retirement Allowance.

## **Option 5: Five Year Certain**

If a member elects this option, the benefit is payable to the retiree for life; however, if the member dies within 5 years of retirement, the benefit is only payable to the designated beneficiary until the 5th anniversary of the member's retirement. For example, a member may elect this option and live for 15 years after retirement, upon the member's death the benefit would cease and not be payable to a beneficiary. Conversely, if a member died one year after retirement, under this option the benefit would be payable to the beneficiary for 4 more years.

## Option 6: Ten Year Certain

If a member elects this option, the benefit is payable to the retiree for life; however, if the member dies within 10 years of retirement, the benefit is only payable to the designated beneficiary until the 10th anniversary of the member's retirement. For example, a member may elect this option and live for 25 years after retirement, upon the member's death the benefit would cease and not be payable to a beneficiary. Conversely, if a member died 3 years after retirement, under this option the benefit would be payable to the beneficiary for 7 more years.

## Pre-finalization Pension

After retirement, members will receive a monthly pension of approximately 90% of their estimated final pension. Full monthly pension payments will not be received until the benefit is certified by the Chief Actuary of the City of New York. Upon certification by the Actuary, a pension is considered finalized. After finalization, members begin to receive full monthly pension payments. Any retroactive adjustments are included in the first full pension payment.

Note: Members considering choosing an option may wish to withhold more than 10% from the pre-finalization pension because choosing an option results in a pension lower than the Maximum Retirement Allowance because of the cost of the option.

## Finalization Requirement

**A pension cannot be finalized unless either the Maximum Retirement Allowance or a pension option is selected.** The Fund will send three notices for option selection; if no response is received after the third notice, the Fund will finalize the pension at the Maximum Retirement Allowance. Finalization is generally irrevocable.

## Reinstatement to the NYPD

### Before the 20<sup>th</sup> Anniversary

If a member separates from service before becoming eligible for Service Retirement and subsequently rejoins the NYPD as a uniformed member the member will maintain all membership rights and credited service earned prior to separation from service, as long as the member did not withdraw any contributions upon separation.

### After the 20<sup>th</sup> Anniversary

If, after Service Retirement, a member rejoins the NYPD the pension stops and an active membership begins in the Police Pension Fund. The member will receive a new Tax ID number upon reinstatement. The member will receive a new required rate based on age at reinstatement and start pension contributions as any new PPF member would.

**Note:** If a member reinstates at age 39 and older, the member contribution rate will be negated by the ITHP unless ITHP is waived and/or the member participates in 50% Additional. The required rate for members 39 and older is less than the 5.0% the City assumes with ITHP.

A reinstated member must work at least five years after reinstatement before the new service and the prior service from the earlier retirement may be combined for purposes of retiring on a recalculated pension.

If a member qualifies for the full value of a recalculated pension, a member must first repay to the Police Pension Fund all pension funds received prior to reinstatement. Any prior pension amount not repaid at the time of the member's second retirement will be actuarially deducted from the recalculated pension.

If the member retires for a second time before completing five years of uniformed service after reinstatement, the pension will be the original pension, adjusted for additional 1/60th and ITHP values.

## **Retiree Employment Restrictions**

NYCPPF retirees must comply with post-retirement earnings restrictions to ensure any portion of the retirement allowance is not jeopardized. All PPF retirees are subject to post-retirement limitations and reemployment restrictions. Violations of any of these laws and/or rules may jeopardize some or all of the retirement allowance. Members are encouraged to consult with PPF prior to accepting any post-retirement employment.

According to §1117 of the New York City Charter, a pension must be suspended or forfeited for retirees employed by New York State or any of its political subdivisions unless the pension, plus the job's salary or compensation, is less than \$1,800 per year. However, sections 211 and 212 of the RSSL may enable service retirees to earn higher amounts.

## **Service and Vested Retirees-Under 65**

### ***Section 211: Waiver Required***

RSSL Section 211 enables New York State or any of its political subdivisions to hire retirees who possess certain qualifying skills; however, such an employer needs to obtain a Section 211 Waiver on behalf of the employee. It is the retiree's responsibility to ensure the employer obtains the 211 Waiver and it remains in force throughout the employment period. The NYS Civil Service Commission and the NYC Department of Citywide Administrative Services (DCAS) are among the entities empowered to grant a Section 211 Waiver.

## Section 211(a) – Earnings Cap

If the position's salary or compensation is over \$30,000 and the position is with a former employer (except the NYC Dept. of Education), the maximum salary or compensation the non-disability retiree may receive is calculated as follows:

Basis:           **Current salary at retirement rank** (salary = base salary + all overtime types + uniform allowance + worked vacation)  
Less:           **Retirement allowance**  
Equals:         **Maximum annual earnings (rounded to the next highest \$500)**

**The Police Pension Fund will suspend the retirement allowance if the retiree earns more than the maximum annual earnings.**

## Section 211(b) – No Earnings Cap

If the position the non-disability retiree seeks is not with a former employer, the retiree may be hired with no earnings limitations. However, the employer must obtain a Section 211 Waiver on behalf of the employee.

## Section 212: Earnings Cap

Under RSSL Section 212, a non-disability retiree under 65 years of age may be employed by New York State or any of its political subdivisions without prior approval of the New York State Civil Service Commission or DCAS. However, the employee's annual salary or compensation must be equal to, or less than, an amount determined by the New York State Legislature (currently \$30,000). A retired PPF member must notify the Executive Director of NYCPPF in writing if he intends to exercise this right. If the retiree's earnings exceed the state-established limit, PPF will suspend the pension benefit.

## Retirees Age 65 and Over

In the calendar year in which a non-disability retiree attains age 65, and every year thereafter, the retiree has no restrictions on earnings paid by New York State or any of its political subdivisions.

## Public Benefit Corporations

Section 1117 of the New York City Charter does not apply to Public Benefit Corporations (PBCs), so all retirees may work for such corporations with no earnings limitations.

The following are some common PBCs, including but not limited to:

- 👉 Metropolitan Transportation Authority
- 👉 New York City Housing Authority
- 👉 New York City Transit Authority

- 👉 New York City Dormitory Authority
- 👉 New York City School Construction Authority
- 👉 New York City Convention Operating Corporation
- 👉 New York City Health and Hospitals Corporation
- 👉 New York/New Jersey Port Authority
- 👉 New York State Urban Development Corporation
- 👉 Waterfront Commission of New York Harbor

## ***Safeguards***

### ***Before the 20<sup>th</sup> Anniversary***

Before the 20th anniversary, Ordinary Disability or Accident Disability retirees are not governed by Section 1117 of the New York City Charter. Accordingly, such retirees may earn more than \$1,800.00 per year when employed by New York State or any of its political subdivisions or a public benefit corporation.

However, New York City Administrative Code § 13-254 limits the earnings of pre-20th anniversary disability retirees. Maximum earnings are defined as follows:

Base:	Current salary* at next highest rank (immediately above retirement rank)
Less:	Pension portion of the retirement allowance
Equals:	Maximum annual earnings

*\*Salary is defined as base pay plus overtime, uniform allowance for rank at retirement and worked vacation.*

The Police Pension Fund will suspend the pension portion of the retirement allowance if the retiree earns more than the maximum annual earnings.

### ***After the 20<sup>th</sup> Anniversary***

After the 20th anniversary, disability retirees are governed by Section 1117 of the New York City Charter (i.e., the retirement allowance pension portion plus the job's salary or compensation must be less than \$1,800.00 per year). RSSL §§ 211 and 212 do not apply to disability retirees after the 20<sup>th</sup> anniversary as per RSSL § 210.

**Note:** If a disability retiree becomes an employee of New York State or any of its political subdivisions after the 20<sup>th</sup> anniversary, PPF will suspend the pension portion of the member's retirement allowance; however disability retirees may be employed by public benefit



corporations and non-public organizations with no earnings limitations after the 20th anniversary.

## ***Second Retirement System Membership***

A retiree may not join another New York State retirement system as an active member while receiving a pension from the Police Pension Fund. If a retiree does so, the pension portion of the retirement allowance will be suspended; when active membership in the second retirement system ends, pension portion payments will resume.

## **Active Member Death Benefits**

This section describes death benefits available to beneficiaries following the death of an active member. Whenever such a death occurs, the Police Pension Fund Death Benefits staff is available to meet upon request with the designated beneficiary/ies to explain all available benefits.

### **Payments for All Deaths**

The following payments are made in the event of an active member's death, regardless of the cause of death:

- Refund of accumulated contributions, which includes pension loan insurance, if applicable;
- Payment of unpaid salary;
- Payment of worked vacation and lost time, if any

### **Ordinary Death Benefit (non-line-of-duty, under 20)**

This death benefit will be paid provided the member was in service for 90 days or more at the time of death and the member was a salaried PPF member at the time of death.

If the deceased member had under 20 years of service, and the death was not in the line of duty, the beneficiary will receive a lump sum payment equal to three times the member's final years earnings, rounded up to the nearest \$1,000.

### **Death Gamble Benefit (non-line-of-duty, over 20)**

The Death Gamble applies to active members with over 20 years of service and to members retired for Service awaiting finalization of their pension benefit. Under the Death Gamble, members are presumed to have taken Service Retirement the day before they died. The beneficiary of a Death Gamble may receive this benefit either as a lump sum payment of the member's pension reserve accounts or as an annuity for life.

## Accidental Death Benefit

An application must be made to the Medical Board to determine whether a member's death was the result of an accident sustained in the line of duty. If the Police Pension Fund Board of Trustees ratifies an affirmative determination from the Medical Board, an Accidental Death Benefit is paid.

The Accidental Death Benefit consists of four parts:

1. A lump sum equal to the member's accumulated deductions and any insured loan amount paid to the designated beneficiary(ies), or the member's estate if no beneficiary.
2. A lump sum payment of the balance in the member's ITHP reserve account.
3. A New York City-paid pension based on 50% of the member's determined salary. This benefit is paid to the spouse; if there is no surviving spouse, or if the surviving spouse dies before any child of the member attains the age of 18 years, or is a full-time student before such child attains the age of 23 years, then the benefit is paid to such a child (or children) under such age until every such child dies or attains such age. If the member has no surviving spouse or qualifying child, then the benefit is paid to a dependent father or mother for life.
4. A Special Accidental Death benefit (SADB). This is a New York State-paid pension equal to the member's final year's salary, less the New York City-paid pension and Social Security benefits. The SADB is payable to the surviving spouse or dependent child/children at the time of your death. The SADB is not payable to dependent parents, and it may be increased periodically by the New York State Legislature. Effective September 1, 2000, any Cost of Living Adjustment (COLA) received on the New York City-paid 50% pension must be subtracted from the Special Accidental Death Benefit.

## Vested Death Benefit

The Vested separation period begins on the date a member leaves police service after vesting and ends on the member's 20<sup>th</sup> anniversary. A Vested Death Benefit is available to beneficiaries of members who die during the Vested separation period.

The benefit varies with the member's length of allowable police service prior to Vested Separation:

- If the member had less than ten years of service upon vested separation and dies before the 20<sup>th</sup> anniversary, the beneficiary will receive only the remaining accumulated contributions.
- If the member had ten or more years of service upon vested separation and dies before the 20<sup>th</sup> anniversary, the beneficiary is entitled to one-half the Ordinary Death Benefit that would have been payable upon the member's separation from uniformed police service.

## Beneficiaries

All members designate a beneficiary (or beneficiaries) for Death Benefits when joining the PPF; however, whenever a member's social condition changes (e.g., marriage, separation, divorce), the beneficiary designation should be updated.

Reviewing beneficiary designations regularly is well worth the time and effort; doing so protects both assets and heirs. Tax filing and open enrollment periods are recommended times to do this. Major life events, e.g., marriage, remarriage, divorce, birth, adoption and death, often create the need to update beneficiaries.

### Checking Your Beneficiary

To obtain beneficiary information, either visit PPF in person or mail a request to the New York City Police Pension Fund, 233 Broadway, 19th Floor, New York, New York, 10279, attention: Membership Services Unit. Due to privacy concerns, telephone and e-mail requests are not permitted.

### Changing Line Organization Beneficiaries

Whenever checking beneficiary information with the PPF, remember to also contact the appropriate line organization at the address and number listed below to obtain beneficiary information in those records, as well:

<b><i>Police Officers</i></b>	Patrolmen's' Benevolent Association (PBA)	212-349-7560
<b><i>Sergeants</i></b>	Sergeants' Benevolent Association (SBA)	212-431-6555
<b><i>Detectives</i></b>	Detectives' Endowment Association (DEA)	212-587-1000
<b><i>Lieutenants</i></b>	Lieutenants' Benevolent Association (LBA)	212-964-7500
<b><i>Captains &amp; above</i></b>	Captains Endowment Association (CEA)	212-791-8292

### Changing Beneficiaries

The PPF Change of Beneficiary Form is available on the PPF website. The form must be notarized and may be mailed to: New York City Police Pension Fund, 233 Broadway, 19th Floor, New York, New York, 10279, attention: Membership Services.. Questions may be directed to Membership Services at 212-693-5850.

## Changing Health Insurance Dependents (Active Members)

To change the dependents on health insurance by mail or in person, please contact the NYPD Health Insurance Section, 51 Chambers Street, 3rd Floor, New York, New York 10007 or call 646-610-5122 for information.

## Changing Deferred Compensation Plan Beneficiaries

If enrolled in the NYC Deferred Compensation Plan, call 212-306-7760 for information about updating Plan Beneficiaries. Information is also available at [www.nyc.gov/OLR](http://www.nyc.gov/OLR). Click on Forms and Downloads and download the Beneficiary Distribution Guide/Form.

## Guide for Surviving Beneficiaries

There are few situations in life more stressful than the loss of a loved one; there are no words of comfort at such a difficult time. This section is designed to aid the survivors of PPF members by providing a checklist of who to contact upon the death of a PPF member or retiree, and the information that is required. There are four calls to make:

### 1. NYPD Operations Unit

Survivors should call NYPD Operations at 646-610-5580, located at NYPD Headquarters, 1 Police Plaza, New York, New York 10038. Pall bearers may be requested at that time and are available for all five City boroughs, Long Island, Westchester, Rockland, Orange and Putnam counties.

### 2. NYC Police Pension Fund

Please notify PPF in writing at 233 Broadway, 19th Floor, New York, NY 10279, attention: Death Benefits Unit or by telephone at 212-693-5619/5919. Please have the following information available at the time of the phone call: the first, middle and last name of the deceased; the date of death; Social Security Number of the deceased; name of the next of kin; and name, address and phone number of the executor or executrix of the estate, if applicable.

The Fund will need (prompt receipt will expedite the ability to make payments):

- ✓ A certified copy of the death certificate;
- ✓ A copy of the paid funeral bill;
- ✓ A copy of the marriage certificate, if applicable; and
- ✓ A copy of the beneficiary's Social Security card.

### **3. Member's line organization**

Contact the appropriate line organization below, and ask about a possible life insurance policy and whether any continuing optional benefits are available:

PBA	125 Broad St.	11th Floor	212-349-7560
DEA	26 Thomas St.		212-587-1000
SBA	35 Worth St.	First and second floor	212-431-6555
LBA	40 Peck Slip		212-964-7500
CEA	40 Peck Slip		212-791-8292

### **4. Health Benefits Program (Retired Members)**

Contact the NYC Employee Health Benefits to request the appropriate health benefits forms. This office is located at 40 Rector Street, 3rd Floor, New York, NY 10006 and can be reached at 212-513-0470.

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# **SUMMARY PLAN DESCRIPTION**

New York City Police Pension Fund  
Tier 3 Members

# New York City Police Pension Fund

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## Introduction

This booklet is called the Tier 3 Summary Plan Description (“SPD”). This SPD applies to the following Tier 3 plans: Original, Revised, and Enhanced. It is published by the New York City Police Pension Fund (“NYCPPF,” “PPF,” “Fund”), and is intended to summarize all of the provisions relating to the retirement plan, programs and other benefits offered to members employed by the New York City Police Department (NYPD) who are subject to Tier 3.

Laws affecting the plan can be added to or changed at any time, which may result in discrepancies within this SPD. In the event of a conflict between the contents of this booklet and any applicable law and/or rules, including, but not limited to, the Administrative Code of the City of New York (“NYCAC”), the New York State Retirement and Social Security Law (“RSSL”), and the Rules of NYCPPF, the applicable Law or Rule will govern.

### *About PPF*

In 2001, legislation provided Corpus Funding for the Pension Fund to begin operations in September 2002 at its new location at 233 Broadway in New York City. The PPF is governed by the Board of Trustees. The Comptroller of the City of New York is Custodian of the funds of the System, and by delegation of the Board of Trustees, has the power to invest those funds. The Executive Director is the chief administrative officer of the agency. The Chief Actuary for the City of New York provides actuarial services to the PPF. The Office of Corporation Counsel provides legal services to the Fund.

NYCPPF is a defined benefit plan, meaning that a specific benefit is provided at retirement in amounts that are paid either on a fixed-dollar basis or as a percentage of compensation. PPF manages the Fund’s invested assets and pays out benefits according to formulas set forth in New York State and City laws. In general, Tier 3 members are governed by Article 14 of the RSSL, the NYCAC, the Rules of the Fund and certain other applicable statutes.

## How to Contact PPF

At PPF, protecting and securing the privacy of member data is a top priority. That is why before taking action on private and confidential pension matters, a personal visit to our office, a written and signed (in some cases notarized) communication, or a judicial subpoena is required. PPF staff does not respond to telephone or e-mail inquiries relating to private member information because the identity of the caller or e-mail writer cannot be confirmed.

To communicate with PPF by fax, members are advised to identify a specific staff member in advance and to send the fax directly to the staff member using the fax number specified. Always retain copies of the fax and fax receipt.



For answers to questions of a **general** nature concerning retirement and pensions, please call PPF at (212) 693-5100; or visit the Pension Fund at 233 Broadway, 19th Floor, New York, New York 10279.

The Fund will respond promptly and completely to pension questions. PPF’s ongoing mission is to provide excellent service to every member.

## Serving the Finest Online



Members can find the answers to many questions quickly and conveniently by visiting the PPF website: [www.nyc.gov/nycppf](http://www.nyc.gov/nycppf). A host of information can be found there regarding benefits, recent pension legislation, and frequently asked questions. Forms may be downloaded for most changes members wish to make, such as beneficiary, guardian, and buyback applications for active members and retiree forms for change of address, direct deposit and Municipal Credit Union deductions, among other forms.



Members can also ask general questions by emailing the Fund directly at [policepensioninquiries@nycppf.org](mailto:policepensioninquiries@nycppf.org). The Fund cannot answer member specific questions regarding financial information or provide legal or tax advice.

The Fund is also now on Facebook! Members, their beneficiaries, and fans of the Fund can “like” us on Facebook at [www.facebook.com/nycppf](http://www.facebook.com/nycppf).



In person and online, PPF is proud to be serving the FINEST.

## Membership

Uniformed members of the New York City Police Department appointed on or after July 1, 2009 are subject to Article 14 of the RSSL, also known as Tier 3. Contributions to the Fund must be made while employed with the NYPD, but are not required after 25 years of service. Membership in the Fund ceases upon withdrawal of contributions. There are three different plans within Tier 3: Original, Revised, and Enhanced.

Members appointed	Plan
Between July 1, 2009 – March 30, 2012	Tier 3 Original
Between April 1, 2012 – March 30, 2017	Tier 3 Revised
On or after April 1, 2017	Tier 3 Enhanced

Tier 3 Original or Revised members who elected to opt-in to Tier 3 Enhanced are subject to the rights, benefits, and provisions provided by the Enhanced plan.

## **Credited Service**

Participation in the Fund is mandatory for uniformed members of the service. A member will not receive retirement credit for any day not on the payroll, *e.g.*, suspended without pay leave. Military service with the federal government may be credited pursuant to New York State Military Law §243, the Uniformed Services Employment and Reemployment Rights Act (USERRA), and RSSL §1000, as explained below.

### ***Prior Service Credit<sup>1</sup>***

A member is eligible to obtain service credit for any New York State Police and Fire time, or service with the New York City Fire Department. This credited service may count toward the requirements for vesting and retirement.

### **Transfer to New York City Police Pension Fund**

A member may transfer to the NYCPPF from another public retirement system within the State of New York. In Tier 3, transferring prior City or State service, other than Police or Fire time, does not provide any additional monetary benefit, nor does it change your Service Retirement eligibility date. However, members with a membership in a New York public pension fund that began prior to July 1, 2009 will become Tier 2 members of the PPF upon completion of a proper transfer. Before deciding whether to transfer service from another pension system, an eligible member should speak with Membership Services at (212) 693-5850.

### **Buyback of Prior Service**

#### ***Chapter 646 of the Laws of 2000***

Chapter 646 of the Laws of 1999 amends RSSL § 645, which allows for the purchase of prior service in another retirement system even though that membership has ceased. Chapter 646 may allow for a Tier change or Tier reinstatement. A member who may be eligible to purchase service under this provision should contact Membership Services at (212) 693-5850 for further information.

#### ***Chapter 552 of the Laws of 2000***

Chapter 552 of the Laws of 2000 allows members the ability to purchase any prior service rendered before becoming a member of the Fund, or any other New York State or New York City retirement system, but there may not be any advantage to doing so. For further information regarding Chapter 552 buybacks contact Membership Services.

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<sup>1</sup> Please be advised this is the PPF's current understanding of the applicable laws regarding prior service credit. Such laws, and their interpretation, may be subject to change. Please contact the Fund before initiating a transfer for buyback for advice regarding prior service.

## ***Military Service, RSSL § 1000***

Chapter 548 of the Laws of 2000 created New York State Retirement and Social Security Law (“RSSL”)§ 1000; this allowed former members of the Armed Forces of the United States during certain periods of conflict or in certain combat areas to buy back their military service as uniformed time.

On May 31, 2016, Chapter 41 of the Laws of 2016 was enacted, amending RSSL §1000 by removing the specified periods of time, medal requirements, and theaters of operation in which military service would have to have been rendered for a pre-membership service purchase. Members need only have been honorably discharged from the military to be eligible to purchase pre-membership service credit pursuant to RSSL §1000. This law is not retroactive and does not permit retired members to purchase service credit.

RSSL §1000 service purchases grant an active member who has five years of credited service, not including the military service being purchased, the eligibility to purchase up to three years of military service for pension credit. The member must be able to produce a DD-214 demonstrating an honorable discharge from any branch of the U.S Armed Forces.

The member must render payment for the service credit as follows:

- *If the member has a membership date with PPF on or prior to March 31, 2012:*
  - 3% of the member’s compensation earned during the 12 months of credited service immediately preceding the application date multiplied by years of military service claimed
- *If the member has a membership date with PPF on or after April 1, 2012:*
  - 6% of the member’s compensation earned during the 12 months of credited service immediately preceding the application date multiplied by years of military service claimed.

The member must apply and remit payment for service credit before the effective date of retirement. In the event of retirement prior to completing payment for the service credit purchase, the amount of service credited to the member shall be proportional to the total amount paid. If upon death, retirement, or separation, the service purchase does not produce a greater benefit, the cost of the service purchase must be refunded to the member with interest.

## ***Retroactive Military Seniority (RMS)***

Retroactive Military Seniority (RMS) is awarded to a member after being appointed to the NYPD from a special list, retroactive to the date the member would have been appointed had the member not been serving in the military. Members who receive RMS from the Department of Citywide Administrative Services (DCAS) receive pension credit retroactive to the date awarded by DCAS. Upon receipt of a letter from DCAS stating the member has RMS, the member is immediately entitled to the same rights, privileges and obligations as if he had served continuously in such position from the date of his appointment.

A member's membership date will be adjusted to reflect the RMS Date (RMSD) found in the letter from DCAS; the member's tier and contribution rate are also adjusted accordingly. Members with RMS must, however, make pension contributions that were missed during the period between the RMSD and appointment to the NYPD.

Contributions must be completed within the repayment period prescribed by law; the maximum repayment period is the time from the RMSD to the NYPD appointment multiplied by 3, up to a maximum of 5 years. Once contributions are completed within the repayment period, the City is required to credit the member's contribution account with the interest that would have credited during this period.

Members may pay for this time in a lump sum payment or enroll in bi-weekly payroll deductions. Please note Tier 3 members may not retire with a shortage; accordingly, RMS payments must be completed prior to retirement. Additionally, payments must be completed by the end of the repayment period, which is calculated as the number of years from the RMS date to the NYPD appointment date multiplied by 3, up to a maximum of 5 years.

Please note a member cannot receive RMS and credit for the same military service through a buyback. Members who have already completed a RSSL §1000 buyback for the same time will receive a refund for the buyback or the City will credit the money toward the RMS payment.

Inquiries regarding eligibility for RMS pension credit should be submitted in writing to the Police Pension Fund, attention Membership Services, 233 Broadway, 19th Floor, New York, New York 10279. General questions may be directed to the Membership Services division at (212) 693-6860.

## Contributions

Contributions to the New York City Police Pension Fund are mandatory for all members, but are not required after 25 years. Contribution rates vary by Tier 3 plan. Pensionable earnings consist of: base salary, overtime, night differential, holiday pay, worked vacation, portal to portal and allowable longevity. Member contributions are based on gross pay and will be deducted from pay before federal taxes are deducted.

### Contribution Rates

Member contributions and the interest they earn are known as accumulated contributions. The Tier 3 rate of interest is currently 5%. A member's accumulated contributions must equal the required amount (the 3% contribution rate plus statutory interest) to be eligible for a pension.

Plan	Contribution Rate
Tier 3 Original	3%
Tier 3 Revised	3%
Tier 3 Enhanced	4%*

\* Tier 3 Enhanced members contribute 3% of pensionable earnings PLUS an additional contribution rate to help fund the enhanced disability benefit. Currently, the additional contribution rate is 1%; the 1% can be raised to 3% based on a financial analysis by the Office of the Actuary every three years. At no time can the total contribution rate exceed 6%.

### Taxability of Contributions

Tier 3 Original and Revised contributions are taken pre-tax. Tier 3 Original and Revised members who opt into Tier 3 Enhanced will have split taxability: the base 3% is pre-tax, however the additional contribution (currently 1%) will be taken after tax.

Tier 3 Enhanced contributions in their entirety are taken pre-tax only for members appointed on or after April 1, 2017.

### Longevity

For members with at least 20 years of credited service, but less than 25 years of credited service, the salary at the 10-year longevity level will be used in pension computations and for computation of the earnings cap. For members with 25 or more years of credited service, the salary at the 20-year longevity level will be used in computations.



## **Member Contributions While on Military Leaves**

Members may take military leaves with or without pay during their career with the NYPD; however, all members must be given the opportunity to purchase pension credit for such leaves.

In 2014, the City reached a settlement with the United States Attorney's Office regarding the calculation of pensionable earnings and member contributions for members on active duty military leaves from the NYPD pursuant to the Uniformed Services Employment and Reemployment Rights Act of 1994, 38 U.S.C. §§ 4301–35 ("USERRA"). USERRA requires military service members' pensions—as well as employer and employee contributions to pension plans—to be computed based on the rate of compensation the employees would have received but for their periods of military service. Pursuant to the Settlement Agreement, PPF must impute, for purposes of pension calculations, overtime and night-shift differential compensation that members would have earned had they not taken military leaves during their careers with the NYPD.

Active PPF members who performed Active Military Service and returned to NYPD service between September 11, 2001 and March 17, 2014 may voluntarily elect to have their pensionable earnings recalculated. Such members may schedule a counseling session with a military advisor by contacting Membership Services at (212) 693-6860 and/or complete PPF Form 86: Recalculation Request, which is available at [www.nyc.gov/nycppf](http://www.nyc.gov/nycppf).

Active PPF members who return to the NYPD from Active Military Service on or after March 18, 2014 must have their pensionable earnings calculated as described below.

### ***What Does the Calculation Entail?***

For each period of time when a member performed active military service after September 11, 2001, PPF will determine how much compensation the member would have earned, but for the period of military service. For example, the member may ordinarily have earned overtime or night-shift differential compensation, but missed the opportunity to do so because of military obligations. Military service begins on the day a member begins his or her leave from the NYPD for the purposes of military service; this may include use of annual leave and/or compensatory time. The military service is deemed completed on the day before the member returns to the NYPD.

To determine the amount of earnings a member would have earned, PPF will average any additional differential payments and overtime the member earned during the 12 months immediately preceding his or her active military service. PPF will then add the base pay to the imputed earnings to reach the pensionable earnings for the military leave. Members are responsible for making additional pension contributions to the Fund.

## ***Refunds***

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

If a member separates from the Fund for reasons other than retirement (resignation, termination, or death) a request for a refund of accumulated contributions plus interest may be made. If contributions are left with the Fund, the money will continue to earn interest for a maximum of five years from the date of separation. For further information on refunds, please refer to the Fund's website, [www.nyc.gov/nycppf](http://www.nyc.gov/nycppf), or call 212-693-5100 for assistance.

## ***Withdrawal of Contributions***

Contributions may be withdrawn until a member has 10 years of credited service. After 10 years of service, contributions may not be withdrawn and members will receive a vested retirement benefit. In the event of a resignation or dismissal, a member who is not vested or entitled to any other benefit under Tier 3 may withdraw accumulated contributions.

## ***Shortages***

A shortage occurs when a member's pension account balance falls below the required amount. Members are responsible for any account shortages; there is no actuarial offset if a member has a shortage at retirement. Unfortunately, a member will not be permitted to retire with a shortage.

Shortages may occur because of delays in contract settlements. Retroactive pay from a contract settlement does not include the interest that would have been earned on these contributions. Interest earned on contributions is part of a member's required amount; therefore, a shortage can occur.

The Fund will notify any member with a shortage prior to retirement. Members may opt to make a lump sum payment(s) or biweekly payroll deductions to reduce any shortage.

## ***Loans***

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

## Retirement

When a member decides to retire, there is no statutory minimum time period by which the member must file before retiring. However, it is recommended that applicants for Service Retirement call the Retirement Counseling Unit at the PPF at (212) 693-5733 for an appointment three to four weeks before filing for retirement.

Filing for retirement should be done in person at least 10 days prior to the start of terminal leave. Patrol Guide Procedure 205-42 authorizes members to take an administrative tour to appear at the Fund to file for retirement.

Pension checks are mailed to the home address on file with the Fund unless a member requests otherwise. Members may have pension payments directly deposited to any bank upon the submission of an Electronic Funds Transfer (EFT) Form. Change of address forms and EFT forms are available at the Fund and on the website ([www.nyc.gov/nycppf](http://www.nyc.gov/nycppf) under “Forms”). It is the member’s responsibility to keep address information current with the Fund, even after retirement.

### *Procedures for all members applying for retirement*

#### **Property Receipt—Discontinuance of Service (PD 520-013)**

This form must be completed and signed by the Commanding Officer of the member’s permanent command, or an officer at least a rank above the member within the command, and delivered by the member to the PPF’s Retirement Counseling Unit. The field, “Next Scheduled Tour After Leaves, Except Terminal Leave” must be filled out on this form. The date in this field is the starting date of terminal leave. It is the responsibility of the member to return Department property to the appropriate locations. A member appearing at PPF for retirement must be in possession of his shield and identification card.

#### **Firearms**

Members who are New York City residents and wish to obtain a New York City Pistol License must submit a notarized NYPD Handgun License Application (PD-643-041) to be delivered in person to the NYPD License Division, Room 110, 1 Police Plaza (8:30 a.m. to 3:00 p.m., Monday-Friday). The Application should be submitted two weeks prior to the member’s scheduled appointment for retirement processing, otherwise the member may be subject to vouchering firearms until the permit is processed.

To obtain the Handgun License Application, visit [www.nyc.gov/nypd](http://www.nyc.gov/nypd), and select “Permits” at the left of the page. Additionally, complete the “Acknowledgement of Person Agreeing to Safeguard Firearms” and, if necessary, “Affidavit of Co-habitant.” Questions regarding the Handgun License Application should be directed to the License Division at (646)610-5536. Members who are not New York City residents must provide a copy of the Property Clerk Invoice (PD 521-141) for all firearms listed on the NYPD Force Record Card.

If the member is not returning to work, a copy of this form must be provided to PPF before the retirement process begins. In all other cases, a copy of this form must be provided before terminal leave begins. If terminal leave is waived, PPF requires the form before the retirement date. For questions regarding firearm licenses outside New York City, please contact the relevant county or municipality.

## **Health Insurance Information**

Members, and in some cases their beneficiaries, may be eligible for health benefits from the City of New York. A member needs at least 10 years of credited service to be eligible for health benefits upon retirement.

Health benefits are only available to a person actually collecting a pension.

For example, a member who vests with 10 years of service and does not collect a retirement allowance until what would have been the member's 22<sup>nd</sup> anniversary is not eligible for health benefits until the Fund begins to disburse the retirement allowance. Likewise, a member who retires with 22 years of service and elects to defer payment of the pension until what would have been 25 years for escalation purposes would not be eligible to receive health benefits until collection of the pension benefit.

Members should contact Employee Health Benefits at the NYC Office of Labor Relations at 40 Rector Street, New York, NY 10006 or (212) 306-7390 for further information regarding health benefits.

For health insurance purposes, the following information must be provided when a member appears at the Fund to retire:

- ✓ GHI, HIP or other health plan card;
- ✓ Spouse's date of birth and Social Security Number;
- ✓ Date of marriage;
- ✓ Dates of birth and Social Security Numbers of dependent children;
- ✓ If spouse is employed and has health insurance, bring pertinent information (name of employer, health plan, and policy number).

## **Counseling Process**

During the counseling process at the PPF, members are advised regarding health insurance, pension options, employment restrictions, withholding tax and other important retirement issues. The member's retirement date will be set, and questions unique to the member's situation will be answered. In addition, estimates for both final pension and pre-finalization pension will be provided.

## **Estimate of Final Pension**

An applicant for retirement will receive a pension estimate after meeting with a retirement counselor—this is only an estimate. Any additional overtime, night differential and worked vacation earned between the estimated retirement date and the actual retirement date will be included at finalization. Any difference in monthly average earnings between the retirement processing date and the finalization date will be disbursed as a retroactive payment.

## **Terminal Leave**

Members are entitled to take all accrued time and terminal leave after the last day on active duty. All accrued time must be used prior to the start of terminal leave. During terminal leave, members remain on the active payroll.

## ***Application Withdrawal***

A member being processed for Vested or Service Retirement may withdraw the retirement application while it is still pending by appearing at PPF in person at least one business day prior to the scheduled retirement date. Any terminal or annual leave used prior to withdrawal of the retirement application may not be restored; however, unused terminal leave may be used toward a future retirement. A member must work 30 days after withdrawing an application for retirement to be eligible for annual leave in the next calendar year.

## ***Final Average Salary***

The compensation base that is used to calculate a pension benefit is referred to as your Final Average Salary (FAS). Your FAS is defined in law as the average of wages earned by a member during a certain continuous period of employment for which the member was credited with service. The FAS period is different in the various Tier 3 plans. The FAS is not determined by a mere average of wages.

Due to a provision in law referred to as the “Kingston Limitation,” wages earned in any one year used in the FAS computation cannot exceed the average of prior years by more than 10 percent. If the wages earned in one year of the FAS exceeds the average of the previous four years by more than 10 percent, the amount in excess of 10 percent is excluded from the FAS. The period of exclusion under the Kingston Limitation is different throughout the various Tier 3 plans.

If the member was on a leave of absence without pay (e.g. suspension) at any time during the FAS period, that time will be excluded from the calculation and the same period of time immediately preceding the FAS period will be included for the final average salary.

## Tier 3 Original

Tier 3 Original (Tier 3 Original who Opt into Tier 3 Enhanced and retires for Vested or Service)	Tier 3 Original Opts Into Tier 3 Enhanced (and retires for disability)*
Average wages earned by a member during any <b>3 consecutive calendar years</b> or <b>36 months</b> immediately preceding the member's retirement date that provides the highest average wage.  If the wages earned during any year included in the period exceeds the average of the <b>prior two years</b> by more than 10%, the amount in excess of 10% shall be excluded.	Average wages earned by a member during any <b>5 consecutive calendar years</b> or <b>60 months</b> immediately preceding the member's retirement date that provide the highest average wage.  If the wages earned during any year included in the period exceeds the average of the <b>prior four years</b> by more than 10%, the amount in excess of 10% shall be excluded.

\*Tier 3 Original members who opt into Tier 3 Enhanced will only see this changed in their FAS if they retire for a disability retirement. The Original FAS calculation remains for members who retire for Vested or Service retirement.

## Tier 3 Revised and Enhanced

FAS is the average wages earned by a member during any **5 consecutive calendar years** or **60 months immediately** preceding the member's retirement date that provide the highest average wage.

If the wages earned during any year included in the period exceeds the average of the **prior four years** by more than 10%, the amount in excess of 10% shall be excluded.

## *Social Security Offset*

Pension benefits in Tier 3 are reduced by a Social Security Offset at age 62, regardless of whether the member is in receipt of Social Security Benefits, or at such time the member is eligible for Social Security Disability Benefits, if earlier than 62.

The Social Security Offset is determined at the time of the member's retirement. All public earnings in New York State up to the point of retirement from the NYPD will be factored into the calculation of the Offset. The payment will not be reduced if the Social Security benefit increases after separation from service.

Tier 3 Enhanced members who retire for a disability will not have their pension benefits reduced by the Social Security Offset.

## Mandatory Retirement

A member must separate from uniformed service upon turning 62 years old. The separation must occur regardless of whether the member is eligible for a Normal Service Retirement.

- Members appointed between July 1, 2009 and March 31, 2012: The retirement benefit may be calculated the same as Early Service Retirement, or the member may be entitled to a Vested benefit. This Vested benefit will be reduced 1/15th for each year that a member's early retirement age is in excess of age 60, as described in the Vested Retirement section. Members who must retire for mandatory retirement and do not have 20 years of service are not eligible for the VSF.
- Members appointed on or after April 1, 2012: If a member attains mandatory retirement age and does not have enough service credit for an Early Service Retirement, the member must take a Vested Retirement. Accordingly, if a member reaches age 62 with less than 20 years of NYPD service, the member is not eligible for the VSF.

## Vested Retirement

After five years of uniformed service a member is eligible for vested retirement benefits. Vested retirees are not entitled to terminal leave before separation from service, nor eligible for Variable Supplement Fund payments.

A member may elect to receive the Vested benefit early, if the member attains age 55 prior to reaching the 20<sup>th</sup> anniversary; otherwise the member must wait until the 20<sup>th</sup> anniversary to begin collecting the Vested retirement benefit. Should the member receive the Vested benefit before attaining the 20<sup>th</sup> anniversary, the benefit will be reduced by 1/30th for each year the benefit commenced before the 20<sup>th</sup> anniversary.

While a member may collect a Vested benefit upon attainment of the 20<sup>th</sup> anniversary of NYPD service, or age 55 with a possible reduction, it is not required. A member may decide to defer payment of the vested pension benefit until 22 years and one month or more, up to 25 years, to be eligible for annual escalation.

For the member appointed at age 25 and resigned with 10 years of vested service at age 35, the benefit may be deferred for any amount of time between ages 47 and 50 to receive either full or partial escalation benefits depending on the deferral period. See the Escalation section of this SPD for an explanation of how appropriate escalation is calculated.

### The vested pension benefit is as follows:

2.1% of the final average salary x years of credited service

-minus-

50% of primary Social Security benefit commencing at 62

## Early Service Retirement

A member is eligible for Early Service Retirement after the completion of 20 years of uniformed service. Only members appointed between July 1, 2009 and March 31, 2012 are eligible to retire for Early Service if they reach mandatory retirement age with less than 20 years of credited service.

### **An Early Service Retirement pension benefit is as follows:**

2.1% of FAS x years of credited service (for first 20 years)

-plus-

1/3% of FAS for each month in excess of 20 years

[total benefit not in excess of 50% of FAS]

-entire benefit above less-

50% of primary Social Security benefit commencing at 62

## Normal Service Retirement

A member is eligible to retire for Service without reduction upon the completion of 22 years of uniformed service.

### **The Normal Service Retirement benefit is:**

50% of FAS-less-

50% of primary Social Security benefit commencing at 62

## Disability Retirement

An application for Ordinary or Accident Disability may be made by a member in active service who is incapacitated from performing the duties of a police officer. Applications for ODR and ADR are made at the Medical Division, 1 Lefrak City Plaza, 59-17 Junction Boulevard, Corona, New York, 11368. Applicants will be notified of the time to appear before the Medical Board for examination.

A disability application may be filed by the member or a legally authorized person acting on the member's behalf; or by a committee or conservator duly appointed by a court of competent jurisdiction; or by the Police Commissioner.



To apply for ODR or ADR, Tier 3 Original and Revised members must sign a waiver of the statutory presumptions. A determination of disability should be made by the Medical Board regardless of any statutory presumptions (except the World Trade Center presumption). Tier 3 Enhanced members are entitled to the benefit of statutory presumptions, which include the Heart Bill and the Exposure (HIV, AIDS, Hepatitis, and Tuberculosis) Bill.

After the examination, the Medical Board will report to the NYCPPF Board of Trustees with a recommendation for approval or disapproval of the disability application. After the Board of Trustees meeting, members are informed of the decision and other necessary information.

### ***Ordinary Disability Retirement (ODR)***

To be eligible for Ordinary Disability Retirement, a member must be in active service and have at least five years of credited service, but not yet be eligible for a Normal Service Retirement benefit. To retire for ODR a member must also be eligible to receive primary Social Security disability benefits. If a member is also found to be disabled by the Medical Board, ODR benefits commence on or after receipt of primary Social Security disability benefits.

**The Ordinary Disability Retirement benefit is the greater of:**

33 1/3 % of FAS

-or-

2% of FAS x years of credited service

-either benefit above, less-

50% of primary Social Security Disability benefit, if applicable

### ***Accident Disability Retirement (ADR)***

To be eligible for ADR, a member must be in active service and be physically or mentally incapacitated for the performance of duty as the natural and proximate result of an accident sustained in active service and not caused by the member's own willful negligence. Vested members are not eligible to apply for ADR benefits under WTC laws until they reach their 20<sup>th</sup> anniversary and are collecting retirement benefits. Receipt of ADR is not conditioned on eligibility for, or receipt of, primary Social Security benefits. Accordingly, payment of a benefit from the Fund will commence after approval by the PPF Board of Trustees.

ADR pensions are generally not subject to taxation. All other pensions (Normal Service, Early Service, Ordinary Disability and Vested) are subject to Federal tax, but are exempt from New York City, New York State and Social Security taxes. The tax laws of all states are different and subject to change; if relocating after retirement, the Fund recommends researching the state's tax laws, or consulting a tax professional.

A Tier 3 ADR pension is calculated as follows:

Tier 3 Original and Revised	Tier 3 Enhanced
<b>50 % of FAS less</b> 50% of primary Social Security Disability	75 % of FAS

## Escalation

Members may be eligible for Escalation on their pension. Escalation is a post-retirement increase (or decrease) to retirement benefits based on the Consumer Price Index (CPI). If the payment of benefits commences on the Full Escalation Date, which is defined as the first day of the month following the date, an eligible Tier 3 member completes or would have completed 25 years of Credited Service, the Escalation is equal to the lesser of 3% or the increase in the CPI. In the event of a decrease in the CPI, the annual retirement benefit shall be decreased by the lesser of 3% or the amount of the decrease in the CPI.

Tier 3 Enhanced members who retire for a disability, do not receive escalation, rather Cost of Living Adjustments (“COLA”).

### *Full Escalation Date*

The full escalation date is calculated as follows for different retirement types:

- **Vested and Service Pensions:** The first day of the month after a member completes, or would have completed 25 years of service.
- **Disability Pensions (Tier 3 Original and Revised only):** The first day of the month following the day on which a disability retiree first becomes eligible for ODR/ADR.
- **Death Benefits:** The first day of the month following the day on which a beneficiary first becomes eligible for a death benefit paid as other than a lump sum.

### *Partial Escalation*

Partial escalation is calculated on benefits that commence prior to the member’s full escalation date. A member will receive 1/36<sup>th</sup> of the full escalation rate for each month the benefit starts after the 22<sup>nd</sup> police anniversary.

### ***Deferred Benefit for Escalation – 22 years of service or less***

A member who retires for Early Service or Vests with less than 20 years of credited service may choose to defer the retirement benefit for the purpose of becoming eligible for annual escalation, in exchange for a reduction in their pension. The reduced pension benefit would then be calculated as follows:

$2\% \times \text{FAS} \times \text{each year of credited service}$
-less-
50% of the Primary Social Security Benefit at age 62

If a member chooses the above option, the member will receive the escalation rate in effect at the time pension benefits become payable.

### ***Deferred Benefit for Escalation – Normal Service Retirement***

A Normal Service retiree with less than 25 years of service may choose to defer the retirement benefit for the purpose of becoming eligible for full escalation.

### ***Deferred Benefit for Escalation and the VSF***

A service retiree (Early and Normal) with over 20 years of service is eligible for the VSF, as described in the earlier VSF section. A member who defers their benefit for escalation, will be paid any banked Variable (VSF DROP) in the year he or she retires, regardless of the duration of the deferral. VSF will not be accrued during the deferral period. When the member begins receipt of the retirement benefit, payment of the VSF will resume.

### **Cost of Living Adjustments (“COLA”)**

Tier 3 Enhanced members who retire for ODR or ADR become eligible for Cost of Living Adjustments (“COLA”) after being retired for five years. The COLA amount is calculated at ½ the Federal Consumer Price Index (CPI), with the minimum amount being 1% and the maximum being 3%.

The COLA amount is applied to the first \$18,000 of the retirement allowance, or to the full retirement allowance if less than \$18,000.

Spouses collecting a benefit under a joint and survivor option may also be eligible to receive COLA; however, the beneficiary receives 50% of the amount that the member/retiree would have received.

## Variable Supplements Fund

Members who **retire for Service, with at least 20 years of credited police service**, on or after October 1, 1968 are eligible to receive an annual statutorily defined Variable Supplements Fund (VSF) payment in addition to regular pension payments. The VSF is prorated based upon the number of full months of retirement. The annual VSF benefit is \$12,000. **Vested members and members who retire for Ordinary or Accident Disability are not eligible for VSF benefits.**

### *VSF DROP (Deferred Retirement Option Plan)*

In addition to the annual VSF benefit discussed above, members who continue on active duty beyond the 20th anniversary, and ultimately retire for Service, may be entitled to the VSF DROP (Deferred Retirement Option Plan), also known as the “Banked Variable.” The VSF DROP was designed to retain experienced members of the NYPD by guaranteeing a lump sum payment upon retirement for each year the member remains in active service beyond the member’s Early Service Retirement Eligibility Date (20 years). Accrued VSF DROP funds are eligible for rollover, subject to IRS regulations.

The VSF DROP is not payable to members who die while in active service or who are terminated from the NYPD.

### *VSF Payment Schedule*

VSF payments and VSF DROP payments will be made or credited on or about December 15th of the retirement year. Members who retire in the month of December and are eligible for the VSF DROP will not be paid until December of the following year.

## Options

A member may elect to receive a reduced retirement allowance while alive in order to provide a continued benefit for someone else upon the member’s death. There are five options that provide such benefits; a member may elect one. Each option has a cost, determined by the member’s age and the beneficiary’s age at the time of the member’s retirement.

Members will be presented with the estimated cost at or before the time of retirement. A member will be required to choose the option within 30 days of the retirement date or the maximum retirement allowance will be granted. In the case of disability retirements, a member may elect to change any prior option selection within 30 days of approval of the disability benefits by the PPF Board.

- **Maximum Retirement Allowance:** The Maximum Retirement Allowance is the highest pension to which a member is entitled by law. Under the Maximum Retirement Allowance, the pension ceases upon the member's death, and no further pension payments may be made to any survivors.
- **Option 1: 100% Joint and Survivor:** Upon the member's death, the designated beneficiary receives 100% of the member's total monthly benefit for the rest of his or her life. Only one beneficiary may be named and may not be changed. If the beneficiary predeceases the member, pension payments continue at the reduced rate unchanged; a new beneficiary may not be named and benefits cease upon the death of the member.
- **Option 2: Annuity:** Upon the member's death, the designated beneficiary receives a retirement allowance of ninety percent or less (but not less than ten percent) payable for the life of the designated beneficiary. Only one beneficiary may be named, and that beneficiary may not be changed. If the beneficiary predeceases the member, pension payments continue at the reduced rate unchanged; a new beneficiary may not be named and all benefits cease upon the death of the member.
- **Option 3: 5 Year Certain:** If a member elects this option, the benefit is payable to the retiree for life; however, if the member dies within 5 years of retirement, the benefit is only payable to the designated beneficiary until the 5th anniversary of the member's retirement. For example, a member may elect this option and live for 15 years after retirement, upon the member's death the benefit would cease and not be payable to a beneficiary. Conversely, if a member died one year after retirement, under this option the benefit would be payable to the beneficiary for 4 more years.
- **Option 4: 10 Year Certain:** If a member elects this option, the benefit is payable to the retiree for life; however, if the member dies within 10 years of retirement, the benefit is only payable to the designated beneficiary until the 10th anniversary of the member's retirement. For example, a member may elect this option and live for 25 years after retirement, upon the member's death the benefit would cease and not be payable to a beneficiary. Conversely, if a member died 3 years after retirement, under this option the benefit would be payable to the beneficiary for 7 more years.
- **Option 5A: 50% Joint and Survivor with "Pop-up":** Upon the member's death, a retirement allowance in an amount equal to 50% of the member's retirement allowance shall be paid for life to the designated beneficiary. If the beneficiary pre-deceases the member, the retirement allowance "pops up" or reverts to the Maximum Retirement Allowance, as if no retirement option was selected.
- **Option 5B: 100% Joint and Survivor with "Pop-up":** Upon the member's death, a retirement allowance in an amount equal to 100 % of the member's retirement allowance shall be paid for life to the designated beneficiary. If the beneficiary pre-deceases the member, the retirement allowance "pops up" or reverts to the Maximum Retirement Allowance, as if no retirement option was selected.

## Reinstatement

### *Before Service Retirement Eligibility*

#### **Return with five years and member contributions not withdrawn**

Pursuant to New York City Administrative Code (NYC AC) § 13-240, if member contributions have not been withdrawn and the member returns to service within five years of the separation date, membership with the Fund has not ceased. Accordingly, the prior service must be automatically credited to the member. The member's required contribution rate would continue to be based on the member's original tier and appointment date.

#### **Return with five years and member contributions are withdrawn**

##### Tier 3 to Tier 3

To receive credit for the prior NYPD time if contributions have been withdrawn, the member must purchase the prior service through a Chapter 646 or Chapter 552 buyback. Members who are rehired and would obtain an equated date that would bring them into eligibility for an earlier Tier 3 plan will be placed in that plan. A Chapter 552 buyback would not move a member to another Tier 3 Plan.

##### Tier 3 to Tier 2

If a member resigned while Tier 2 was in effect and reinstated after Tier 3 was enacted (July 1, 2009) that member would have to complete a Chapter 646 buyback to tier reinstate pursuant to New York State Retirement and Social Security Law (RSSL) § 645. The member's contribution rate would be governed by RSSL § 645.

### *After Service Retirement*

If, after Service Retirement, a member rejoins the NYPD (i.e., reinstates as a uniformed member), the pension stops and an active membership begins in the Police Pension Fund; the member will receive a new Tax ID Number. A reinstated member must work at least five years after reinstatement before the new service and the prior service from the earlier retirement may be combined for purposes of retiring on a recalculated pension or receiving escalation benefits.

## Retiree Employment Restrictions

NYCPPF retirees must comply with post-retirement earnings restrictions to ensure any portion of the retirement allowance is not jeopardized. All PPF retirees are subject to post-retirement limitations and reemployment restrictions. Violations of any of these laws and/or rules may jeopardize some or all of the retirement allowance. Members are encouraged to consult with PPF prior to accepting any post-retirement employment.

According to §1117 of the New York City Charter, a pension must be suspended or forfeited for retirees employed by New York State or any of its political subdivisions unless the pension, plus the job's salary or compensation, is less than \$1,800 per year. However, sections 211 and 212 of the RSSL may enable service retirees to earn higher amounts.

### *Service and Vested Retirees Under 65*

#### **Section 211: Waiver Required**

RSSL Section 211 enables New York State or any of its political subdivisions to hire retirees who possess certain qualifying skills; however, such an employer needs to obtain a Section 211 Waiver on behalf of the employee. It is the retiree's responsibility to ensure the employer obtains the 211 Waiver and it remains in force throughout the employment period. The NYS Civil Service Commission and the NYC Department of Citywide Administrative Services (DCAS) are among the entities empowered to grant a Section 211 Waiver.

#### **Section 211(a) – Earnings Cap**

If the position's salary or compensation is over \$30,000 and the position is with a former employer (except the NYC Dept. of Ed.), the maximum salary or compensation the non-disability retiree may receive is calculated as follows:

Basis: **Current salary at retirement rank** (salary = base salary + all overtime types + uniform allowance + worked vacation)

Less: **Retirement allowance**

Equals: **Maximum annual earnings**

***The Police Pension Fund will suspend the retirement allowance if the retiree earns more than the maximum annual earnings.***

#### **Section 211(b) – No Earnings Cap**

If the position the non-disability retiree seeks is not with a former employer, the retiree may be hired with no earnings limitations. However, the employer must obtain a Section 211 Waiver on behalf of the employee.

## **Section 212: Earnings Cap**

Under RSSL Section 212, a non-disability retiree under 65 years of age may be employed by New York State or any of its political subdivisions without prior approval of the New York State Civil Service Commission or DCAS. However, the employee's annual salary or compensation must be equal to, or less than, an amount determined by the New York State Legislature (currently \$30,000). A retired PPF member must notify the Executive Director of NYCPPF in writing if he intends to exercise this right. If the retiree's earnings exceed the state-established limit, PPF will suspend the retirement allowance.

## ***Retirees Age 65 and Over***

In the calendar year in which a non-disability retiree attains age 65, and every year thereafter, the retiree has no restrictions on retirement earnings paid by New York State or any of its political subdivisions.

## ***Public Benefit Corporations***

Section 1117 of the New York City Charter does not apply to Public Benefit Corporations (PBCs), so all retirees may work for such corporations with no earnings limitations.

The following are some common PBCs, including but not limited to:

- 👉 Metropolitan Transit Authority
- 👉 New York City Housing Authority
- 👉 New York City Transit Authority
- 👉 New York City Dormitory Authority
- 👉 New York City School Construction Authority
- 👉 New York City Convention Operating Corporation
- 👉 New York City Health and Hospitals Corporation
- 👉 New York/New Jersey Port Authority
- 👉 New York State Urban Development Corporation
- 👉 Waterfront Commission of New York Harbor



## ***Safeguards: Accident Disability Retirees***

### **Before 20<sup>th</sup> Anniversary**

Before the 20<sup>th</sup> anniversary, Ordinary Disability or Accident Disability retirees are not governed by Section 1117 of the New York City Charter. Accordingly, such retirees may earn more than \$1,800.00 per year when employed by New York State or any of its political subdivisions or a public benefit corporation.

However, New York City Administrative Code § 13-254 limits the earnings of pre-20<sup>th</sup> anniversary disability retirees. Maximum earnings are defined as follows:

Base: Current salary\* at next highest rank (immediately above retirement rank)  
Less: Pension portion of the retirement allowance  
Equals: Maximum annual earnings

*\*Salary is defined as base pay plus overtime, uniform allowance for rank at retirement and worked vacation.*

The Police Pension Fund will suspend the pension portion of the retirement allowance if the retiree earns more than the maximum annual earnings.

### **After 20<sup>th</sup> Anniversary**

After the 20<sup>th</sup> anniversary, disability retirees are governed by Section 1117 of the New York City Charter (i.e., the retirement allowance pension portion plus the job's salary or compensation must be less than \$1,800.00 per year). RSSL §§ 211 and 212 do not apply to disability retirees after the 20<sup>th</sup> anniversary as per RSSL § 210.

**Note:** If a disability retiree becomes an employee of New York State or any of its political subdivisions after the 20<sup>th</sup> anniversary, PPF will suspend the pension portion of the member's retirement allowance; however disability retirees may be employed by public benefit corporations and non-public organizations with no earnings limitations after the 20<sup>th</sup> anniversary.

## ***Safeguards: Ordinary Disability Retirees***

If a disability retiree becomes ineligible for primary Social Security benefits before reaching age 65, the retirement benefits from the Fund shall cease. If the disability benefit is not conditioned on receipt of Social Security Disability benefits, but the retiree engages in employment or business activity that would render the retiree ineligible for primary Social Security Disability benefits, the benefit from the Fund will also cease.

If the disability retiree is found to be ineligible for disability benefits but is otherwise eligible for City employment, the retiree will be placed on a preferred eligible list of the City of New York. The disability benefit will continue until the retiree is offered a civil service position from the preferred eligible list, at which time the disability benefit shall cease.

## Death Benefits

### *In Service*

To be eligible for an Ordinary Death Benefit, a member needs to have completed ninety (90) days of uniformed service with the NYPD.

**The Ordinary Death Benefit is calculated as follows:**

3 x member's salary raised to the next highest multiple of \$1,000

-plus-

a return of the member's accumulated contributions

The Ordinary Death Benefit is paid to a beneficiary designated by the member. Members may designate multiple beneficiaries.

Any death benefits paid, except for the Accidental Death Benefit, are in lieu of all other statutory death benefits.

### *Vested But Not Yet Collecting*

A vested member who dies prior to payability is entitled to 50% of an ordinary death benefit.

### *Accidental Death*

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

The application for Accidental Death Benefits must be filed within two years of the death of the member.

Eligible beneficiaries are dictated by statute, payable in the following hierarchy:

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

In the event that a class of eligible beneficiaries consists of more than one person, the benefit will be divided equally.

**The benefit is paid as follows:**

A New York City-paid pension based on 50% of final average salary

-plus-

Special Accidental Death benefit (SADB): A New York State-paid pension equal to the member's final year's salary, less the New York City-paid pension, less the Social Security benefits.

If an Accidental Death Benefit payment to an eligible beneficiary does not exceed what an Ordinary Death Benefit would have been, a lump sum payment of the difference between the Ordinary Death Benefit and what was paid as an Accidental Death Benefit will be paid to the last eligible beneficiary listed above.

If there are no eligible beneficiaries, the death benefit will be converted to an Ordinary Death Benefit and the Fund will pay the designated beneficiary on file.

## **Beneficiaries**

All members designate a beneficiary (or beneficiaries) for Death Benefits when joining the PPF; however, whenever a member's social condition changes (e.g., marriage, separation, divorce), the beneficiary designation should be updated.

Reviewing beneficiary designations regularly is well worth the time and effort; doing so protects both assets and heirs. Tax filing and open enrollment periods are recommended times to do this. Major life events, e.g., marriage, remarriage, divorce, birth, adoption and death, often create the need to update beneficiaries.

### ***Checking Your Beneficiary***

To obtain beneficiary information, either visit PPF in person or mail a request to the New York City Police Pension Fund, 233 Broadway, 19th Floor, New York, New York, 10279, attention: Membership Services Unit. Due to privacy concerns, telephone and e-mail requests are not permitted.

## ***Changing Line Organization Beneficiaries***

Whenever checking beneficiary information with the PPF, remember to also contact the appropriate line organization at the address and number listed below to obtain beneficiary information in those records, as well:

<b><i>Police Officers</i></b>	Patrolmen's Benevolent Association (PBA)	212-349-7560
<b><i>Sergeants</i></b>	Sergeants' Benevolent Association (SBA)	212-431-6555
<b><i>Detectives</i></b>	Detectives' Endowment Association (DEA)	212-587-1000
<b><i>Lieutenants</i></b>	Lieutenants' Benevolent Association (LBA)	212-964-7500
<b><i>Captains &amp; above</i></b>	Captains' Endowment Association (CEA)	212-964-7500

## ***Changing Beneficiaries***

The PPF Change of Beneficiary Form is available on the PPF website. The form must be notarized and may be mailed to: New York City Police Pension Fund, 233 Broadway, 19th Floor, New York, New York, 10279, attention: Membership Services Unit. Questions may be directed to Membership Services at 212-693-5850.

## ***Changing Health Insurance Dependents***

To change the dependents on health insurance by mail or in person, please contact the NYPD Health Insurance Section, 51 Chambers Street, 3rd Floor, New York, New York 10007 or call 646-610-5122 for information.

## ***Changing Deferred Compensation Plan Beneficiaries***

If enrolled in the NYC Deferred Compensation Plan, call 212-306-7760 for information about updating Plan Beneficiaries. Information is also available at [www.nyc.gov/OLR](http://www.nyc.gov/OLR). Click on Forms and Downloads and download the Beneficiary Distribution Guide/Form.

## ***Guide for Surviving Beneficiaries***

There are few situations in life more stressful than the loss of a loved one; there are no words of comfort at such a difficult time. This section is designed to aid the survivors of PPF members by providing a checklist of who to contact upon the death of a PPF member or retiree, and the information that is required. There are four calls to make:

## 1. NYPD Operations Unit

- Survivors should call NYPD Operations at 646-610-5580, located at NYPD Headquarters, 1 Police Plaza, New York, New York 10038. Pall bearers may be requested at that time and are available for all five City boroughs, Long Island, Westchester, Rockland, Orange and Putnam counties.

## 2. NYC Police Pension Fund

- Please notify PPF in writing at 233 Broadway, 19th Floor, New York, NY 10279, attention: Death Benefits Unit or by telephone at 212-693-5619/5919. Please have the following information available at the time of the phone call: the first, middle and last name of the deceased; the date of death; Social Security Number of the deceased; name of the next of kin; and name, address and phone number of the executor or executrix of the estate, if applicable.
- The Fund will need:
  - ✓ A certified copy of the death certificate;
  - ✓ A copy of the paid funeral bill;
  - ✓ A copy of the marriage certificate, if applicable; and
  - ✓ A copy of the beneficiary's Social Security card.

Prompt receipt of these items will expedite the Fund's ability to make payments to any beneficiaries.

## 3. Member's line organization

- Contact the appropriate line organization below, and ask about a possible life insurance policy and whether any continuing optional benefits are available:

PBA	125 Broad St.	11th Floor	212-349-7560
DEA	26 Thomas St.		212-587-1000
SBA	35 Worth St.	First and second floor	212-431-6555
LBA	40 Peck Slip		212-964-7500
CEA	40 Peck Slip		212-964-7500

## 4. Health Benefits Program

- Contact the NYC Health Benefits Program to request the appropriate health benefits forms. This Program is located at 40 Rector Street, 3rd Floor, New York, NY 10006 and can be reached at 212-513-0470.

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# NEW YORK CITY POLICE PENSION FUND

A Pension Trust Fund of the City of New York  
Comprehensive Annual Financial Report



**Financial Section  
Part II**

*fiscal year ended  
June 30, 2020*

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## REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

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

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

### **Management's responsibility for the 2020 combining financial statements**

Management is responsible for the preparation and fair presentation of these 2020 combining financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of combining financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditor's responsibility**

Our responsibility is to express an opinion on these 2020 combining financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the 2020 combining financial statements are free from material misstatement.

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

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

**Opinion**

In our opinion, the 2020 combining financial statements referred to above present fairly, in all material respects, the combining fiduciary net position of the System as of June 30, 2020, and the changes in the combining fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

**Other Matters***Required supplementary information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, Schedule 1 - Schedules of Changes in the Employers' Net Pension Liability and Related Ratios, Schedule 2 - Schedules of City Contributions, and Schedule 3 - Schedule of Investment Returns, as listed in the table of contents, be presented to supplement the basic 2020 combining financial statements. Such information, although not a required part of the basic 2020 combining financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the basic 2020 combining financial statements in an appropriate operational, economic, or historical context. This required supplementary information is the responsibility of management. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America. These limited procedures consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic 2020 combining financial statements, and other knowledge we obtained during our audit of the basic 2020 combining financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

*Other information*

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

The Additional Supplementary Information (Schedule of Investment Expenses, Schedule of Pension Cost Allocation, and Schedule of Administrative Expenses for the year ended June 30, 2020, is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic combining financial statements. Such information has been subjected to the auditing procedures, applied in the audit of the basic combining financial statements and certain additional procedures, applied in the audit of the basic combining financial statements or to the basic combining financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Additional Supplementary Information is fairly stated, in all material respects, in relation to the basic combining financial statements taken as a whole.

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

*Report on 2019 combining financial statements*

The combining financial statements of the System as of and for the year ended June 30, 2019 ("2019 combining financial statements") were audited by other auditors. Those auditors expressed an unmodified opinion on those 2019 combining financial statements in their report dated October 24, 2019.

*Grant Thornton LLP*

New York, New York

October 28, 2020

(except for the Additional Supplementary Information,  
as to which the date is December 18, 2020)

**NEW YORK CITY POLICE PENSION FUNDS  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
JUNE 30, 2020 and 2019**

This narrative discussion and analysis of the New York City Police Pension Funds ("POLICE", "Funds" or the "Plan"), provides an overview of the Funds combining financial activities for the Fiscal Years ended June 30, 2020 and 2019. It is meant to assist the reader in understanding the Funds combining financial statements by providing an overall review of the combining financial activities during the years and the effects of significant changes, as well as a comparison with the prior year's activity and results. This discussion and analysis is intended to be read in conjunction with the Funds combining financial statements.

The Fund administer: the New York City Police Pension Funds, Tiers 1, 2, 3, and 6 (Tier 3 Revised), in conjunction with the establishment of an administrative staff separate from the New York City Police Department, in accordance with Chapter 292 of the Laws of 2001 – Qualified Pension Plan ("QPP") – as set forth in the Administrative Code of the City of New York ("ACNY") § 13-214.1; the Police Superior Officers' Variable Supplements Fund ("PSOVSF"), as set forth in ACNY § 13-278; and the Police Officers' Variable Supplements Fund ("POVSF"), as set forth in ACNY § 12-268.

***Overview of Basic Combining Financial Statements***

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

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

***Financial Highlights***

The Funds net position restricted for benefits increased by \$1.3 billion, or 2.8% to \$46.3 billion in Fiscal Year 2020 compared to Fiscal Year 2019, and increased by \$2.4 billion, or 5.6% to \$44.9 billion in Fiscal Year 2019 compared to Fiscal Year 2018. The Funds net position restricted for benefits increased in Fiscal Years 2020 and 2019 due to contributions and investment income exceeding benefit payments and withdrawals.

**NEW YORK CITY POLICE PENSION FUNDS  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
JUNE 30, 2020 and 2019**

**Changes in Fiduciary Net Position**

**Years Ended June 30, 2020, 2019, and 2018**

**(In thousands)**

	2020	2019	2018
<b>Additions:</b>			
Member contributions	\$ 280,129	\$ 278,087	\$ 267,031
Employer contributions	2,458,907	2,558,256	2,415,153
Net investment income	2,038,305	2,861,543	3,964,010
Litigation income	4,488	2,276	1,838
Net receipts from other retirement systems	2,053	1,907	1,627
Total additions	<u>4,783,882</u>	<u>5,702,069</u>	<u>6,649,659</u>
<b>Deductions:</b>			
Benefit payments and withdrawals	3,491,495	3,282,070	3,197,971
Administrative expenses	26,803	29,005	21,146
Total deductions	<u>3,518,298</u>	<u>3,311,075</u>	<u>3,219,117</u>
Net increase in net position	1,265,584	2,390,994	3,430,542
<b>Net position restricted for benefits</b>			
Beginning of year	<u>44,997,307</u>	<u>42,606,313</u>	<u>39,175,771</u>
End of year	<u>\$ 46,262,891</u>	<u>\$ 44,997,307</u>	<u>\$ 42,606,313</u>

During Fiscal Year 2020, member contributions increased 0.7% to \$280.1 million as compared to Fiscal Year 2019 contributions of \$278.1 million. This change was due to members increasing their deductions. During Fiscal Year 2019, member contributions increased 4.1% to \$278.1 million as compared to Fiscal Year 2018 contributions of \$267.0 million. This change was due to members increasing their deductions. In accordance with the pension plan requirements, certain members, under certain conditions, may elect to increase or decrease their deductions.

Employer contributions in Fiscal Year 2020 were \$2.46 billion, a decrease of 3.9% from Fiscal Year 2019 contributions of \$2.56 billion primarily due to experience gains. Employer contributions in Fiscal Year 2019 were \$2.56 billion, an increase of 5.9% from Fiscal Year 2018 contributions of \$2.42 billion primarily due to an increase in the payment for the Initial Actuarial Liability established as of June 30, 2010.

Benefit payments and withdrawals were \$3.49 billion, \$3.28 billion, and \$3.20 billion for the Fiscal Years ended June 30, 2020, 2019 and 2018, respectively. This is primarily due to an increase in the number of retirees eligible for benefits.

In Fiscal Year 2002, Chapter 292 of the New York State Laws of 2001 provided the Funds with corpus funding for administrative expenses. In Fiscal Years 2020, 2019, 2018, the administrative expenses were \$26.8 million, \$29.0 million, and \$21.1 million, respectively.

***Fiduciary Net Position***

In Fiscal Year 2020, the Funds experienced a 2.8% increase in the combined net position restricted for benefits due to an increase in assets compared to Fiscal Year 2019, when a 5.6% increase from Fiscal Year 2018 was noted.

**NEW YORK CITY POLICE PENSION FUNDS  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
JUNE 30, 2020 and 2019**

**Fiduciary Net Position**

**June 30, 2020, 2019 and 2018**

**(In thousands)**

	<u>2020</u>	<u>2019</u>	<u>2018</u>
Cash	\$ 17,972	\$ 26,127	\$ 8,102
Receivables	829,771	1,128,838	790,916
Investments — at fair value	46,807,184	45,251,365	43,021,858
Collateral from securities lending	3,559,791	3,851,420	4,927,493
Other assets	9,716	7,093	6,583
Total assets	<u>51,224,434</u>	<u>50,264,843</u>	<u>48,754,952</u>
Accounts payable and other liabilities	1,401,752	1,416,116	1,221,146
Securities lending	3,559,791	3,851,420	4,927,493
Total liabilities	<u>4,961,543</u>	<u>5,267,536</u>	<u>6,148,639</u>
Net position restricted for benefits	<u>\$ 46,262,891</u>	<u>\$ 44,997,307</u>	<u>\$ 42,606,313</u>

Receivables and payables related to investment securities are primarily generated through the timing differences between the trade and settlement dates of investment securities purchased or sold.

**NEW YORK CITY POLICE PENSION FUNDS  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
JUNE 30, 2020 and 2019**

**Investment Summary**

**June 30, 2020**

**(In thousands)**

<u>Investments — At fair value:</u>	<u>QPP</u>	<u>PSOVSF</u>	<u>POVSF</u>	<u>Combined</u>
Short-term investments:				
Commercial paper	\$ 238,555	\$ 69,000	\$ 3,000	\$ 310,555
Short-term investment fund	293,923	-	679	294,602
U.S. treasury bills and agencies	636,923	2,005	4,005	642,933
Debt securities:				
Bank loans	226,857	-	-	226,857
Corporate and other	4,396,908	-	-	4,396,908
Mortgage debt securities	1,377,705	-	-	1,377,705
Treasury inflation protected securities	1,710,665	-	-	1,710,665
U.S. government and agencies	3,069,573	-	-	3,069,573
Equity securities:				
Domestic equity	13,542,621	994,288	591,182	15,128,091
International equity	2,814,260	-	-	2,814,260
Collective trust funds at NAV:				
Bank loans	514,197	-	-	514,197
Corporate and other	11,597	332,546	206,576	550,719
Domestic equity	356,956	115,789	68,109	540,854
International equity	2,872,858	852,805	467,350	4,193,013
Mortgage debt securities	205,647	312,925	194,387	712,959
Opportunistic fixed income	137,770	-	-	137,770
Treasury inflation protected securities	-	-	-	-
U.S. government and agency	-	431,900	268,294	700,194
Alternative Investments:				
Infrastructure	504,681	-	-	504,681
Opportunistic fixed income	1,354,060	-	-	1,354,060
Private equity	2,489,568	-	-	2,489,568
Private real estate	2,181,695	-	-	2,181,695
Hedge fund investment	2,955,325	-	-	2,955,325
Collateral from securities lending	3,430,138	77,814	51,839	3,559,791
 Total investments	 <u>\$ 45,322,482</u>	 <u>\$ 3,189,072</u>	 <u>\$ 1,855,421</u>	 <u>\$ 50,366,975</u>

**NEW YORK CITY POLICE PENSION FUNDS  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
JUNE 30, 2020 and 2019**

**Investment Summary**

**June 30, 2019**

**(In thousands)**

<u>Investments — At fair value:</u>	<u>QPP</u>	<u>PSOVSF</u>	<u>POVSF</u>	<u>Combined</u>
Short-term investments:				
Commercial paper	\$ 235,970	\$ -	\$ -	\$ 235,970
Discount notes	162,145	6,492	5,927	174,564
Short-term investment fund	234,110	1,005	651	235,766
U.S. treasury bills and agencies	-	-	-	-
Debt securities:				
Bank loans	206,667	-	-	206,667
Corporate and other	3,696,453	-	-	3,696,453
Mortgage debt securities	861,533	-	-	861,533
Treasury inflation protected securities	1,412,234	-	-	1,412,234
U.S. government and agencies	4,618,579	-	-	4,618,579
Equity securities:				
Domestic equity	12,958,661	811,896	613,984	14,384,541
International equity	259,640	-	-	259,640
Collective trust funds at NAV:				
Bank loans	536,357	-	-	536,357
Corporate and other	50,620	237,504	181,261	469,385
Domestic equity	87,942	89,563	66,139	243,644
International equity	5,984,252	687,831	516,950	7,189,033
Mortgage debt securities	204,347	247,255	188,703	640,305
Opportunistic fixed income	132,311	-	-	132,311
Treasury inflation protected securities	457,367	-	-	457,367
U.S. government and agency	25,958	347,758	265,406	639,122
Alternative Investments:				
Infrastructure	406,813	-	-	406,813
Opportunistic fixed income	1,223,141	-	-	1,223,141
Private equity	2,516,553	-	-	2,516,553
Private real estate	1,980,800	-	-	1,980,800
Hedge fund investment	2,730,587	-	-	2,730,587
Collateral from securities lending	3,733,667	67,906	49,847	3,851,420
<b>Total investments</b>	<b>\$ 44,716,707</b>	<b>\$ 2,497,210</b>	<b>\$ 1,888,868</b>	<b>\$ 49,102,785</b>

Due to the long-term nature of the Funds' liabilities, the assets are invested with a long-term investment horizon. Assets are invested in a diversified portfolio of capital market securities. Investments in these assets are expected to produce higher returns, but are also subject to greater volatility and may produce negative returns. For example, the Russell 3000 Index, a broad measure of the United States stock market decreased to 6.53% from 8.98% in Fiscal Years 2020 and 2019, respectively. In 2020, the World ex-USA Custom BM Index decreased to -5.11% from 0.16% in 2019. In Fiscal Year 2020, the Emerging International Market decreased to -3.39%, while in Fiscal Year 2019 it gained 1.21%. For the three-year period ended June 30, 2020, the overall rate of return on investments for QPP, PSOVSF, POVSF were 7.21%, 6.35% and 6.03%, for the five-year period the return was 7.23%, 6.51% and 6.32% and for the ten-year period was 9.27%, 8.99% and 9.55%.



**NEW YORK CITY POLICE PENSION FUNDS  
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)  
JUNE 30, 2020 and 2019**

Assets are invested long-term for the benefit of the Funds participants and their beneficiaries. All investments are managed by registered investment managers and advisors, pursuant to applicable laws and to guidelines issued by The Comptroller of the City of New York. Collectively, the investments utilize fourteen domestic equity managers, seventeen international equity managers, twenty-four hedge fund managers, forty-seven private real estate managers, ten infrastructure managers, one hundred two private equity investment managers, twelve public fixed income managers, and twenty-eight alternative credit managers and one Economically Targeted Investment ("ETI") manager.

Assets are allocated in accordance with policy adopted periodically by the Funds' Board of Trustees. The percentage in each category is determined by a study indicating the probable rates of return and levels of risk for various asset allocations. The actual allocation may vary from this policy mix as fair values shift and as investments are added or terminated.

***Contact information***

This financial report is designed to provide a general overview of the New York City Police Pension Funds finances. Questions concerning any data provided in this report or requests for additional information should be directed to the Director of Accounting, New York City Police Pension Fund, 233 Broadway, 25th Floor, New York, NY 10279.

**NEW YORK CITY POLICE PENSION FUNDS**  
**COMBINING STATEMENTS OF FIDUCIARY NET POSITION**  
**JUNE 30, 2020**  
(In thousands)

	QPP	PSOVSF	POVSF	Eliminations	Total Funds
<b>ASSETS:</b>					
<b>Cash</b>	\$ 9,815	\$ 3,944	\$ 4,213	\$ -	\$ 17,972
<b>Receivables:</b>					
Investments Securities Sold	608,688	852	509	-	610,049
Member Loans	218,592	-	-	-	218,592
Transferable Earnings FY 19	-	31,561	1,452	(33,013)	-
Transferable Earnings FY 20	-	141,000	143,000	(284,000)	-
Accrued Interest & Dividends	1,009	78	43	-	1,130
Total receivables	828,289	173,491	145,004	(317,013)	829,771
<b>Investments - At Fair Value</b>					
Short-Term Investments:					
Commercial Paper	238,555	69,000	3,000	-	310,555
Discount Notes	-	-	-	-	-
Short Term Investment Fund	293,923	-	679	-	294,602
U.S. Treasury bills and Agencies	636,923	2,005	4,005	-	642,933
Debt Securities:					
Bank Loans	226,857	-	-	-	226,857
Corporate and Other	4,396,908	-	-	-	4,396,908
Mortgage Debt Securities	1,377,705	-	-	-	1,377,705
Treasury Inflation Protected Securities	1,710,665	-	-	-	1,710,665
U.S. Government and Agency	3,069,573	-	-	-	3,069,573
Equity Securities:					
Domestic Equity	13,542,621	994,288	591,182	-	15,128,091
International Equity	2,814,260	-	-	-	2,814,260
Collective Pooled funds:					
Bank Loans	514,197	-	-	-	514,197
Corporate and Other	11,597	332,546	206,576	-	550,719
Domestic Equity	356,956	115,789	68,109	-	540,854
International Equity	2,872,858	852,805	467,350	-	4,193,013
Mortgage Debt Securities	205,647	312,925	194,387	-	712,959
Opportunistic Fixed Income	137,770	-	-	-	137,770
Treasury Inflation Protected Securities	-	-	-	-	-
U.S. Government and Agency	-	431,900	268,294	-	700,194
Alternative investments:					
Infrastructure	504,681	-	-	-	504,681
Opportunistic Fixed Income	1,354,060	-	-	-	1,354,060
Private Equity	2,489,568	-	-	-	2,489,568
Private Real Estate	2,181,695	-	-	-	2,181,695
Hedge Fund Investment	2,955,325	-	-	-	2,955,325
Collateral from securities lending	3,430,138	77,814	51,839	-	3,559,791
Total investments	45,322,482	3,189,072	1,855,421	-	50,366,975
Other assets	9,716	-	-	-	9,716
Total assets	46,170,302	3,366,507	2,004,638	(317,013)	51,224,434
<b>LIABILITIES:</b>					
Accounts payable	49,637	69,315	347	-	119,299
Payable for investment securities purchased	1,026,317	1,643	345	-	1,028,305
Accrued benefits payable	54,183	121,306	78,659	-	254,148
Transferable earnings FY 19	33,013	-	-	(33,013)	-
Transferable earnings FY 20	284,000	-	-	(284,000)	-
Collateral from securities lending	3,430,138	77,814	51,839	-	3,559,791
Total liabilities	4,877,288	270,078	131,190	(317,013)	4,961,543
Net position restricted for benefits:					
Benefits to be provided by QPP	41,293,014	-	-	-	41,293,014
Benefits to be provided by VSF	-	3,096,429	1,873,448	-	4,969,877
Total net position restricted for benefits	\$ 41,293,014	\$ 3,096,429	\$ 1,873,448	\$ -	\$ 46,262,891

The accompanying notes are an integral part of these combining financial statements.

**NEW YORK CITY POLICE PENSION FUNDS**  
**COMBINING STATEMENTS OF FIDUCIARY NET POSITION**  
**JUNE 30, 2019**  
(In thousands)

	<u>QPP</u>	<u>PSOVSF</u>	<u>POVSF</u>	<u>Eliminations</u>	<u>Total Funds</u>
<b>ASSETS:</b>					
<b>Cash</b>	\$ 23,690	\$ 411	\$ 2,026	\$ -	\$ 26,127
<b>Receivables:</b>					
Investments Securities Sold	865,477	12,469	9,491	-	887,437
Member Loans	238,644	-	-	-	238,644
Transferable Earnings FY 17	-	241,628	24,164	(265,792)	-
Transferable Earnings FY 18	-	115,000	3,000	(118,000)	-
Transferable Earnings FY 19	-	311,000	108,000	(419,000)	-
Accrued Interest & Dividends	2,294	228	235	-	2,757
Total receivables	<u>1,106,415</u>	<u>680,325</u>	<u>144,890</u>	<u>(802,792)</u>	<u>1,128,838</u>
<b>Investments - At Fair Value</b>					
Short-Term Investments:					
Commercial Paper	235,970	-	-	-	235,970
Discount Notes	162,145	6,492	5,927	-	174,564
Short Term Investment Fund	234,110	1,005	651	-	235,766
Debt Securities:					
Bank Loans	206,667	-	-	-	206,667
Corporate and Other	3,696,453	-	-	-	3,696,453
Mortgage Debt Securities	861,533	-	-	-	861,533
Treasury Inflation Protected Securities	1,412,234	-	-	-	1,412,234
U.S. Government and Agency	4,618,579	-	-	-	4,618,579
Equity Securities:					
Domestic Equity	12,958,661	811,896	613,984	-	14,384,541
International Equity	259,640	-	-	-	259,640
Collective Pooled funds:					
Bank Loans	536,357	-	-	-	536,357
Corporate and Other	50,620	237,504	181,261	-	469,385
Domestic Equity	87,942	89,563	66,139	-	243,644
International Equity	5,984,252	687,831	516,950	-	7,189,033
Mortgage Debt Securities	204,347	247,255	188,703	-	640,305
Opportunistic Fixed Income	132,311	-	-	-	132,311
Treasury Inflation Protected Securities	457,367	-	-	-	457,367
U.S. Government and Agency	25,958	347,758	265,406	-	639,122
Alternative investments:					
Infrastructure	406,813	-	-	-	406,813
Opportunistic Fixed Income	1,223,141	-	-	-	1,223,141
Private Equity	2,516,553	-	-	-	2,516,553
Private Real Estate	1,980,800	-	-	-	1,980,800
Hedge Fund Investment	2,730,587	-	-	-	2,730,587
Collateral from securities lending	3,733,667	67,906	49,847	-	3,851,420
Total investments	<u>44,716,707</u>	<u>2,497,210</u>	<u>1,888,868</u>	<u>-</u>	<u>49,102,785</u>
Other assets	7,093	-	-	-	7,093
Total assets	<u>45,853,905</u>	<u>3,177,946</u>	<u>2,035,784</u>	<u>(802,792)</u>	<u>50,264,843</u>
<b>LIABILITIES:</b>					
Accounts payable	265,086	244	188	-	265,518
Payable for investment securities purchased	863,328	12,440	9,350	-	885,118
Accrued benefits payable	69,608	118,052	77,820	-	265,480
Transferable earnings FY 17	265,792	-	-	(265,792)	-
Transferable earnings FY 18	118,000	-	-	(118,000)	-
Transferable earnings FY 19	419,000	-	-	(419,000)	-
Collateral from securities lending	3,733,667	67,906	49,847	-	3,851,420
Total liabilities	<u>5,734,481</u>	<u>198,642</u>	<u>137,205</u>	<u>(802,792)</u>	<u>5,267,536</u>
Net position restricted for benefits:					
Benefits to be provided by QPP	40,119,424	-	-	-	40,119,424
Benefits to be provided by VSF	-	2,979,304	1,898,579	-	4,877,883
Total net position restricted for benefits	<u>\$ 40,119,424</u>	<u>\$ 2,979,304</u>	<u>\$ 1,898,579</u>	<u>\$ -</u>	<u>\$ 44,997,307</u>

The accompanying notes are an integral part of these combining financial statements.

**NEW YORK CITY POLICE PENSION FUNDS**  
**COMBINING STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION**  
**YEAR ENDED JUNE 30, 2020**  
(In thousands)

	QPP	PSOVSF	POVSF	Eliminations	Total Funds
<b>ADDITIONS:</b>					
Contributions:					
Member contributions	\$ 280,129	\$ -	\$ -	\$ -	\$ 280,129
Employer contributions	2,458,907	-	-	-	2,458,907
Total contributions	<u>2,739,036</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2,739,036</u>
Investment income (Note 2):					
Interest income	421,859	65,359	35,663	-	522,881
Dividend income	497,886	41,093	27,344	-	566,323
Net appreciation (depreciation) in fair value of investments	1,191,629	40,878	(66,717)	-	-
Total investment income	<u>2,111,374</u>	<u>147,330</u>	<u>(3,710)</u>	<u>-</u>	<u>2,254,994</u>
Less investment expenses	226,384	1,545	998	-	228,927
Net income	<u>1,884,990</u>	<u>145,785</u>	<u>(4,708)</u>	<u>-</u>	<u>2,026,067</u>
Securities lending transactions:					
Securities lending income	12,194	797	533	-	13,524
Less securities lending fees	1,172	68	46	-	1,286
Net securities lending income	<u>11,022</u>	<u>729</u>	<u>487</u>	<u>-</u>	<u>12,238</u>
Net investment income	<u>1,896,012</u>	<u>146,514</u>	<u>(4,221)</u>	<u>-</u>	<u>2,038,305</u>
Net receipts from other retirement systems	2,053	-	-	-	2,053
Transferable earnings FY 18	-	115,550	1,808	(117,358)	-
Transferable earnings FY 20	-	141,000	143,000	(284,000)	-
Litigation income	4,435	24	29	-	4,488
Total additions	<u>4,641,536</u>	<u>403,088</u>	<u>140,616</u>	<u>(401,358)</u>	<u>4,783,882</u>
<b>DEDUCTIONS:</b>					
Benefit payments and withdrawals	3,039,785	285,963	165,747	-	3,491,495
Transferable earnings FY 18	117,358	-	-	(117,358)	-
Transferable earnings FY 20	284,000	-	-	(284,000)	-
Administrative expenses	26,803	-	-	-	26,803
Total deductions	<u>3,467,946</u>	<u>285,963</u>	<u>165,747</u>	<u>(401,358)</u>	<u>3,518,298</u>
Net increase in net position	1,173,590	117,125	(25,131)	-	1,265,584
Net position restricted for benefits					
Beginning of year	40,119,424	2,979,304	1,898,579	-	44,997,307
End of year	<u>\$ 41,293,014</u>	<u>\$ 3,096,429</u>	<u>\$ 1,873,448</u>	<u>\$ -</u>	<u>\$ 46,262,891</u>

The accompanying notes are an integral part of these combining financial statements.

**NEW YORK CITY POLICE PENSION FUNDS**  
**COMBINING STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION**  
**YEAR ENDED JUNE 30, 2019**  
(In thousands)

	QPP	PSOVSF	POVSF	Eliminations	Total Funds
<b>ADDITIONS:</b>					
Contributions:					
Member contributions	\$ 278,087	\$ -	\$ -	\$ -	\$ 278,087
Employer contributions	2,558,256	-	-	-	2,558,256
Total contributions	<u>2,836,343</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2,836,343</u>
Investment income (Note 2):					
Interest income	548,925	20,198	19,067	-	588,190
Dividend income	494,434	34,196	30,837	-	559,467
Net appreciation (depreciation) in fair value of investments	1,772,808	122,481	54,392	-	1,949,681
Total investment income	<u>2,816,167</u>	<u>176,875</u>	<u>104,296</u>	<u>-</u>	<u>3,097,338</u>
Less investment expenses	249,849	1,313	1,122	-	252,284
Net income	<u>2,566,318</u>	<u>175,562</u>	<u>103,174</u>	<u>-</u>	<u>2,845,054</u>
Securities lending transactions:					
Securities lending income	17,063	645	573	-	18,281
Less securities lending fees	1,679	60	53	-	1,792
Net securities lending income	<u>15,384</u>	<u>585</u>	<u>520</u>	<u>-</u>	<u>16,489</u>
Net investment income	<u>2,581,702</u>	<u>176,147</u>	<u>103,694</u>	<u>-</u>	<u>2,861,543</u>
Net receipts from other retirement systems	1,907	-	-	-	1,907
Transferable earnings FY 17	39,836	99,628	-	(139,464)	-
Transferable earnings FY 18	100,000	-	-	(100,000)	-
Transferable earnings FY 19	-	311,000	108,000	(419,000)	-
Litigation income	2,201	35	40	-	2,276
Total additions	<u>5,561,989</u>	<u>586,810</u>	<u>211,734</u>	<u>(658,464)</u>	<u>5,702,069</u>
<b>DEDUCTIONS:</b>					
Benefit payments and withdrawals (Note 1)	2,853,799	263,076	165,195	-	3,282,070
Transferable earnings FY 17	99,628	-	39,836	(139,464)	-
Transferable earnings FY 18	-	-	100,000	(100,000)	-
Transferable earnings FY 19	419,000	-	-	(419,000)	-
Administrative expenses	29,005	-	-	-	29,005
Total deductions	<u>3,401,432</u>	<u>263,076</u>	<u>305,031</u>	<u>(658,464)</u>	<u>3,311,075</u>
Net increase in net position	2,160,557	323,734	(93,297)	-	2,390,994
Net position restricted for benefits					
Beginning of year	37,958,867	2,655,570	1,991,876	-	42,606,313
End of year	<u>\$ 40,119,424</u>	<u>\$ 2,979,304</u>	<u>\$ 1,898,579</u>	<u>\$ -</u>	<u>\$ 44,997,307</u>

The accompanying notes are an integral part of these combining financial statements.

**NEW YORK CITY POLICE PENSION FUNDS**  
**NOTES TO COMBINING FINANCIAL STATEMENTS**  
**JUNE 30, 2020 and 2019**

**NOTE 1 - PLAN DESCRIPTION**

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

POLICE administers the New York City Police Pension Funds, Tiers 1, 2, 3, and Tier 6 (Tier 3 Revised), in conjunction with the establishment of an administrative staff separate from the New York City Police Department, in accordance with Chapter 292 of the Laws of 2001- Qualified Pension Plan (“QPP”); as set forth in Administrative Code of The City of New York (“ACNY”) § 13-214.1, the Police Superior Officers’ Variable Supplements Fund (“PSOVSF”), as set forth in ACNY § 13-278; and the Police Officers’ Variable Supplements Fund (“POVSF”), as set forth in ACNY § 13-268.

The QPP is a single-employer pension plan. The QPP provides pension benefits for full-time uniformed employees of the New York City Police Department (“Employer”). All full-time uniformed employees of the New York City Police Department become members of the QPP upon employment. 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 PSOVSF and the POVSF (collectively, “VSFs”) operate pursuant to the provisions of Title 13, Chapter 2 of the ACNY and provide supplemental benefits to retired Police Superior Officers (including Detectives, and Sergeants through Deputy Chiefs) and retired Police Officers, respectively. To be eligible to receive benefits from the VSFs, Police Superior Officers or Police Officers must retire on or after October 1, 1968 with 20 or more years of credited service, and be receiving a service retirement benefit from the QPP. Under current law, the VSFs are not to be construed as constituting a pension or retirement system. Instead, they provide defined supplemental payments, other than pension or retirement system allowances, in accordance with applicable statutory provisions. While the City guarantees these payments, the New York State Legislature has reserved to itself and the State the right and power to amend, modify, or repeal the VSFs and the payments they provide. For financial reporting purposes, however, the VSFs are considered single-employer defined benefit pension plans.

POLICE is a fiduciary fund of the City and is included in the Pension and Other Employee Benefit Trust Funds section of the City’s Comprehensive Annual Financial Report (“CAFR”).

***Board of Trustees***

The QPP Board of Trustees consists of twelve members. The Trustees and their voting rights are as follows: The Police Commissioner, representative of the Mayor, the Comptroller, and the Commissioner of Finance (one and one-half votes each); four specified officers of the Patrolmen’s Benevolent Association (one vote each); and the presidents of the Detectives’ Endowment Association, the Sergeants Benevolent Association, the Lieutenants Benevolent Association, and the Captains Endowment Association (one-half vote each).

The PSOVSF Board of Trustees consists of seven members. The Trustees and their voting rights are as follows: a representative of the Mayor, the Comptroller and the Commissioner of Finance (two votes each), and four representatives of the Police Superior Officers’ Associations who are the four members of the QPP Board of Trustees (one vote each).

**NEW YORK CITY POLICE PENSION FUNDS  
NOTES TO COMBINING FINANCIAL STATEMENTS  
JUNE 30, 2020 and 2019**

The POVSF Board of Trustees consists of five members each with one vote: a representative of the Mayor, Comptroller, and Commissioner of Finance and two of the officers of the Patrolmen's Benevolent Association that are members of the QPP Board of Trustees.

**Membership Data**

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

	QPP		
	2020*	2019	2018
Retirees and beneficiaries receiving benefits	54,456	50,727	50,124
Terminated vested members not yet receiving benefits	469	497	491
Active Off Payroll**	2,666	1,640	1,940
Active members receiving salary	34,581	36,401	36,562
Total	<u>92,172</u>	<u>89,265</u>	<u>89,117</u>

\* Estimated figures

\*\* Represents members who are no longer on payroll but not otherwise classified.

At June 30, 2020, 2019, and 2018 the PSOVSF and POVSF membership consisted of:

	PSOVSF			POVSF		
	2020*	2019	2018	2020*	2019	2018
Retirees currently receiving Payments	19,440	19,424	19,005	12,687	12,800	12,675
Active members***	11,695	12,692	12,721	23,006	23,709	23,841
Total	<u>31,135</u>	<u>32,116</u>	<u>31,726</u>	<u>35,693</u>	<u>36,509</u>	<u>36,516</u>

\* Estimated figures

\*\*\* Represents the number of actively employed Police Superior Officers and Police Officers, respectively, as of the June 30 valuation dates.

**Summary of Benefits**

QPP

The New York State Constitution provides that the pension rights of public employees are contractual and shall not be diminished or impaired. In 1973, amendments were made to the New York State Retirement and Social Security Law ("RSSL") to modify certain benefits for employees joining the QPP on or after the effective date of such amendments. These amendments, which affect employees who joined the QPP on and after July 1, 1973, established certain benefit limitations relating to eligibility for retirement, the salary base for benefits and maximum benefits. Recent laws, including but not limited to Chapter 372 of the Laws of 2000 which provides a revised definition of salary base to be used in the computation of certain benefits for Tier 2 members of the QPP and Chapter 589 of the Laws of 2001 which eliminated the Tier 2 maximum 30 years of service limitation, have lessened these limitations.

The QPP currently administers the following pension tiers: Tier 1, Tier 2, Tier 3, Tier 3 Revised, and Tier 3 Enhanced. Membership is mandatory for uniformed employees of the New York City Police Department.

**NEW YORK CITY POLICE PENSION FUNDS**  
**NOTES TO COMBINING FINANCIAL STATEMENTS**  
**JUNE 30, 2020 and 2019**

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

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

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

- A Vested Retirement Benefit is payable to Tier 1 and 2 members with at least five years of uniform service. Tier 1 and 2 members who commenced their membership with the QPP prior to February 4, 2000 must have 15 years of uniformed service to be eligible for a Vested Retirement Benefit. This benefit is generally comprised of a pension equal to 1/40 of their final average salary for every year of uniformed service and is reduced or increased based on the actuarial value of an account shortage or excess. The benefit can be increased for any purchased non-uniformed service.
- A Service Retirement Benefit provides an allowance of one-half of final average salary after 20 years or 25 years of credited service (as elected), with additional benefits equal to a specified percentage per year of service (currently approximately 1.67%) of actual earnings times the number of years of service in excess of the 20-year or 25-year minimum. These additional 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 eligibility for service retirement. ITHP represents amounts assumed 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 increase pension contributions made to the QPP.
- ODR benefits are contingent on the member’s amount of credited service. Members with less than ten years of credited service are entitled to a pension equal to 1/3 of their final average salary, members with 10-20 years of credited service are entitled to a pension equal to 50% of their final average salary; and members with 20 or more years of credited service are entitled to a pension equal to 1/40 of their final average salary for every year of credited service. All ODR benefits are either reduced for the annuity value of an account deficit, or increased for the annuity value of an account excess.
- An ADR benefit provides a pension of three-fourths of final salary plus an increment as described above based on years of service in excess of the 20-year or 25-year minimum plus an annuity based on the member’s contributions with accumulated interest and the amount accumulated under the ITHP program.

Tier 1 and Tier 2 members have the right to make voluntary member contributions (“Voluntary Contributions”) in excess of their required member contributions (“Required Contributions”). Both the Voluntary Contributions and the Required Contributions are credited with interest at a statutory rate (currently 8.25% 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 (“Actual Balance”), less the outstanding balance of any member loans (“Net Actual Contributions”), may exceed (“Excess of Contributions”) or fall short of (“Deficiency of Contributions”) the member’s Required Amount. The Required Amount is the sum of the Required Contributions which a member should have made during his or her first 20 years of credited service, plus statutory interest earnings thereon. The amount of the member’s retirement annuity or the refund of contributions that he or she is entitled to is increased by the actuarial value of any Excess of Contributions or reduced by any Deficiency of Contributions. Annuities attributable to member contributions are reduced on an actuarial basis for any loans with unpaid balances outstanding at the date of retirement.



**NEW YORK CITY POLICE PENSION FUNDS**  
**NOTES TO COMBINING FINANCIAL STATEMENTS**  
**JUNE 30, 2020 and 2019**

Cost of Living Adjustments (“COLA”) are automatically payable to members who are either: (1) at least age 62 and have been retired for at least 5 years or (2) at least age 55 and have been retired for at least 10 years. Additionally, COLA are payable to members who retired for disability after being retired for 5 or more years and to beneficiaries receiving accidental death benefits who have been receiving them for at least 5 years. Beginning September 2001, COLA benefits equal 50% of the increase in the CPI-U based on the year ending March 31, rounded to the next higher .1% not less than 1% nor greater than 3% of the first \$18,000 of the sum of maximum pension allowance and prior COLA.

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

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

- A Normal Service Retirement Benefit is earned after completion of 22 years of uniformed service.
- An Early Service Retirement Benefit is payable upon completion of 20 years or age 62 for Tier 3 or upon completion of 20 years for Tier 3 Revised and is payable as a pension equal to 2.1% of Final Average Salary plus 1/3% of Final Average Salary for each month in excess of 20 years of uniformed service, such benefit not to exceed 50% of Final Average Salary.
- A Vested Benefit payable to members with at least five years of uniformed service. The benefit is equal to 2.1% of final average salary for every year of uniformed service, payable upon attainment of eligibility for early age, or 55.
- An ODR retirement allowance is payable to member who has at least 5 years of service and is in receipt of Social Security Disability Benefits (non-Enhanced members only). An ODR benefit is 1/3 of Final Average Salary or 2% of Final Average Salary for each year of credited service, whichever is greater and does not exceed 50% of Final Average Salary.
- An ADR retirement allowance is payable to a member who was disabled as the result of a line-of-duty accident not attributable to his own willful negligence. An ADR pension for a non-Enhanced member is 50% of a member’s Final Average Salary. An ADR pension for an Enhanced member is 75% of a member’s Final Average Salary.

All of the above retirement allowances, except for Enhanced Plan ODR/ADR retirement allowances, are reduced by one-half of the member’s Social Security Benefit attributable to New York State public earnings at age 62, regardless of eligibility for Social Security, except for ODR retirees, in which case the Social Security Offset occurs immediately.

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

**NEW YORK CITY POLICE PENSION FUNDS  
NOTES TO COMBINING FINANCIAL STATEMENTS  
JUNE 30, 2020 and 2019**

Tier 3 Enhanced Members contribute 3% of pensionable earnings PLUS an additional contribution rate to help fund the enhanced disability benefit. Currently, the additional contribution rate is 1% that can be raised to 3% based on a financial analysis by the Office of the Actuary every three years. At no time can the total contribution rate exceed 6%.

VSFs

VSF benefits are payable to members who retire for a Service pension, regardless of tier.

The PSOVSF provides a guaranteed schedule of supplemental benefits for Police Superior Officers who retire (or have retired) as Police Superior Officers on Service Retirement with at least 20 years of credited service as follows:

- For a Police Superior Officer hired before July 1, 1988, who retires from service as a Police Superior Officer on or after October 1, 1988, the annual benefit was \$5,000 in Calendar Year 1993. For those who retired during the Calendar 1993 the annual \$5,000 benefit was prorated.

The annual benefit increases \$500 each year thereafter to a maximum of \$12,000 in Calendar Year 2007 and thereafter.

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

- For those who become members of the QPP on or after July 1, 1988, the annual supplemental benefit is \$2,500 for the first twelve months of retirement, which increases 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 444 of the Laws of 2001 ("Chapter 444/01") such that these members will receive the maximum \$12,000 benefit beginning Calendar Year 2008.

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

- For those who retired prior to July 1, 1988, the annual benefit was \$2,500 in Calendar Year 1988. For those who retired during Calendar Year 1988, the annual \$2,500 benefit payment was prorated. The annual benefit increases \$500 each year thereafter to a maximum of \$12,000 in Calendar Year 2007 and thereafter.

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

- For those who become members of the QPP on or after July 1, 1988, the annual supplemental benefit is \$2,500 for the first twelve months of retirement, which increases by \$500 each year until a maximum of \$12,000 is payable in the twentieth and later years of retirement. This was modified by Chapter 503 of the Laws of 1995 ("Chapter 503/95") such that these members will receive the maximum \$12,000 benefit beginning Calendar Year 2008 and thereafter.

Chapter 503 of the Laws of 1995 ("Chapter 503/95") amended the ACNY in relation to the transfer of assets, liabilities and administration of certain pension funds in the New York City Police Department. In addition, this law permits certain active employees with prior service credit before entering the QPP to utilize their original dates of hire for determining eligibility for benefits from the PSOVSF and POVSF.

**NEW YORK CITY POLICE PENSION FUNDS**  
**NOTES TO COMBINING FINANCIAL STATEMENTS**  
**JUNE 30, 2020 and 2019**

In addition to the VSF benefits discussed earlier, Chapter 216 of the Laws of 2002 (“Chapter 216/02”) provides that all participants of the PSOVSF and POVSF who retire for service from the QPP on and after January 1, 2002, with more than 20 years of credited service are entitled to the Deferred Retirement Option Plan (“DROP”). The DROP, also known as “Banked Variable,” represents the VSF payments that the member would have received had he retired for service upon reaching eligibility. The DROP payment is an eligible distribution that may be rolled over pursuant to IRS regulations. Members who retired for a disability or die in active service are not eligible for the VSF DROP.

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

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

Chapter 3 of the Laws of 2013 (“Chapter 3/13”) provides for the transfer of assets from the QPP to the PSOVSF and POVSF if assets of the PSOVSF and POVSF are insufficient to pay scheduled benefits.

## **NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**Basis of Accounting** - The Funds use the accrual basis of accounting where the measurement focus is on the flow of economic resources. Revenues are recognized in the accounting period in which they are earned, and expenses are recognized in the period incurred. Contributions from members are recognized by the QPP when the employer makes payroll deductions from QPP members. Employer contributions are recognized when due and the employer has a legal obligation to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the Funds.

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

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

**Investment Valuation** - Investments are reported at fair value. Fair value is defined as the quoted market price at the end of the last trading day for the specified period, except for Alternative Investments which are considered long-term and illiquid in nature. Alternative investments consist of limited partnership structures invested in privately held investments for which exchange quotations are not readily available and are valued at estimated fair value as determined in good faith by the General Partner (GP). These investments are initially valued at cost with subsequent adjustments that reflect third party transactions, financial operating results and other factors deemed relevant by the GP. Fair value is determined by plan management based on information provided by the various GPs after review by an independent consultant and the custodian bank for the funds. They include investments held within Hedge Funds, Private Equity, Real Estate, Opportunistic Fixed Income, and Infrastructure.

Purchases and sales of securities are reflected on the trade date.

**NEW YORK CITY POLICE PENSION FUNDS**  
**NOTES TO COMBINING FINANCIAL STATEMENTS**  
**JUNE 30, 2020 and 2019**

Dividend income is recorded on the ex-dividend date. Interest income is recorded as earned on the accrual basis.

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

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

**Accrued Benefits Payable** - Accrued benefits payable represents benefits due and unpaid by the Funds as of the fiscal year end.

**Securities Lending Transactions** - State statutes and Board policies permit the Funds to lend its investments to broker-dealers and other entities for collateral, for the same securities in the future with a simultaneous agreement to return the collateral in the form of cash, treasury and U.S. Government securities. The Funds' agent lends the following types of securities: short-term securities, common stocks, long-term corporate bonds, U.S. Government and U.S. Government agency bonds, asset-backed securities, and international equities and bonds held in collective investment funds. In return, the Funds receive collateral in the form of cash, U.S. Treasury and U.S. Government agency securities at 100% to 105% of the principal plus accrued interest for reinvestment. At June 30, 2020 and 2019 management believes that the Funds had no credit risk exposure because the fair value of collateral held by the Funds equaled or exceeded the fair value of securities lent to the borrowers. The contracts with the Funds' Securities Lending Agent (the "Agent") require the Agent to indemnify the Funds. In the situation when a borrower goes into default, the Agent will liquidate the collateral to purchase replacement securities. Any shortfall before the replacement securities cost and the collateral value is covered by the Agent. All securities loans can be terminated on demand within a period specified in each agreement by either the Funds or the borrowers. Cash collateral is invested by the securities lending agent using approved Lender's Investment guidelines. The weighted average maturity is 51.65 days for Collateral Investments. The securities lending program in which the Funds participate only allows pledging or selling securities in the case of borrower default.

GASB Statement No. 28, *Accounting and Financial Reporting for Securities Lending Transactions*, requires that securities loaned as assets and related liabilities be reported in the statement of plan net position. Cash received as collateral on securities lending transactions and investments made with that cash are reported as assets. Securities received as collateral are also reported as assets if the government entity has the ability to pledge or sell them without a borrower default. Accordingly, the Funds 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, 2020 and 2019 was \$3.4 billion and \$3.7 billion, respectively for the QPP, \$80.5 million and \$69.9 million, respectively for the PSOVSF, and \$53.6 million and \$51.9 million, respectively for the POVSF. Cash collateral received related to securities lending as of June 30, 2020 and 2019 was \$3.4 billion and \$3.7 billion, respectively for the QPP, \$77.8 million and \$67.9 million, respectively for the PSOVSF, and \$51.8 million and \$49.8 million, respectively for the POVSF.

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

**NEW YORK CITY POLICE PENSION FUNDS  
NOTES TO COMBINING FINANCIAL STATEMENTS  
JUNE 30, 2020 and 2019**

**NOTE 3 - INVESTMENTS AND DEPOSITS**

The Comptroller of The City of New York (the “Comptroller”) acts as an investment advisor to the Funds. In addition, the Funds employ several independent investment consultants as investment advisors. The Funds utilize 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.

Investment policy is approved by the respective Boards of Trustees of the Funds. The Funds’ investment policy is implemented using a strategic allocation of assets that meets their objectives, while working within the confines of the ACNY and the RSSL. The ACNY authorizes the investment in assets, except equities, subject to the terms, conditions, limitations and restrictions imposed by law for investment by Savings Banks. Equity investments may be made only in stocks that meet the qualifications of the State RSSL. Short-term investments may be made in U.S. Government securities or other securities fully guaranteed by the U.S. Government, commercial paper rated A1 or P1 or fully collateralized repurchase agreements. Investments up to 25% of total assets held by the Funds may be made in instruments not expressly permitted by the State RSSL.

The Funds do not possess an investment risk policy statement, nor does it actively manage assets to specified risk targets. Rather, investment risk management is an inherent function of the asset allocation process. Assets are diversified over a broad range of asset classes and encompass multiple investment strategies aimed at limiting concentration risk. The policy asset allocation targeted for the Funds in Fiscal Years 2020 and 2019 included securities in the following categories:

	<u>2020</u>	<u>2019</u>
U.S. Equity	31.0%	31.0%
Core U.S. Fixed	11.0	11.0
EAFE Markets	9.0	9.0
Private Equities	7.0	7.0
Emerging Market	6.0	6.0
High Yield	7.0	7.0
Real Estate	8.0	8.0
Infrastructure	2.0	2.0
Hedge Funds	6.0	6.0
TIPS	4.0	4.0
Opportunistic Fixed	5.0	5.0
Bank Loans	2.0	2.0
ETI	2.0	2.0
Total	<u>100.00%</u>	<u>100.00%</u>

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

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**Credit Risk** - The possibility of a loss or default resulting from a borrower's inability to repay a loan or fulfill its contractual debt obligations. Portfolios other than U.S. Government and related portfolios, have credit rating limitations. Investment Grade portfolios are limited to mostly ratings, of BBB/Baa2 and above, except that they are also permitted a 10% maximum exposure to BB & B / Ba2 & B2 rated securities. While High Yield non-investment grade managers primarily invest in BB & B / Ba2 & B2 rated securities, they can also invest up to 10% of their portfolio in securities rated CCC/Caa2. The quality ratings of the Fund's investments, by percentage of the rated portfolio, as described by nationally recognized statistical rating organizations, at June 30, 2020 and 2019 are as follows:

Investment Type & Fair Value June 30, 2020	Moody's Quality Ratings																		
	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa & Below	NR	Total
U.S. government Corporate bonds Short term	47.52%	0.04%	0.05%	0.02%	0.04%	0.01%	0.02%	0.09%	0.14%	0.01%	0.01%	-	-	-	-	-	-	1.30%	49.25%
Commercial paper Pooled fund	0.81%	0.31%	0.26%	0.40%	0.67%	2.03%	2.54%	2.61%	3.25%	3.47%	1.87%	2.36%	3.28%	2.94%	3.15%	2.22%	2.36%	6.89%	41.42%
Discount notes & T-bills	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.39%	1.39%
Percent of rated portfolio	48.33%	0.35%	0.31%	0.42%	0.71%	2.04%	2.56%	2.70%	3.39%	3.48%	1.88%	2.36%	3.28%	2.94%	3.15%	2.22%	2.36%	17.52%	100.00%

Investment Type & Fair Value June 30, 2019	Moody's Quality Ratings																		
	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa & Below	NR	Total
U.S. government Corporate bonds Short term	57.06%	0.02%	0.05%	0.01%	0.03%	0.01%	0.04%	0.02%	0.09%	0.01%	-	-	-	-	-	-	-	0.65%	57.99%
Commercial paper Pooled fund	0.39%	0.23%	0.12%	0.17%	0.28%	1.27%	1.21%	1.56%	1.78%	2.34%	1.55%	2.44%	4.28%	3.53%	4.02%	3.40%	2.21%	8.09%	38.87%
Discount notes & T-bills	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.14%	3.14%
Percent of rated portfolio	57.45%	0.25%	0.17%	0.18%	0.31%	1.28%	1.25%	1.58%	1.87%	2.35%	1.55%	2.44%	4.28%	3.53%	4.02%	3.40%	2.21%	11.88%	100.00%

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

Consistent with the Funds' investment policy, the investments are held by the Funds' custodian and registered in the name of the Funds. All of the Funds' deposits are insured by the Federal Deposit Insurance Corporation ("FDIC") (subject to the FDIC limit or \$250K per plan per member) and/or collateralized by securities held by a financial institution separate from the Funds' depository financial institution. However, the plans cash balances can exceed FDIC insured limits. Non-invested cash is swept into a State Street Short term investment intraday account, which is not FDIC insured.

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**Interest Rate Risk** - The risk that the value of debt securities will be affected by fluctuations in market interest rates. Although there is no formal interest rate risk management policy, the duration of the portfolio, relative to the duration of the portfolio's benchmark, is monitored by the Bureau of Asset Management. The lengths of investment maturities (in years) of the Funds' investments, as shown by the percent of the rated portfolio, at June 30, 2020 and 2019, are as follows:

Years to Maturity

Investment Type June 30, 2020	Investment Maturities (in years)				
	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
U.S. government	49.25%	0.01%	11.79%	7.14%	30.30%
Corporate bonds	41.42%	1.07%	19.43%	12.80%	8.13%
Short-term:					
Commercial paper	1.39%	1.39%	-	-	-
Pooled fund	3.24%	3.24%	-	-	-
Discount notes	4.70%	4.70%	-	-	-
Percent of rated portfolio	<u>100.00%</u>	<u>10.41%</u>	<u>31.22%</u>	<u>19.94%</u>	<u>38.43%</u>

Years to Maturity

Investment Type June 30, 2019	Investment Maturities (in years)				
	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
U.S. government	57.99%	0.15%	16.70%	13.24%	27.90%
Corporate bonds	38.87%	0.86%	20.26%	11.26%	6.49%
Short-term:					
Commercial paper	3.14%	3.14%	-	-	-
Percent of rated portfolio	<u>100.00%</u>	<u>4.15%</u>	<u>36.96%</u>	<u>24.50%</u>	<u>34.39%</u>

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**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 stock and/or bonds. The currency markets are diversifiers in a total portfolio context; therefore, the Funds have numerous managers that invest globally. In general, currency exposure is viewed as a benefit for its diversification reasons and not as an inherent risk within the portfolio. Foreign currency exposures of the Funds' investments as of June 30, 2020 and 2019, are as follows:

Trade Currency	(in USD, in thousands)	
	6/30/2020 Fair Value	6/30/2019 Fair Value
Euro Currency	\$2,002,380	\$1,751,805
Japanese Yen	958,864	915,577
Hong Kong Dollar	949,466	837,125
Pound Sterling	639,935	787,236
Swiss Franc	386,492	362,771
South Korean Won	360,787	366,008
New Taiwan Dollar	331,634	275,290
Indian Rupee	262,603	263,334
Canadian Dollar	229,136	265,034
Australian Dollar	189,487	187,090
Danish Krona	162,443	105,287
Brazilian Real	113,859	180,559
Swedish Krona	110,999	103,455
South African Rand	99,376	144,204
Chinese Yuan Renminbi	71,860	25,932
Singapore Dollar	61,954	68,029
Thailand Baht	57,904	96,897
Indonesian Rupiah	56,914	70,730
China Yuan (Offshore)	52,433	41
Mexican Peso (New)	50,513	66,772
Norwegian Krone	43,300	48,450
Malaysian Ringgit	37,885	53,776
Turkish Lira	33,748	42,010
Polish Zloty	31,679	46,709
Philippine Peso	20,831	30,986
Hungarian Forint	17,000	10,983
Chilean Peso	16,112	25,551
Uae Dirham	15,556	15,710
New Israeli Sheqel	15,104	15,083
Qatari Rial	13,670	19,670
New Zealand Dollar	8,401	6,973
Czech Koruna	7,248	5,418
Colombian Peso	6,263	11,440
Kuwaiti Dinar	5,300	10,000
Romanian Leu	3,669	3,902
Egyptian Pound	3,164	4,577
Russian Ruble	2,856	2,871
Nigerian Naira	2,606	2,450
Pakistan Rupee	2,488	2,875
Kenyan Shilling	1,958	3,347
Jordanian Dinar	1,911	2,896
Moroccan Dirham	1,890	2,728
Croatian Kuna	1,863	3,195
Mauritius Rupee	1,762	2,594
Omani Rial	1,647	2,772
Botswana Pula	947	1,068
Peruvian Nouveau Sol	757	1,883
Tunisian Dinar	698	1,121
Ghana Cedi	409	620
	<u>\$ 7,449,761</u>	<u>\$ 7,254,834</u>



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**Securities Lending Transactions: Credit Risk** - The quality ratings of investments held as collateral for Securities Lending by the Funds at June 30, 2020 and 2019, are as follows:

Securities lending Credit quality (in thousands) June 30, 2020	Moody's Quality Ratings											
	Aaa	Aa & Below	A1	A2	A3	Baa2	Ba & Below	B & Below	Caa & Below	Ca & Below	NR	Total
Short-term												
Reverse repurchase agreements	\$ -	\$ -	\$ 125,000	\$ 187,059	\$ 889,529	\$ 35,229	\$ -	\$ -	\$ -	\$ -	\$ 1,650,245	\$ 2,887,062
Money market	248,273	-	-	-	-	-	-	-	-	-	53,033	301,306
U.S. agency	-	-	-	-	-	-	-	-	-	-	14,637	14,637
Cash or cash equivalent	-	-	355,858	-	-	-	-	-	-	-	-	355,858
Uninvested	-	-	-	-	-	-	-	-	-	-	928	928
<b>Total</b>	<b>\$ 248,273</b>	<b>\$ -</b>	<b>\$ 480,858</b>	<b>\$ 187,059</b>	<b>\$ 889,529</b>	<b>\$ 35,229</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,718,843</b>	<b>\$ 3,559,791</b>
By percent	6.97%	0.00%	13.51%	5.25%	24.99%	0.99%	0.00%	0.00%	0.00%	0.00%	48.29%	100.00%
Securities lending Credit quality (in thousands) June 30, 2019	Moody's Quality Ratings											
	Aaa	Aa & Below	A1	A2	A3	Baa2	Ba & Below	B & Below	Caa & Below	Ca & Below	NR	Total
Short-term												
Reverse repurchase agreements	\$ -	\$ -	\$ 125,000	\$ 205,320	\$ 1,564,736	\$ 34,200	\$ -	\$ -	\$ -	\$ -	\$ 1,358,517	\$ 3,287,773
Money market	55,352	-	-	-	-	-	-	-	-	-	6,048	61,400
U.S. agency	-	-	-	-	-	-	-	-	-	-	13,982	13,982
Cash or cash equivalent	-	-	369,691	-	-	-	-	-	-	-	-	369,691
Uninvested	-	-	-	-	-	-	-	-	-	-	821	821
<b>Total</b>	<b>\$ 55,352</b>	<b>\$ -</b>	<b>\$ 494,691</b>	<b>\$ 205,320</b>	<b>\$ 1,564,736</b>	<b>\$ 34,200</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,379,368</b>	<b>\$ 3,733,667</b>
By percent	1.48%	0.00%	13.25%	5.50%	41.91%	0.92%	0.00%	0.00%	0.00%	0.00%	36.94%	100.00%

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**Interest Rate Risk** - The lengths of investment maturities (in years) of the collateral for Securities Lending held by the Funds at June 30, 2020 and 2019, are as follows:

Investment Type (In Thousands) June 30, 2020	Investment Maturities (in years)				
	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
Short-term:					
Reverse repurchase agreements	\$ 2,887,062	\$ 2,887,062	\$ -	\$ -	\$ -
Money market funds	301,306	301,306	-	-	-
U.S. agencies	14,637	14,637	-	-	-
Cash or cash equivalent	355,858	355,858	-	-	-
Uninvested	928	928	-	-	-
<b>Total</b>	<b>\$ 3,559,791</b>	<b>\$ 3,559,791</b>	<b>\$ -</b>	<b>\$ --</b>	<b>\$ -</b>
Percent of securities lending portfolio	100.00%	100.00%	-%	-%	-%

Investment Type (In Thousands) June 30, 2019	Investment Maturities (in years)				
	Fair Value	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years
Short-term:					
Reverse repurchase agreements	\$ 3,386,883	\$ 3,386,883	\$ -	\$ -	\$ -
Money market funds	69,625	69,625	-	-	-
U.S. agencies	17,894	17,894	-	-	-
Cash or cash equivalent	376,197	376,197	-	-	-
Uninvested	821	821	-	-	-
<b>Total</b>	<b>\$ 3,851,420</b>	<b>\$ 3,851,420</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Percent of securities lending portfolio	100.00%	100.00%	-%	-%	-%

**Rate of Return** - For the years ended June 30, 2020 and 2019, the annual money-weighted rate of return on investments, net of investment expense, for the Funds were as follows:

	2020	2019
QPP	4.74%	6.81%
PSOVSF	4.07%	9.27%
POVSF	4.33%	5.77%

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 Funds adopted GASB 72. GASB 72 was issued to address accounting and financial reporting issues related to fair value measurements.

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**GASB 72 - Level Inputs**

The Funds categorize 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 Funds have the following recurring fair value measurements as of June 30, 2020 and June 30, 2019:

GASB 72 - Disclosure  
(In thousands)

	2020			Total
	Level One	Level Two	Level Three	
Investments - At fair value				
Short-term investments:				
Commercial paper	\$ -	\$ 310,555	\$ -	\$ 310,555
Short-term investment fund	-	294,602	-	294,602
U.S. treasury bills and agencies	-	642,933	-	642,933
Debt securities:				
Bank loans	-	222,532	4,325	226,857
Corporate and other	-	4,340,523	56,385	4,396,908
Mortgage debt securities	-	1,377,705	-	1,377,705
Treasury inflation protected securities	-	1,710,665	-	1,710,665
U.S. government and agency	-	3,069,573	-	3,069,573
Equity securities:				
Domestic equity	15,121,160	124	6,807	15,128,091
International equity	2,813,778	-	482	2,814,260
Collective trust funds:				
Bank loans	-	492,540	21,657	514,197
Corporate and other	-	550,686	33	550,719
Domestic equity	539,712	-	1,142	540,854
International equity	4,189,386	-	3,627	4,193,013
Mortgage debt securities	-	598,639	114,320	712,959
Opportunistic fixed income	4,103	127,795	5,872	137,770
Treasury inflation protected securities	-	-	-	-
U.S. government and agency	-	700,194	-	700,194
Alternative investments:				
Infrastructure	-	-	504,681	504,681
Opportunistic fixed income	-	-	1,354,060	1,354,060
Private equity	4,575	-	2,484,993	2,489,568
Private real estate	-	-	2,181,695	2,181,695
Total investments at fair value	<u>\$ 22,672,714</u>	<u>\$ 14,439,066</u>	<u>\$ 6,740,079</u>	43,851,859
Alternative investments (Hedge Funds*) valued at net position value				<u>2,955,325</u>
Total investments				<u>\$ 46,807,184</u>

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GASB 72 - Disclosure  
(In thousands)

	2019			Total
	Level One	Level Two	Level Three	
Investments - At fair value				
Short-term investments:				
Commercial paper	\$ -	\$ 235,970	\$ -	\$ 235,970
Discount notes	-	174,564	-	174,564
Short-term investment fund	-	235,766	-	235,766
Debt securities:				
Bank loans	-	206,667	-	206,667
Corporate and other	-	3,696,453	-	3,696,453
Mortgage debt securities	-	804,217	57,317	861,534
Treasury inflation protected securities	-	1,412,234	-	1,412,234
U.S. government and agency	-	4,618,579	-	4,618,579
Equity securities:				
Domestic equity	14,215,970	-	168,571	14,384,541
International equity	259,364	-	276	259,640
Collective trust funds:				
Bank loans	-	535,080	1,277	536,357
Corporate and other	-	469,386	-	469,386
Domestic equity	243,040	-	604	243,644
International equity	7,188,413	-	619	7,189,032
Mortgage debt securities	-	527,130	113,174	640,304
Opportunistic fixed income	-	129,855	2,456	132,311
Treasury inflation protected securities	-	457,367	-	457,367
U.S. government and agency	-	639,122	-	639,122
Alternative investments:				
Infrastructure	-	-	406,813	406,813
Opportunistic fixed income	-	-	1,223,141	1,223,141
Private equity	6,260	-	2,510,293	2,516,553
Private real estate	-	-	1,980,800	1,980,800
Total investments at fair value	<u>\$ 21,913,047</u>	<u>\$ 14,142,390</u>	<u>\$ 6,465,341</u>	42,520,778
Alternative investments (Hedge Funds*) valued at net position value				<u>2,730,587</u>
Total investments				<u>\$ 45,251,365</u>

\*Hedge Funds that do not have a readily determinable fair value and are measured at fair value using the net position value per share (or its equivalent) practical expedient (NAV Practical Expedient), have not been classified in the fair value hierarchy.

**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 of the fair value are securities whose stated market price is unobservable by the marketplace, many of these securities are priced by the issuers or industry groups for these securities. Fair Value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by 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.

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***Collective Trust Funds***

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

***Alternative Investments***

Alternative investments include Private Equity, Real Estate, Opportunistic Fixed Income and Infrastructure Investments. These are investments for which exchange quotations are not readily available and are valued at Net Position Value calculated by the general partner's valuation policy. Alternative investments are mainly illiquid and typically not sold or redeemed. 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 should be valued by the GP or the fund administrator 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 to measure fair value.

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

The determination of Fair Value using these methodologies should take into consideration a range of factors, including but not limited to, the price at which the investment was acquired, the nature of the investment, local market conditions, trading values on public exchanges for comparable securities, current and projected operating performance and financing transactions subsequent to the acquisition of the investment. Because of the subjective nature of estimated Fair Value of the private investments, such value may differ significantly from the values that would have been used had a ready market existed for these investments. These financial instruments have been classified as Level 3 in the Fair Value hierarchy.

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

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The fair value quantities presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the entity's combining financial statements. The following table below displays details the fair value, redemption terms, redemption notice periods, gates and redemption holdback amounts.

NAV Practical Expedient (Dollars in Thousands)

June 30, 2020 Fair Value	Redemption Terms	Redemption Notice Period	Gate	Redemption Holdback
\$ 186,203	Monthly redeeming on Last Business Day (Shares can be redeemed and any time other than the Last Business Day of the Month but are subject to 1.5% fee)	3 Calendar days notice	No	5%
55,079	Semester Calendar redeeming on Last Business Day Of Month	60 Calendar days notice	No	10%
364,903	Quarterly redeeming on First Business Day Of Month	153 Calendar days notice	10% master fund level and 25% investor level Yes	N/A
206,037	Quarterly redeeming on Last Business Day Of Month	90 Calendar days	This fund imposes a 25% Investor level gate with slower liquidation schedule.	10%
252,245	Quarterly Calendar redeeming on Last Business Day Of Month	75 Calendar days notice	This fund may impose a 8.3% Fund level gate with slower liquidation schedule	10%
120,282	Quarterly Calendar redeeming on Last Business Day Of Month	44 Calendar days notice	Fund level Gate 25% at manager's discretion	10%
836	Illiquid - periodic distributions	Illiquid - periodic distributions	No	10%
117,368	Monthly redeeming on First Business Day Of Month	30 Calendar days notice	No	5%
45,000	Monthly redeeming on First Business Day Of Month	30 Calendar days notice	No	5%
35,156	Monthly redeeming on Last Business Day Of Month	15 Calendar days notice	No	3%
56,327	Monthly redeeming on Last Business Day	30 Calendar days notice	20% Firm level gate	5%
175,889	Daily redeeming	2 Calendar days notice	No	N/A
71,811	Monthly redeeming on First Business Day Of Month	30 Calendar days notice	No	3%
166,955	Quarterly Calendar redeeming on Last Business Day Of Month	65 Calendar days notice	25% investor level	5%
76,985	Monthly redeeming on Last Business Day Of Month	90 Calendar days notice	No	10%
198,353	Quarterly Calendar redeeming on Last Business Day Of Month	90 Calendar days notice	No	5%
1,507	Illiquid - periodic distributions	Illiquid - periodic distributions	No	N/A
189,581	Quarterly Calendar redeeming on Last Business Day Of Month	90 Calendar days notice	25% Fund level gate	5%
111,238	Cash item	Cash item	Cash item	Cash item
137,620	Quarterly Calendar redeeming on Last Business Day Of Month	60 Calendar days notice	This fund imposes a 33.3% Investor level gate with slower liquidation schedule. Yes	5%
39,350	Quarterly Calendar redeeming on Last Business Day Of Month	90 Calendar days notice	This fund imposes a 25% Investor level gate with slower liquidation schedule. Yes	5%
118,933	Quarterly Calendar redeeming on Last Business Day Of Month	45 Calendar days notice	This fund imposes a 12.5% Investor level gate with slower liquidation schedule. This fund may impose a 25% Fund level gate with slower liquidation schedule.	5%
41,889	Monthly redeeming on First Business Day Of Month	30 Calendar days notice	No	1%
108,406	Monthly redeeming on First Business Day Of Month	90 Calendar days notice	No	5%
41,003	Monthly redeeming on First Business Day Of Month	90 Calendar days notice	No	1%
36,369	N/A	N/A	N/A	N/A
<u>\$ 2,955,325</u>	TOTAL HEDGE FUNDS			

**NEW YORK CITY POLICE PENSION FUNDS  
NOTES TO COMBINING FINANCIAL STATEMENTS  
JUNE 30, 2020 and 2019**

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

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

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

For Fiscal Year 2020, the preliminary excess earnings of the QPP are reported on the combined financial statements for the year ending June 30, 2020 to be equal to \$284 million, where \$143 million was reported as a liability from the QPP to the POVSF and \$141 million was reported as a liability from the QPP to the PSOVSF.

For Fiscal Year 2019, the preliminary excess earnings of the QPP are reported on the combined financial statements for the year ending June 30, 2019 to be equal to \$419 million, where \$108 million was reported as a liability from the QPP to the POVSF and \$311 million was reported as a liability from the QPP to the PSOVSF.

In addition, under Chapter 3 of the Laws of 2013, if the assets of the POVSF or PSOVSF are less than the amount required to pay the retirees’ guaranteed supplemental benefit payments, then an amount sufficient to pay such benefits shall be appropriated from the Contingent Reserve Fund of the QPP.

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

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

A comparison of the APV of accumulated plan benefits as calculated by the Funds’ Chief Actuary (the “Actuary”) with the net position restricted for benefits for the POVSF and the PSOVSF as of June 30, 2019 and June 30, 2018, are as follows:

	POVSF		PSOVSF	
	2019 <sup>3</sup>	2018	2019 <sup>3</sup>	2018
	(In millions)			
APV of accumulated plan benefits <sup>1</sup> for:				
Retirees currently receiving benefits	\$ 1,544.0	\$ 1,586.9	\$ 2,356.1	\$ 2,417.8
Active members	432.7	383.7	1,371.8	1,247.5
Total APV of accumulated plan benefits	1,976.7	1,970.6	3,727.9	3,665.3
Net position held in trust for benefits <sup>2</sup>	1,868.4	1,938.8	2,786.4	1,621.2
Unfunded APV of accumulated plan benefits	\$ 108.3	\$ 31.8	\$ 941.6	\$ 2,044.1

<sup>1</sup> Based on actuarial assumptions adopted by the Board of Trustees of the QPP during Fiscal Year 2019.

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

<sup>3</sup> Preliminary.

For purposes of the June 30, 2019 and the June 30, 2018 actuarial valuations of the VSFs, Chapter 125/00 has been taken into account in the determination of the unfunded APV of accumulated plan benefits relative to the Supplementation benefit increases that began Fiscal Year 2001 and to the automatic COLA benefits provided for Fiscal Year 2002 and each future year (Note 1).

Sections 13-270 and 13-280 of the ACNY provide that the Boards of Trustees of the POVSF and the PSOVSF shall adopt, upon the recommendation of the Actuary, actuarial assumptions as to interest rate, mortality of retirees and estimated number of active members of the QPP in service as of each June 30 who will retire for service with 20 or more years of service as Police Officers and Police Superior Officers, for use in making annual valuations of liabilities.

The following actuarial assumptions were used in the actuarial calculations to determine the preceding APV of accumulated plan benefits as of June 30, 2019 and June 30, 2018, respectively:

	June 30, 2019	June 30, 2018
Investment rate of return	7.0% per annum. <sup>1, 2</sup>	7.0% per annum. <sup>1, 2</sup>
Post-retirement mortality	Tables adopted by the Board of Trustees during Fiscal Year 2019.	Tables adopted by the Board of Trustees during Fiscal Year 2019.
Active service: withdrawal, death, disability	Tables adopted by the Board of Trustees during Fiscal Year 2019.	Tables adopted by the Board of Trustees during Fiscal Year 2019.
Service retirement	Tables adopted by the Board of Trustees during Fiscal Year 2019.	Tables adopted by the Board of Trustees during Fiscal Year 2019.
Percentage of all active POLICE members estimated to retire for service with 20 or more years of service as Police Officers	40%	40%
Percentage of all active Police Superior Officers estimated to retire for service with 20 or more years of service as Police Superior Officers	100%.	100%.
Cost-of-Living Adjustments <sup>1</sup>	1.5% per annum Auto Cola 2.5% per annum for Escalation.	1.5% per annum Auto Cola 2.5% per annum for Escalation.

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

<sup>2</sup> Net of Investment Expenses.



**NEW YORK CITY POLICE PENSION FUNDS  
NOTES TO COMBINING FINANCIAL STATEMENTS  
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**NOTE 5 - QPP CONTRIBUTIONS**

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

**Member Contributions** - Tier 1 and Tier 2 members contribute by salary deductions on the basis of a normal rate of contribution, based on age and actuarial tables in effect at the time of membership. Member contribution rates are reduced by 5.0% under the ITHP program as defined earlier. Additionally, members may voluntarily increase their rates of contribution by 50% for the purpose of purchasing an additional annuity. Members are permitted to borrow up to 90% of their own contributions including accumulated interest.

Tier 3/Tier 3 Revised members contribute 3.0% of pensionable earnings until attainment of 25 years of credited service.

**Employer Contributions** - Statutory Contributions to the QPP, determined by the Actuary in accordance with State statutes and City laws, are generally funded by the Employer within the appropriate fiscal year. The Statutory Contribution for the year ended June 30, 2020, based on an actuarial valuation as of June 30, 2018 was \$2,458.9 million and the Statutory Contribution for the year ended June 30, 2019, based on an actuarial valuation as of June 30, 2017 was \$2,558.3 million. The Statutory Contributions for Fiscal Years 2020 and 2019 were equal to the Actuarial Contributions. Refer to the Schedule of Employer Contributions in the accompanying required supplementary information for more information on the actuarial methods and assumptions applied by the Actuary to determine the Statutory Contributions.

**NOTE 6 - NET PENSION LIABILITY**

The components of the net pension liability of the Employer at June 30, 2020 and 2019 for the Funds were as follows:

June 30, 2020	(in thousands)			
	QPP	POVSF	PSOVSF	TOTAL
Total pension liability*	\$ 51,317,492	\$ 2,055,136	\$ 3,895,801	\$ 57,268,429
Fiduciary net position**	41,293,014	1,952,107	3,217,735	46,462,856
Employers' net pension liability	<u>\$ 10,024,478</u>	<u>\$ 103,029</u>	<u>\$ 678,066</u>	<u>\$ 10,805,573</u>
Fiduciary net position as a percentage of the total pension liability	80.47%	94.99%	82.59%	81.13%

**NEW YORK CITY POLICE PENSION FUNDS**  
**NOTES TO COMBINING FINANCIAL STATEMENTS**  
**JUNE 30, 2020 and 2019**

June 30, 2019	(in thousands)			
	QPP	POVSF	PSOVSF	TOTAL
Total pension liability*	\$ 49,089,967	\$ 2,034,839	\$ 3,872,625	\$ 54,997,431
Fiduciary net position**	40,119,424	1,976,399	3,097,356	45,193,179
Employers' net pension liability	<u>\$ 8,970,543</u>	<u>\$ 58,440</u>	<u>\$ 775,269</u>	<u>\$ 9,804,252</u>
Fiduciary net position as a percentage of the total pension liability	81.73%	97.13%	79.98%	82.17%

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

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

**Actuarial Methods and Assumptions**

The total pension liability as of June 30, 2020 and 2019 were determined by actuarial valuations as of June 30, 2019 and June 30, 2018, respectively, that were rolled-forward to develop the total pension liability to the respective fiscal year-end. The following actuarial assumptions were applied to all periods included in the measurement:

Projected Salary Increases	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per annum
Investment Rate of Return	7.0% per annum, net of Investment Expenses.
COLAs	1.5% per annum for Auto COLA, 2.5% per annum for Escalation.

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

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

There were no changes in actuarial assumptions and methods from the prior actuarial valuation.

Beginning with the June 30, 2017 actuarial valuation, the Employer Contribution is based on the actuarial assumptions and methods adopted by the POLICE Board of Trustees during Fiscal Year 2019 (the "2019 A&M").

Pursuant to Section 96 of the New York City Charter, a study of the actuarial assumptions used to value liabilities of the QPP is conducted every two years. The most recent of these studies was performed by Bolton, Inc. and included experience through June 30, 2017.

**NEW YORK CITY POLICE PENSION FUNDS  
NOTES TO COMBINING FINANCIAL STATEMENTS  
JUNE 30, 2020 and 2019**

The Entry Age Normal (“EAN”) cost method of funding is utilized by the Plan’s Actuary to calculate the contribution required of the Employer.

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

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

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

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

The obligations of the QPP to the POVSF and the PSOVSF are recognized through the Liability Valuation Method. Under this method the APV of Future SKIM from the QPP to the POVSF and PSOVSF is included directly as an actuarial liability to the QPP. SKIM is all or a portion of the excess earnings on equity securities of the QPP which are transferable to the POVSF and PSOVSF. The APV of Future SKIM is computed as the excess, if any, of the APV of benefits of the POVSF and PSOVSF offset by the actuarial asset value of the POVSF and PSOVSF, respectively.

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

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

<u>Asset Class</u>	<u>Target Asset Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
<b>Public Markets:</b>		
U.S. Public Market Equities	30.0%	6.3%
Developed Public Market Equities	8.0%	6.7%
Emerging Public Market Equities	5.0%	8.1%
Fixed Income	28.0%	1.5%
<b>Private Markets (Alternative Investments):</b>		
Private Equity	8.0%	10.8%
Private Real Estate	7.0%	7.8%
Infrastructure	3.0%	8.9%
Hedge Funds	6.0%	4.0%
Opportunistic Fixed Income	5.0%	3.9%
Total	<u>100.0%</u>	

**NEW YORK CITY POLICE PENSION FUNDS  
NOTES TO COMBINING FINANCIAL STATEMENTS  
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**Discount Rate**

The discount rate used to measure the total pension liability was 7.0%. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the rates applicable to the current Tier for each member and that City contributions will be made at rates as determined by the Actuary. Based on those assumptions, the Funds' fiduciary net position was projected to be available to make all projected future benefit payments of current active and non-active members. Therefore, the long-term expected rate of return on the Funds' investments was applied to all periods of projected benefit payments to determine the total pension liability.

The following presents the net pension liability of the Employer as of June 30, 2020, 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) Net Pension Liability - June 30, 2020	1% Decrease (6.0%)	Discount Rate (7.0%) (In Thousands)	1% Increase (8.0%)
QPP	\$ 15,899,384	\$ 10,024,478	\$ 5,139,772
POVSF	319,319	103,029	(79,120)
PSOVSF	1,075,526	678,066	342,285
Total	<u>\$ 17,294,229</u>	<u>\$ 10,805,573</u>	<u>\$ 5,402,937</u>

**NOTE 7 - MEMBER LOANS**

Tier 1 and 2 members are permitted to borrow up to 90% of their own contributions, including accumulated interest. Loans are repaid at the statutory interest rate of 4%. The balance of QPP member loans receivable at June 30, 2020 and 2019, is \$218.6 million and \$238.6 million, respectively. Upon termination of employment before retirement, certain members are entitled to refunds of their own contributions, including accumulated interest, less any loans outstanding. As a result of a review of all member accounts, there were no prior year loans due from retired or inactive employees that were deemed uncollectible in Fiscal Years 2019 and 2018.

**NOTE 8 - RELATED PARTIES**

Pursuant to statute and resolutions, the Comptroller has been appointed as custodian for the assets of the Funds. Securities are held by certain banks under custodial agreements with the Comptroller. The Comptroller also provides cash receipt and cash disbursement services to the Funds. Actuarial services are provided to the Funds by the New York City Office of the Actuary. The City's Corporation Counsel provides legal services to the Funds. Other administrative services are also provided by The City. The aforementioned services may be provided by employees or officers of the City who may also be participants in the Funds. The cost of providing such services amounted to \$8,663,447 and \$7,199,427 in Fiscal Years 2020 and 2019, respectively.

**NEW YORK CITY POLICE PENSION FUNDS  
NOTES TO COMBINING FINANCIAL STATEMENTS  
JUNE 30, 2020 and 2019**

**NOTE 9 - ADMINISTRATIVE AND INVESTMENT EXPENSES**

Chapter 292 of the Laws of 2001 provides Corpus Funding of administrative expenses for the QPP commencing July 1, 2001, and allows for the appointment of an executive director for the QPP. In Fiscal Year 2020, total non-investment expenses attributable to the QPP were approximately \$35.5 million, of which \$26.8 million were paid from the assets of the QPP and \$8.7 million were paid by The City on behalf of the QPP. In Fiscal Year 2019, total non-investment expenses attributable to the QPP were approximately \$36.2 million, of which \$29.0 million were paid from the assets of the QPP and \$7.2 million were paid by The City on behalf of the QPP. Investment expenses charged to the investment earnings of the QPP, exclusive of expenses relating to securities-lending transactions, amounted to approximately \$229 million in 2020 and \$252 million in 2019.

In July 2010, the Fund renegotiated its lease agreement to rent office space. The agreement will expire in Fiscal Year 2031. The future minimum rental payments required under this operating lease are as follows:

<u>Fiscal Years Ending June 30,</u>	<u>Amount</u>
2021	\$ 2,219,742
2022 to 2025	8,878,968
2026	2,444,526
2027 to 2030	9,778,104
2031	52,570

Additionally, the Fund renegotiated its lease agreement to rent additional colocation space in 2019 pursuant to its Disaster Recovery and Business Continuity Plan. The original agreement was signed in February 2010 and terminates on July 14, 2024. The current rental payments required under this lease are as follows:

<u>Fiscal Years Ending June 30,</u>	<u>Amount</u>
2021	\$ 434,275
2022	435,632
2023	444,875
2024	445,617
2025	17,175
2026	

Rent expense under the lease agreements for each of the Fiscal Years ended June 30, 2020 and 2019, was approximately \$2.7 million.

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

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

**Other Matters** - During Fiscal Years 2020 and 2019, certain events described below took place which, in the opinion of POLICE management, could have the effect of increasing benefits to members and/or their beneficiaries and therefore would increase the obligations of the Funds. The effect of such events has not been fully quantified. However, it is the opinion of POLICE management that such developments would not have a material effect on the Funds' combined net position restricted for benefits or cause changes in the Funds' combined net position restricted for benefits.

**NEW YORK CITY POLICE PENSION FUNDS**  
**NOTES TO COMBINING FINANCIAL STATEMENTS**  
**JUNE 30, 2020 and 2019**

**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 New York City Retirement Systems (“NYCRS”) are conducted every two years. Refer to Note 6 for the results of the most recent actuarial studies for POLICE.

**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.

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

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

***New York State Legislation (only significant laws since Fiscal Year 2018 included)***

Chapter 266 of the Laws of 2018 extended the Notice of Participation filing deadline to September 11, 2022 for vested members to file a sworn statement indicating participation in the Rescue, Recovery, and Clean-up Operations.

Chapter 589 of the Laws of 2019 amended Retirement and Social Security Law § 212, increased the amount of money a Service or Vested retiree may earn in retirement without diminution of their benefit from \$30,000 to \$35,000.

Chapter 89 of the Laws of 2020 provided a death benefit to statutory beneficiaries of members whose death was a result of or was contributed to by sars-cov-2 (also known as the coronavirus or “COVID-19”).

The CARES Act of March 2020 suspended Required Minimum Distributions due in 2020. It also authorized more advantageous loans and distributions to members who certify that COVID-19 adversely affected themselves or their household. These special rules sunset on or before December 31, 2020.

***COVID-19***

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

***Executive Orders***

On March 7, 2020 Governor Cuomo enacted Executive Order 202 declaring a state of emergency for the entire State of New York. Through a series of further executive orders, the Governor temporally suspended and modified laws as it related to the disaster emergency. Specifically, Executive Order 202.11, enacted on March 27, 2020, as extend by EO 202.14, 202.28, 202.38, 202.48, 202.55, 2020.60, and 202.67, suspended New York State Retirement and Social Security Law § 212 earnings limitations, portions of the Open Meetings Law, allow the Board of Trustees to conduct business virtually, allowed for electronic notarization of documents, and tolled the filing deadlines and statutes of limitations for all civil actions, which includes an litigation with which the Fund is involved through November 3, 2020. Additionally, as a result of the Executive Orders, the Fund has been permitted to have employees work remotely from home.

**NEW YORK CITY POLICE PENSION FUNDS  
NOTES TO COMBINING FINANCIAL STATEMENTS  
JUNE 30, 2020 and 2019**

***Litigation***

There are two pending cases brought by PBA president, Patrick Lynch as it relates to service credit purchases. In the first, the PBA seeks judicial review of the Pension Fund's interpretation of the RSSL and Administrative Code as limiting the availability of service credit for child care leave solely to members in Tier 2. The Court held that Tier 3 members are entitled to childcare leave under Ad. Code 13 218(h). On appeal, the First Department unanimously reversed the decision of the lower court, and granted the City's motion for summary judgment. The court upheld the City's determination that Section 513 of Article 14 of the RSSL (a/k/a Tier 3) defines the service credit available to Tier 3 police officers, and that section limits service credit for unpaid childcare leave to correction officers appointed prior to April 1, 2012. The Court of Appeals granted the PBA's motion for leave to appeal and this case has not yet been concluded. In the second case, the PBA challenges the fact that Tier 3/3R officers do not have the same buy-back benefits as Tier 2 officers. They allege that the Pension Fund's interpretation of the statutory provisions is in error. This case is currently on a motion to reargue, and a date has not been set by the Court.

**NEW YORK CITY POLICE PENSION FUNDS**  
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**  
(In thousands)

June 30, 2020	<u>QPP*</u>	<u>POVSF</u>	<u>PSOVSF</u>	<u>TOTAL</u>
Total pension liability:				
Service cost	\$ 1,375,436	\$ 34,291	\$ 73,382	\$ 1,483,109
Interest	3,427,979	139,165	266,493	3,833,636
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	463,894	11,750	(33,990)	441,654
Changes of assumptions	-	-	-	-
Benefit payments and withdrawals	(3,039,785)	(164,908)	(282,709)	(3,487,402)
Net change in total pension liability	<u>2,227,525</u>	<u>20,297</u>	<u>23,176</u>	<u>2,270,998</u>
Total pension liability — beginning	<u>49,089,967</u>	<u>2,034,839</u>	<u>3,872,625</u>	<u>54,997,431</u>
Total pension liability — ending (a)	<u>51,317,492</u>	<u>2,055,136</u>	<u>3,895,801</u>	<u>57,268,429</u>
Plan fiduciary net position:				
Employer contributions	2,458,907	-	-	2,458,907
Member contributions	280,129	-	-	280,129
Net investment income	1,896,012	(4,221)	146,514	2,038,305
Benefit payments and withdrawals	(3,039,785)	(164,908)	(282,709)	(3,487,402)
Administrative expenses	(26,803)	-	-	(26,803)
Other	6,488	29	24	6,541
Net change in plan fiduciary net position	<u>1,574,948</u>	<u>(169,100)</u>	<u>(136,171)</u>	<u>1,269,677</u>
Accrued Transfers from POLICE to POVSF and PSOVSF	(401,358)	144,808	256,550	-
Plan fiduciary net position — beginning	<u>40,119,424</u>	<u>1,976,399</u>	<u>3,097,356</u>	<u>45,193,179</u>
Plan fiduciary net position — ending (b) **	<u>41,293,014</u>	<u>1,952,107</u>	<u>3,217,735</u>	<u>46,462,856</u>
Employer's net pension liability — ending (a)-(b)	<u>\$ 10,024,478</u>	<u>\$ 103,029</u>	<u>\$ 678,066</u>	<u>\$ 10,805,573</u>
Plan fiduciary net position as a percentage of the total pension liability	<u>80.47%</u>	<u>94.99%</u>	<u>82.59%</u>	<u>81.13%</u>
Covered payroll	\$ 4,244,806	n/a	n/a	\$ 4,244,806
Employer's net pension liability as a percentage of covered payroll	<u>236.16%</u>	<u>n/a</u>	<u>n/a</u>	<u>254.56%</u>

**Additionally, in accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.**

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

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

See Report of Independent Certified Public Accountants.



**SCHEDULE 1 (CONTINUED)**

**NEW YORK CITY POLICE PENSION FUNDS**  
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**  
(In thousands)

<b>June 30, 2019</b>	<b>QPP*</b>	<b>POVSF</b>	<b>PSOVSF</b>	<b>TOTAL</b>
Total pension liability:				
Service cost	\$ 1,396,466	\$ 41,454	\$ 60,989	\$ 1,498,910
Interest	3,386,097	138,805	258,094	3,782,997
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	(868,164)	133,399	(84,203)	(818,967)
Changes of assumptions	(349,830)	(136,776)	144,204	(342,402)
Benefit payments and withdrawals	(2,853,799)	(164,281)	(260,665)	(3,278,745)
Net change in total pension liability	710,771	12,602	118,420	841,793
Total pension liability — beginning	48,379,196	2,022,237	3,754,205	54,155,638
Total pension liability — ending (a)	49,089,967	2,034,839	3,872,625	54,997,431
Plan fiduciary net position:				
Employer contributions	2,558,256	-	-	2,558,256
Member contributions	278,087	-	-	278,087
Net investment income	2,581,702	103,694	176,148	2,861,544
Benefit payments and withdrawals	(2,853,799)	(164,281)	(260,665)	(3,278,745)
Administrative expenses	(29,005)	-	-	(29,005)
Other	4,108	40	35	4,183
Net change in plan fiduciary net position	2,539,349	(60,547)	(84,482)	2,394,320
Accrued Transfers from POLICE to POVSF and PSOVSF	(378,792)	(31,836)	410,628	-
Plan fiduciary net position — beginning	37,958,867	2,068,782	2,771,210	42,798,859
Plan fiduciary net position — ending (b) **	40,119,424	1,976,399	3,097,356	45,193,179
Employer's net pension liability — ending (a)-(b)	\$ 8,970,543	\$ 58,440	\$ 775,269	\$ 9,804,252
Plan fiduciary net position as a percentage of the total pension liability	81.73%	97.13%	79.98%	82.17%
Covered payroll	\$ 4,047,772	n/a	n/a	\$ 4,047,772
Employer's net pension liability as a percentage of covered payroll	221.62%	n/a	n/a	242.21%

**Additionally, in accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.**

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

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

See Report of Independent Certified Public Accountants.

**SCHEDULE 1 (CONTINUED)**

**NEW YORK CITY POLICE PENSION FUNDS**  
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**  
(In thousands)

<b>June 30, 2018</b>	<b>QPP*</b>	<b>POVSF</b>	<b>PSOVSF</b>	<b>TOTAL</b>
Total pension liability:				
Service cost	\$ 1,281,545	\$ 57,875	\$ 46,859	\$ 1,386,279
Interest	3,257,275	137,689	254,151	3,649,115
Changes of benefit terms	90,363	10,231	4,077	104,671
Differences between expected and actual experience	(138,508)	(45,327)	39,715	(144,120)
Changes of assumptions	-	-	-	-
Benefit payments and withdrawals	(2,774,387)	(162,149)	(257,017)	(3,193,553)
Net change in total pension liability	1,716,288	(1,681)	87,785	1,802,392
Total pension liability — beginning	46,662,909	2,023,917	3,666,420	52,353,246
Total pension liability — ending (a)	48,379,197	2,022,236	3,754,205	54,155,638
Plan fiduciary net position:				
Employer contributions	2,415,153	-	-	2,415,153
Member contributions	267,031	-	-	267,031
Net investment income	3,925,283	294	38,433	3,964,010
Benefit payments and withdrawals	(2,774,387)	(162,149)	(257,017)	(3,193,553)
Administrative expenses	(21,146)	-	-	(21,146)
Other	3,408	31	26	3,465
Net change in plan fiduciary net position	3,815,342	(161,824)	(218,558)	3,434,960
Accrued Transfers from POLICE to POVSF and PSOVSF	(1,280,000)	130,000	1,150,000	-
Plan fiduciary net position — beginning	35,423,525	2,100,606	1,839,768	39,363,899
Plan fiduciary net position — ending (b) **	37,958,867	2,068,782	2,771,210	42,798,859
Employer's net pension liability — ending (a)-(b)	\$ 10,420,330	\$ (46,546)	\$ 982,995	\$ 11,356,779
Plan fiduciary net position as a percentage of the total pension liability	78.46%	102.30%	73.82%	79.03%
Covered payroll	\$ 3,673,054	n/a	n/a	\$ 3,673,054
Employer's net pension liability as a percentage of covered payroll	283.70%	n/a	n/a	309.19%

**Additionally, in accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.**

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

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

See Report of Independent Certified Public Accountants.

**NEW YORK CITY POLICE PENSION FUNDS**  
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**  
(In thousands)

June 30, 2017	QPP*	POVSF	PSOVSF	TOTAL
Total pension liability:				
Service cost	\$ 1,221,506	\$ 52,848	\$ 46,062	\$ 1,320,416
Interest	3,138,263	137,697	248,372	3,524,332
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	(632,751)	(16,264)	3,767	(645,248)
Changes of assumptions	-	-	-	-
Benefit payments and withdrawals	(2,571,999)	(159,063)	(255,938)	(2,987,000)
Net change in total pension liability	1,155,019	15,218	42,263	1,212,500
Total pension liability — beginning	45,507,890	2,008,699	3,624,157	51,140,746
Total pension liability — ending (a)	46,662,909	2,023,917	3,666,420	52,353,246
Plan fiduciary net position:				
Employer contributions	2,293,840	-	-	2,293,840
Member contributions	276,301	-	-	276,301
Net investment income	4,079,747	166,755	40,392	4,286,894
Benefit payments and withdrawals	(2,571,999)	(159,063)	(255,938)	(2,987,000)
Administrative expenses	(18,917)	-	-	(18,917)
Other	10,381	74	52	10,507
Net change in plan fiduciary net position	4,069,353	7,766	(215,494)	3,861,625
Accrued Transfers from POLICE to POVSF and PSOVSF	(2,128,438)	708,636	1,419,802	-
Plan fiduciary net position — beginning	33,482,610	1,384,204	635,460	35,502,274
Plan fiduciary net position — ending (b) **	35,423,525	2,100,606	1,839,768	39,363,899
Employer's net pension liability — ending (a)-(b)	\$ 11,239,384	\$ (76,689)	\$ 1,826,652	\$ 12,989,347
Plan fiduciary net position as a percentage of the total pension liability	75.91%	103.79%	50.18%	75.19%
Covered payroll	\$ 3,509,985	n/a	n/a	\$ 3,509,985
Employer's net pension liability as a percentage of covered payroll	320.21%	n/a	n/a	370.07%

**Additionally, in accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.**

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

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

**NEW YORK CITY POLICE PENSION FUNDS**  
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**  
(In thousands)

June 30, 2016	QPP*	POVSF	PSOVSF	TOTAL
Total pension liability:				
Service cost	\$ 1,241,707	\$ 53,625	\$ 45,283	\$ 1,340,615
Interest	3,059,499	136,591	245,309	3,441,399
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	216,334	13,273	3,854	233,461
Changes of assumptions	709,886	32,650	52,144	794,680
Benefit payments and withdrawals	(2,475,738)	(155,754)	(246,959)	(2,878,451)
Net change in total pension liability	2,751,688	80,385	99,631	2,931,704
Total pension liability — beginning	42,756,202	1,928,314	3,524,526	48,209,042
Total pension liability — ending (a)	45,507,890	2,008,699	3,624,157	51,140,746
Plan fiduciary net position:				
Employer contributions	2,393,940	-	-	2,393,940
Member contributions	249,921	-	-	249,921
Net investment income	644,318	(133,017)	(107,767)	403,534
Benefit payments and withdrawals	(2,475,738)	(155,754)	(246,959)	(2,878,451)
Administrative expenses	(18,478)	-	-	(18,478)
Other	6,479	147	130	6,756
Net change in plan fiduciary net position	800,442	(288,624)	(354,596)	157,222
Accrued Transfers from POLICE to POVSF and PSOVSF	326,195	(250,751)	(75,444)	-
Plan fiduciary net position — beginning	32,355,973	1,923,579	1,065,500	35,345,052
Plan fiduciary net position — ending (b) **	33,482,610	1,384,204	635,460	35,502,274
Employer's net pension liability — ending (a)-(b)	\$ 12,025,280	\$ 624,495	\$ 2,988,697	\$ 15,638,472
Plan fiduciary net position as a percentage of the total pension liability	73.58%	68.91%	17.53%	69.42%
Covered payroll	\$ 3,540,326	n/a	n/a	\$ 3,540,326
Employer's net pension liability as a percentage of covered payroll	339.67%	n/a	n/a	441.72%

**Additionally, in accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.**

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

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

**NEW YORK CITY POLICE PENSION FUNDS**  
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**  
(In thousands)

June 30, 2015	QPP*	POVSF	PSOVSF	TOTAL
Total pension liability:				
Service cost	\$ 1,227,570	\$ 54,502	\$ 43,736	\$ 1,325,808
Interest	2,875,649	131,185	238,391	3,245,225
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	(213,409)	(13,154)	11,145	(215,418)
Changes of assumptions	-	-	-	-
Benefit payments and withdrawals	(2,360,484)	(151,333)	(234,967)	(2,746,784)
Net change in total pension liability	1,529,326	21,200	58,305	1,608,831
Total pension liability — beginning**	41,226,876	1,907,114	3,466,221	46,600,211
Total pension liability — ending (a)	42,756,202	1,928,314	3,524,526	48,209,042
Plan fiduciary net position:				
Employer contributions	2,309,619	-	-	2,309,619
Member contributions	241,102	-	-	241,102
Net investment income	1,018,506	61,019	18,695	1,098,220
Benefit payments and withdrawals	(2,360,484)	(151,333)	(234,967)	(2,746,784)
Administrative expenses	(17,903)	-	-	(17,903)
Reimbursement of benefit payments to PSOVSF from QPP	(313)	-	313	-
Other	4,554	25	37	4,616
Net change in plan fiduciary net position	1,195,081	(90,289)	(215,922)	888,870
Accrued Transfers from POLICE to POVSF and PSOVSF	(590,000)	330,000	260,000	-
Plan fiduciary net position — beginning	31,750,892	1,683,868	1,021,422	34,456,182
Plan fiduciary net position — ending (b) ***	32,355,973	1,923,579	1,065,500	35,345,052
Employer's net pension liability — ending (a)-(b)	\$ 10,400,229	\$ 4,735	\$ 2,459,026	\$ 12,863,990
Plan fiduciary net position as a percentage of the total pension liability	75.68%	99.75%	30.23%	73.32%
Covered payroll	\$ 3,512,778	n/a	n/a	\$ 3,512,778
Employer's net pension liability as a percentage of covered payroll	296.07%	n/a	n/a	366.21%

**Additionally, in accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.**

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

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

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

**NEW YORK CITY POLICE PENSION FUNDS**  
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS**  
(In thousands)

June 30, 2014	<u>QPP*</u>	<u>POVSF</u>	<u>PSOVSF</u>	<u>TOTAL</u>
Total pension liability:				
Service cost	\$ 1,206,036	\$ 52,629	\$ 43,088	\$ 1,301,753
Interest	2,753,264	129,659	234,394	3,117,317
Changes of benefit terms	-	-	-	-
Differences between expected and actual experience	-	-	-	-
Changes of assumptions	-	-	-	-
Benefit payments and withdrawals	<u>(2,305,609)</u>	<u>(147,153)</u>	<u>(229,461)</u>	<u>(2,682,223)</u>
Net change in total pension liability	1,653,691	35,135	48,021	1,736,847
Total pension liability — beginning	<u>39,259,678</u>	<u>1,871,979</u>	<u>3,418,199</u>	<u>44,549,856</u>
Total pension liability — ending (a)	<u>40,913,369</u>	<u>1,907,114</u>	<u>3,466,220</u>	<u>46,286,703</u>
Plan fiduciary net position:				
Employer contributions	2,320,910	-	-	2,320,910
Member contributions	228,783	-	-	228,783
Net investment income	5,071,530	76,054	(101)	5,147,483
Benefit payments and withdrawals	<u>(2,305,609)</u>	<u>(147,153)</u>	<u>(229,461)</u>	<u>(2,682,223)</u>
Administrative expenses	(17,450)	-	-	(17,450)
Reimbursement of benefit payments to PSOVSF from QPP	(231,024)	-	231,024	-
Other	<u>6,811</u>	<u>80</u>	<u>20</u>	<u>6,911</u>
Net change in plan fiduciary net position	5,073,951	(71,019)	1,482	5,004,414
Accrued Transfers from POLICE to POVSF and PSOVSF	(2,310,000)	1,290,000	1,020,000	-
Plan fiduciary net position — beginning	<u>28,986,941</u>	<u>464,887</u>	<u>(60)</u>	<u>29,451,768</u>
Plan fiduciary net position — ending (b)	<u>31,750,892</u>	<u>1,683,868</u>	<u>1,021,422</u>	<u>34,456,182</u>
Employer's net pension liability — ending (a)-(b)	<u>\$ 9,162,477</u>	<u>\$ 223,246</u>	<u>\$ 2,444,798</u>	<u>\$ 11,830,521</u>
Plan fiduciary net position as a percentage of the total pension liability	<u>77.61%</u>	<u>88.29%</u>	<u>29.47%</u>	<u>74.44%</u>
Covered payroll	\$ 3,420,312	n/a	n/a	\$ 3,420,312
Employer's net pension liability as a percentage of covered payroll	<u>267.88%</u>	<u>n/a</u>	<u>n/a</u>	<u>345.89%</u>

**Additionally, in accordance with GASB No. 67, paragraph 50, such information was not readily available for periods prior to 2014.**

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

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

**NEW YORK CITY POLICE PENSION FUNDS  
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
SCHEDULE OF EMPLOYER CONTRIBUTIONS  
(In thousands)**

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>
Actuarially determined contribution	\$ 2,458,907	\$ 2,558,256	\$ 2,415,153	\$ 2,293,840	\$ 2,393,940
Contributions in relation to the actuarially determined contribution	<u>2,458,907</u>	<u>2,558,256</u>	<u>2,415,153</u>	<u>2,293,840</u>	<u>2,393,940</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 4,244,806	\$ 4,047,772	\$ 3,673,054	\$ 3,509,985	\$ 3,540,326
Contributions as a percentage of covered payroll*	57.927%	63.202%	65.753%	65.352%	67.619%
	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>
Actuarially determined contribution	\$ 2,309,619	\$ 2,320,910	\$ 2,424,690	\$ 2,385,731	\$ 2,083,633
Contributions in relation to the actuarially determined contribution	<u>2,309,619</u>	<u>2,320,910</u>	<u>2,424,690</u>	<u>2,385,731</u>	<u>2,083,633</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 3,512,778	\$ 3,420,312	\$ 3,459,872	\$ 3,448,765	\$ 3,252,706
Contributions as a percentage of covered payroll*	65.749%	67.857%	70.080%	69.176%	64.058%

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

SCHEDULE 2 (CONTINUED)

NEW YORK CITY POLICE PENSION FUNDS  
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
SCHEDULE OF EMPLOYER CONTRIBUTIONS  
(In thousands)

Note to Schedule:

The above actuarially determined contributions were developed using a One-Year Lag Methodology, under which the actuarial valuation determines the employer contribution for the second following fiscal year (e.g. Fiscal Year 2020 contributions were determined using an actuarial valuation as of June 30, 2018). The methods and assumptions used to determine the actuarially determined contributions are as follows:

Valuation Dates	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013	June 30, 2012	June 30, 2011
Actuarial cost method	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age
Amortization method for Unfunded Actuarial Accrued Liabilities:								
Initial Unfunded	Increasing Dollar Level Dollar	Increasing Dollar Level Dollar	Increasing Dollar Level Dollar	Increasing Dollar Level Dollar	Increasing Dollar Level Dollar	Increasing Dollar Level Dollar	Increasing Dollar Level Dollar	Increasing Dollar Level Dollar
Post-2010 Unfunded	14 years (closed)	15 years (closed)	16 years (closed)	17 years (closed)	18 years (closed)	19 years (closed)	20 years (closed)	21 years (closed)
Remaining amortization period:	9 years (closed)	9 years (closed)	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)
2011 Actuarial Gain/Loss	9 years (closed)	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	NA
2012 Actuarial Gain/Loss	10 years (closed)	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	NA	NA
2013 Actuarial Gain/Loss	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	NA	NA	NA
2014 Actuarial Gain/Loss	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	NA	NA	NA	NA
2015 Actuarial Gain/Loss	13 years (closed)	14 years (closed)	15 years (closed)	NA	NA	NA	NA	NA
2016 Actuarial Gain/Loss	14 years (closed)	15 years (closed)	NA	NA	NA	NA	NA	NA
2017 Actuarial Gain/Loss	15 years (closed)	NA	NA	NA	NA	NA	NA	NA
2018 Actuarial Gain/Loss	15 years (closed)	NA	NA	NA	NA	NA	NA	NA
Actuarial Asset Valuation (AAV) Method <sup>3</sup>	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 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 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.
Actuarial assumptions:	7.0% per annum, net of investment expenses	7.0% per annum, net of investment expenses	7.0% per annum, net of investment expenses	7.0% per annum, net of investment expenses	7.0% per annum, net of investment expenses	7.0% per annum, net of investment expenses	7.0% per annum, net of investment expenses	7.0% per annum, net of investment expenses
Assumed rate of return <sup>4</sup>	Tables adopted by Board of Trustees during Fiscal Year 2019	Tables adopted by Board of Trustees during Fiscal Year 2019	Tables adopted by Board of Trustees during Fiscal Year 2016	Tables adopted by Board of Trustees during Fiscal Year 2016	Tables adopted by Board of Trustees during Fiscal Year 2016	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012
Post-retirement mortality	Tables adopted by Board of Trustees during Fiscal Year 2019	Tables adopted by Board of Trustees during Fiscal Year 2019	Tables adopted by Board of Trustees during Fiscal Year 2016	Tables adopted by Board of Trustees during Fiscal Year 2016	Tables adopted by Board of Trustees during Fiscal Year 2016	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012
Active service: withdrawal, death, disability, service retirement	Tables adopted by Board of Trustees during Fiscal Year 2019	Tables adopted by Board of Trustees during Fiscal Year 2019	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012
Salary increases <sup>4</sup>	In general, merit and promotion increases plus assumed General Wage increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage increases of 3.0% per year.	In general, merit and promotion increases plus assumed General Wage increases of 3.0% per year.

<sup>1</sup> 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 accrued liability (UAAL) not less than \$0. The financial results using this Frozen Initial Liability Actuarial Cost Method are the same as those that would be produced using the Aggregate Actuarial Cost Method.

<sup>2</sup> In conjunction with Chapter 85 of the Laws of 2000, there is an amortization method. However, the June 30, 1999 UAAL for the QPP equaled \$0 and no amortization period was required.

<sup>3</sup> As of the June 30, 2014 (Lag) valuation, the AAV is constrained to be no more than 20% from Fair Value.

<sup>4</sup> Developed using a long-term Consumer Price Inflation assumption of 2.5% per year.

See Report of Independent Certified Public Accountants.



**NEW YORK CITY POLICE PENSION FUNDS  
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
SCHEDULE OF INVESTMENT RETURNS  
(In thousands)**

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

<b><u>Fiscal Year Ended</u></b>	<b><u>QPP</u></b>	<b><u>PSOVSF</u></b>	<b><u>POVSF</u></b>
June 30, 2020	4.74%	4.07%	4.33%
June 30, 2019	6.81%	9.27%	5.77%
June 30, 2018	9.60%	4.42%	6.71%
June 30, 2017	13.19%	12.85%	13.80%
June 30, 2016	1.18%	-1.06%	-0.33%
June 30, 2015	3.83%	5.16%	6.34%
June 30, 2014	17.69%	16.16%	19.44%

Note: In accordance with paragraph 50 of GASB No. 67, this schedule should present information for 10 years, if available. The information presented here pertains to periods beginning with the June 30, 2014 fiscal year, the Plan's adoption year of GASB No. 67. Additional years will be added until the 10 year requirement is met.

**New York City Police Pension Funds**  
**Investment Expenses**  
**Year Ended June 30, 2020**

<u>Fund Manager</u>	<u>Asset Class</u>	<u>Total Fees</u>
Wellington Mgmt MCC	Domestic Equity	\$ 3,247,449
Brown Asset Mgmt US SCG	Domestic Equity	2,246,392
RAFI Enhanced Large Co.	Domestic Equity	1,564,599
Legal General US LMCE	Domestic Equity	844,238
Dalton US SCV	Domestic Equity	783,194
Dimensional Fund Advisors - US SCC	Domestic Equity	516,638
William Blair US SCG	Domestic Equity	428,652
Ceredex US SCV	Domestic Equity	322,443
Pzena US SCV	Domestic Equity	263,108
BlackRock US LMC R1000 Core	Domestic Equity	152,509
RAFI	Domestic Equity	136,897
SSGA Russell Top 200 Core	Domestic Equity	82,834
LEGATO-BRIDGE CITY SCG	Domestic Equity	78,304
LEGATO-ESSEX SCG	Domestic Equity	60,225
LEGATO-DEAN SCV	Domestic Equity	59,299
Cooke & Bieler US SCV	Domestic Equity	50,040
LEGATO-ALTRAVUE SCV	Domestic Equity	47,111
LEGATO-LISANTI-SCG	Domestic Equity	45,942
LEGATO-BOWLING SCV	Domestic Equity	45,087
Blackrock R2000 Growth	Domestic Equity	2,682
Blackrock R2000 Value	Domestic Equity	1,926
Walter Scott WorldxUS LMCG	Total World Ex Usa	1,569,446
Baillie Gifford WorldxUS LMCG	Total World Ex Usa	1,349,240
Sprucegrove (New)	Total World Ex Usa	1,239,795
Causeway WorldxUS LMCV	Total World Ex Usa	976,001
Causeway WorldxUS LMCV	Total World Ex Usa	766,854
Acadian WorldxUS SCC	Total World Ex Usa	669,111
Walter Scott WorldxUS LMCG	Total World Ex Usa	505,826
Baillie Gifford WorldxUS LMCG	Total World Ex Usa	414,220
Fidelity WorldxUS SCC	Total World Ex Usa	373,973
Algert EAFE SCC	Total World Ex Usa	176,824
SSGA WorldexUS LMC Passive Core	Total World Ex Usa	62,900
SSGA WorldexUS SC Passive	Total World Ex Usa	61,422
Baillie Gifford EM	Emerging Markets	1,711,120
DFA EM	Emerging Markets	1,480,501
Acadian EM	Emerging Markets	1,222,767
Parametric EM	Emerging Markets	1,073,608
Baillie Gifford EM	Emerging Markets	\$ 569,340

Continued...

**New York City Police Pension Funds**  
**Investment Expenses**  
**Year Ended June 30, 2020**

<u>Fund Manager</u>	<u>Asset Class</u>	<u>Total Fees</u>
BlackRock Passive MSCI EM Core	Emerging Markets	\$ 211,671
UBS-EM ACC	Emerging Markets	155,199
Pzena-EM ACV	Emerging Markets	124,146
LEADING EDGE-HENRY JAMES INTL	International Fund of Funds	208,166
LEADING EDGE-REDWOOD EAFE	International Fund of Funds	204,497
LEADING EDGE-ATIVO INTL	International Fund of Funds	176,860
LEADING EDGE-HAVEN	International Fund of Funds	148,741
LEADING EDGE-BLACKCRANE INTL	International Fund of Funds	134,404
FIS-DUNDAS EAFE	International Fund of Funds	71,500
FIS-ATIVO EAFE	International Fund of Funds	66,164
FIS-AUBREY EM	International Fund of Funds	65,157
FIS-OSMOSIS EAFE	International Fund of Funds	63,390
FIS-CHANGE GLOBAL EM	International Fund of Funds	47,752
FIS-DENALI EAFE	International Fund of Funds	41,119
FIS-REDWOOD INVESTMENTS	International Fund of Funds	40,558
FIS-MARTIN-EAFE	International Fund of Funds	34,388
FIS-METIS EAFE	International Fund of Funds	21,956
LEADING EDGE-TRANSITION	International Fund of Funds	11,346
FIS-TRANSITION	International Fund of Funds	1,335
T. Rowe Price - Credit	Fixed Income Structured Program	559,220
SSGA LI Treasury	Fixed Income Structured Program	528,871
BlackRock LI Treasury	Fixed Income Structured Program	398,948
Blackrock - Mortgage	Fixed Income Structured Program	319,902
Fidelity / Pyramis - Credit	Fixed Income Structured Program	227,690
Prudential - Credit	Fixed Income Structured Program	199,315
SSGA LT Treasury FTSE	Fixed Income Structured Program	171,338
Taplin Canida - Credit	Fixed Income Structured Program	97,808
Blackrock - Credit	Fixed Income Structured Program	94,246
Neuberger Berman - Mortgage	Fixed Income Structured Program	57,462
SSGA ST Treasury 1-3Y	Fixed Income Structured Program	32,158
SSGA IT Treasury 1-10Y	Fixed Income Structured Program	656
GIA-Core Plus	Core Fixed Income – Developing Managers	109,584
LM Capital-Core Plus	Core Fixed Income – Developing Managers	66,908
Pugh-CorePlus	Core Fixed Income – Developing Managers	9,116
PIM - Pugh Capital Mgmt -Core	Total Core Fixed Income – Emerging Managers	81,129
PIM - Ramirez Core-Core Plus	Total Core Fixed Income – Emerging Managers	73,269
PIM - New Century Core-Core Plus	Total Core Fixed Income – Emerging Managers	64,240
PIM - Optimum Quantvest (fka Hillswick) Core-Core Plus	Total Core Fixed Income – Emerging Managers	\$ 24,280

Continued...

**New York City Police Pension Funds**  
**Investment Expenses**  
**Year Ended June 30, 2020**

<u>Fund Manager</u>	<u>Asset Class</u>	<u>Total Fees</u>
PIM - Integrity Core-Core Plus	Total Core Fixed Income – Emerging Managers	\$ 21,422
Blackrock TIPS	Fixed Income - TIPS	195,612
SSGA TIPS Passive	Fixed Income - TIPS	69,077
Blackrock TIPS	Fixed Income - TIPS	64,024
T. Rowe Price - High Yield	Fixed Income High Yield	1,963,767
Shenkman - High Yield	Fixed Income High Yield	1,101,193
Neuberger Berman - High Yield	Fixed Income High Yield	1,017,969
Oaktree - High Yield	Fixed Income High Yield	749,104
Brigade High Yield	Fixed Income High Yield	429,108
Stone Harbor - High Yield	Fixed Income High Yield	424,915
Nomura High Yield	Fixed Income High Yield	383,939
Mackay Shields High Yield	Fixed Income High Yield	371,574
Eaton Vance High Yield	Fixed Income High Yield	343,018
Barings Bank Loans	Fixed Income Bank Loans	825,783
Credit Suisse Bank Loans	Fixed Income Bank Loans	609,428
Pinebridge Bank Loans	Fixed Income Bank Loans	471,268
Advent Convertible Bonds	Fixed Income Convertible Bonds	1,730,540
Victory Convertible Bonds	Fixed Income Convertible Bonds	1,227,921
AFL-CIO Housing Investment Trust	Fixed Income ETI Investments	554,751
RBC Access MBS	Fixed Income ETI Investments	160,657
Fortress Ptnrs LP	Opportunistic Fixed Income	2,270,631
Oak Hill Ptnrs LP	Opportunistic Fixed Income	1,627,879
Apollo Centre Street Partnership LP	Opportunistic Fixed Income	1,174,660
Marathon Centre Street Partnership, L.P.	Opportunistic Fixed Income	1,146,452
Goldentree OD MTA	Opportunistic Fixed Income	1,039,686
Angelo Gordon Ptnrs LP	Opportunistic Fixed Income	912,928
Brightwood Capital Fund IV	Opportunistic Fixed Income	858,638
Ares Centre Street Partnership, L.P.	Opportunistic Fixed Income	840,921
Oaktree Opportunities Fund IX, L.P.	Opportunistic Fixed Income	681,844
Torchlight Debt Opp VI	Opportunistic Fixed Income	605,668
Maranon Centre Street Partnership	Opportunistic Fixed Income	573,815
KKR SP-OFI (KKR-NYC Credit)	Opportunistic Fixed Income	566,251
ICG Centre St Partnership	Opportunistic Fixed Income	475,135
Contrarian Centre Street Partnership, L.P.	Opportunistic Fixed Income	375,207
Torchlight Debt Opp V	Opportunistic Fixed Income	292,780
Brightwood Capital Fund III, LP	Opportunistic Fixed Income	105,087
Fortress Ptnrs LP II	Opportunistic Fixed Income	71,708
Avenue Special Situations Fund VI	Opportunistic Fixed Income	\$ 4,237

Continued...

**New York City Police Pension Funds**  
**Investment Expenses**  
**Year Ended June 30, 2020**

<u>Fund Manager</u>	<u>Asset Class</u>	<u>Total Fees</u>
Lone Star Fd VIII	Opportunistic Fixed Income	\$ (7,765)
D.E. Shaw Composite Fund, L.L.C.	Hedge Funds	13,968,689
AlphaQuest Partners	Hedge Funds	4,023,328
Altimeter Partners Fund LP	Hedge Funds	3,504,600
Florin Court Capital Fund	Hedge Funds	3,298,103
Key Square Partners LP	Hedge Funds	2,411,916
SRS Investment Management	Hedge Funds	1,682,780
Luxor Capital Partners, LP	Hedge Funds	1,339,322
DL Partners Opportunities Fund LP	Hedge Funds	1,212,777
Brevan Howard AH Fund	Hedge Funds	966,921
GSA Trend Fund LP	Hedge Funds	875,219
Voloridge Fund, LP	Hedge Funds	783,703
Lansdowne Euro Abs Opp	Hedge Funds	740,150
Caspian Select Credit Fund, L.P.	Hedge Funds	641,535
Gotham Targeted Neutral, LP	Hedge Funds	480,527
Standard General	Hedge Funds	332,560
Voloridge Aggressive Fund, LP	Hedge Funds	332,262
Gresham Quant ACAR Fund	Hedge Funds	281,830
Turiya Fund LP	Hedge Funds	143,995
Vista Equity Partners Fund V, L.P.	Private Equity	6,379,729
Summit Partners Growth Equity VIII-A	Private Equity	4,524,186
Warburg Pincus Private Equity XI, LP	Private Equity	2,643,557
Apollo Investment Fund VIII	Private Equity	2,446,139
Paladin III, L.P.	Private Equity	2,102,877
Ares Corporate Opportunities Fund III, L.P.	Private Equity	1,927,735
Crestview Partners III, L.P.	Private Equity	1,920,226
Vista Equity Partners Fund VI, L.P.	Private Equity	1,872,317
AXA Secondary Fund V B L.P.	Private Equity	1,786,473
Apollo Investment Fund IX, L.P.	Private Equity	1,687,967
Vista Equity Partners VII	Private Equity	1,507,999
Warburg Pincus Global Growth, L.P.	Private Equity	1,468,726
EQT VIII	Private Equity	1,435,917
Trilantic Capital Partners VI L.P.	Private Equity	1,235,632
ASF VIII B, L.P.	Private Equity	1,207,144
Apax Partners IX	Private Equity	1,198,849
CVC Capital Partners VII	Private Equity	1,161,629
Platinum Equity Partners Small Cap I	Private Equity	\$ 1,124,817

Continued...

**New York City Police Pension Funds**  
**Investment Expenses**  
**Year Ended June 30, 2020**

<u>Fund Manager</u>	<u>Asset Class</u>	<u>Total Fees</u>
CVC European Equity Partners V, L.P.	Private Equity	\$ 1,053,833
Welsh, Carson, Anderson & Stowe XIII, L.P.	Private Equity	1,049,051
Trilantic Capital Partners V L.P.	Private Equity	1,033,471
Bridgepoint Europe VI L.P.	Private Equity	1,012,119
Warburg Pincus Private Equity XII, LP	Private Equity	929,979
Lexington Capital Partners VIII, L.P.	Private Equity	909,301
Welsh, Carson, Anderson & Stowe XII, L.P.	Private Equity	904,095
Trilantic Capital Partners IV L.P.	Private Equity	869,143
FS Equity Partners VI, L.P.	Private Equity	852,117
Siris Partners IV	Private Equity	848,856
Lexington Capital Partners IX L.P.	Private Equity	837,710
EQT VII, L.P.	Private Equity	834,306
Platinum Equity Capital Partners III, LP	Private Equity	832,913
ComVest Investment Partners IV, L.P.	Private Equity	786,998
Platinum Equity Capital Partners V, LP	Private Equity	777,739
Apax Partners X	Private Equity	739,325
Landmark Equity Partners XV	Private Equity	707,989
Ares Corporate Opportunities Fund V, L.P.	Private Equity	701,854
Green Equity Investors VII	Private Equity	646,066
KKR Americas Fund XII L.P.	Private Equity	645,521
CVC Capital Partners VI	Private Equity	570,478
Palladium Equity Partners V, L.P.	Private Equity	530,301
Platinum Equity Capital Partners IV, LP	Private Equity	512,033
New Mountain Partners III, L.P.	Private Equity	457,775
GCM Grosvenor Emerging Manager Fund, L.P.	Private Equity	452,114
American Securities Partners VII, L.P.	Private Equity	400,399
Centerbridge Capital Partners III, L.P.	Private Equity	399,072
BC European Capital IX	Private Equity	383,236
Carlyle Partners VI, L.P.	Private Equity	379,629
Blackstone Capital Partners VI, L.P.	Private Equity	376,988
Neuberger Berman Strategic Co - Invest II, LP	Private Equity	367,659
ASF VII B, L.P.	Private Equity	360,378
Green Equity Investors VI	Private Equity	326,843
Palladium Equity Partners IV	Private Equity	319,748
Carlyle Partners IV, L.P.	Private Equity	315,164
ASF VI B	Private Equity	286,902
Bridgepoint Europe V L.P.	Private Equity	284,117
BC European Capital X	Private Equity	\$ 280,597

Continued...

**New York City Police Pension Funds**  
**Investment Expenses**  
**Year Ended June 30, 2020**

<u>Fund Manager</u>	<u>Asset Class</u>	<u>Total Fees</u>
Yucaipa American Alliance Fund I, L.P.	Private Equity	\$ 260,437
Olympus Growth Fund VI, L.P.	Private Equity	257,275
Reverence Capital Partners Opportunities Fund II, L.P.	Private Equity	255,071
Vista Equity Partners Fund IV, L.P.	Private Equity	247,173
Warburg Pincus Financial Sector Fund	Private Equity	241,959
BDCM Opportunity Fund III, L.P.	Private Equity	239,918
Incline Equity Partners III, L.P.	Private Equity	213,037
KKR Europe V	Private Equity	191,317
Raine Partners III	Private Equity	177,698
Stellex Capital Management LP	Private Equity	175,980
Pegasus Partners V, L.P.	Private Equity	175,209
Clearlake Capital Partners VI	Private Equity	172,219
Trident V, L.P.	Private Equity	164,835
Crestview Partners II, L.P.	Private Equity	164,574
Snow Phipps II, L.P.	Private Equity	152,644
Valor Equity Partners IV	Private Equity	144,900
Olympus Capital Asia III	Private Equity	139,544
Lexington Capital Partners VII, L.P.	Private Equity	136,417
EQT VI, L.P.	Private Equity	132,119
Siris Partners III	Private Equity	131,733
Bridgepoint Europe VI Co-Investment	Private Equity	129,792
Ares Corporate Opportunities Fund, L.P.	Private Equity	124,116
SCP Vitalife Partners II, L.P.	Private Equity	112,576
FTV V, LP	Private Equity	104,656
Yucaipa Corporate Initiatives Fund II LP	Private Equity	103,790
New MainStream Capital II	Private Equity	103,650
ICV Partners IV, L.P.	Private Equity	102,649
FTVentures III, L.P.	Private Equity	102,258
Euro Choice IV L.P.	Private Equity	96,625
Lindsay Goldberg V	Private Equity	95,058
Altaris Health Partners III, L.P.	Private Equity	93,888
Grain Communications Opportunities Fund II	Private Equity	91,895
Coller International Partners V, L.P.	Private Equity	85,802
Capital Partners Private Equity Income Fund III, L.P.	Private Equity	85,443
Valor Equity III	Private Equity	85,224
NorthBound Emerging Manager Custom Fd LP	Private Equity	83,530
Montreux Equity Partners IV L.P.	Private Equity	83,439
Apollo Investment Fund VII, L.P.	Private Equity	\$ 80,614

Continued...

**New York City Police Pension Funds**  
**Investment Expenses**  
**Year Ended June 30, 2020**

<u>Fund Manager</u>	<u>Asset Class</u>	<u>Total Fees</u>
Patriot Financial Partners III	Private Equity	\$ 79,788
MidOcean Partners III, L.P.	Private Equity	76,877
Crestview Partners IV	Private Equity	75,117
Solera Partners, L.P.	Private Equity	74,409
Yucaipa American Alliance Fund II, LP	Private Equity	69,494
Vista Foundation Fund II, L.P.	Private Equity	68,503
Vistria Fund III, LP	Private Equity	68,389
Ampersand 2011 L.P.	Private Equity	66,462
Onex Partners III LP	Private Equity	64,435
New MainStream Capital III	Private Equity	64,311
FTV IV, LP	Private Equity	63,956
Raine Partners II	Private Equity	63,217
Lincolnshire Equity Fund III, L.P.	Private Equity	63,086
FTV VI, LP	Private Equity	61,684
Blue Wolf Capital Fund II, L.P.	Private Equity	61,112
Palladium Equity Partners III, L.P.	Private Equity	57,513
Catterton Partners VI, L.P.	Private Equity	53,425
EQT VIII Co-Investment	Private Equity	52,052
Atlantic Equity Partners IV, L.P.	Private Equity	51,301
Landmark Equity Partners XIV, L.P.	Private Equity	49,553
Permira IV	Private Equity	49,294
Milestone Partners III, LP	Private Equity	47,870
Quaker BioVentures II, L.P.	Private Equity	44,831
Webster Capital III	Private Equity	42,900
Welsh, Carson, Anderson & Stowe XI, L.P.	Private Equity	42,252
Mill City Capital II	Private Equity	40,758
SCP Private Equity Partners II, L.P.	Private Equity	40,134
USPF II Institutional Fund, L.P.	Private Equity	36,661
Patriot Financial Partners II	Private Equity	35,814
United States Power Fund III, L.P.	Private Equity	35,562
NGN BioMed Opportunity II, L.P.	Private Equity	32,044
Capital Partners Private Equity Income Fund II, L.P.	Private Equity	31,832
NB PCG Clean Energy Tech Fund East, L.P.	Private Equity	31,711
FdG Capital Partners II LP	Private Equity	31,526
Highland Consumer Fund I	Private Equity	31,169
Lincolnshire Equity Fund IV, L.P.	Private Equity	29,935
ASF VI B NYC Co-Invest L.P.	Private Equity	27,451
Crestview Partners IV Co-Investment	Private Equity	\$ 25,042

Continued...



**New York City Police Pension Funds**  
**Investment Expenses**  
**Year Ended June 30, 2020**

<u>Fund Manager</u>	<u>Asset Class</u>	<u>Total Fees</u>
Grey Mountain Partners Fund III, LP	Private Equity	\$ 24,376
Falconhead Capital Partners II, L.P.	Private Equity	23,326
BC European Capital X Co-Investment	Private Equity	23,140
Wellspring Capital Partners V, L.P.	Private Equity	22,239
Euro Choice III L.P.	Private Equity	21,956
Pegasus Partners IV, L.P.	Private Equity	21,226
Ares Corporate Opportunities Fund II, L.P.	Private Equity	18,509
Neuberger Berman Co-Investment Partners LP	Private Equity	18,040
Vista Equity Partners Fund III, L.P.	Private Equity	17,905
Terra Firma Capital Partners III, L.P.	Private Equity	17,187
Scale Venture Partners III, LP	Private Equity	16,864
Landmark NYC Fund I	Private Equity	16,778
Crestview Partners III (Co-Investment B), L.P.	Private Equity	13,991
Aisling Capital III, L.P.	Private Equity	13,737
GF Capital Private Equity Fund, L.P.	Private Equity	12,943
ICV Partners III, L.P.	Private Equity	12,568
ACON Equity Partners III, L.P.	Private Equity	11,693
Landmark Equity Partners XIII	Private Equity	11,590
RRE Ventures IV, L.P.	Private Equity	10,311
Avista Capital Partners II, L.P.	Private Equity	9,905
First Reserve Fund XII, L.P.	Private Equity	9,475
JP Morgan Fleming (Tranche A)	Private Equity	9,433
Constellation Venture Capital III, L.P.	Private Equity	9,305
Apollo Investment Fund V, L.P.	Private Equity	8,833
Reverence Capital Partners Opportunities Fund II (Parallel), L.P.	Private Equity	8,011
Capital Partners Private Equity Income Fund, L.P.	Private Equity	7,803
Carlyle Partners V, L.P.	Private Equity	7,515
Avista Capital Partners, L.P.	Private Equity	7,414
Apollo Investment Fund VI, L.P.	Private Equity	6,927
Carlyle Partners VI, L.P. (Side Car)	Private Equity	6,183
GSO Capital Opportunities Fund, L.P.	Private Equity	6,066
ASF VIII B NYC Co-Invest L.P.	Private Equity	5,853
CCMP Capital Investors II, L.P.	Private Equity	5,383
ComVest Investment Partners III, L.P.	Private Equity	4,599
First Reserve Fund XI, L.P.	Private Equity	4,414
Snow Phipps Group, L.P.	Private Equity	4,043
CVC European Equity Partners III, L.P.	Private Equity	3,827
Pine Brook Capital Partners	Private Equity	\$ 3,680

Continued...

**New York City Police Pension Funds  
Investment Expenses  
Year Ended June 30, 2020**

<u>Fund Manager</u>	<u>Asset Class</u>	<u>Total Fees</u>
Platinum Equity Capital Partners IV - SC	Private Equity	\$ 2,214
Blackstone Capital Partners IV, L.P.	Private Equity	1,769
Intermedia Partners VII, L.P.	Private Equity	1,479
Gleacher Mezzanine Fund II, LP	Private Equity	1,444
Aurora Equity Partners III, L.P.	Private Equity	1,439
Landmark Equity Partners XI, L.P.	Private Equity	1,413
Levine Leichtman Capital Partners IV LP	Private Equity	1,405
Bridgepoint Europe V Co-Investment	Private Equity	1,208
Thomas, McNerney & Partners II, L.P.	Private Equity	1,079
Aisling Capital II, LP	Private Equity	1,078
Arlington Capital Partners II, L.P.	Private Equity	932
FS Equity Partners V, L.P.	Private Equity	634
Lincolnshire Equity Fund II, L.P.	Private Equity	539
New Mountain Partners II, L.P.	Private Equity	400
Blackstone Capital Partners V, L.P.	Private Equity	(2,580)
ASF VII B NYC Co-Invest L.P.	Private Equity	(4,133)
Psilos Group Partners III, L.P.	Private Equity	(16,888)
Bridgepoint Europe IV	Private Equity	(293,558)
Riverstone/Carlyle Global Energy & Power Fund IV, L.P.	Private Equity	(594,459)
Arsenal Capital Partners II	Private Equity	(740,766)
Ares Corporate Opportunities Fund IV, L.P.	Private Equity	(1,058,765)
Brookfield Strategic Real Estate	Private Real Estate	4,815,208
Brookfield Premier Real Estate Partners	Private Real Estate	2,179,444
Blackstone Real Estate Ptnrs VII	Private Real Estate	2,058,360
Blackstone Real Estate Partners Europe IV, L.P.	Private Real Estate	2,020,648
Blackstone Real Estate Ptnrs VIII	Private Real Estate	2,008,770
Carlyle Realty Partners VII	Private Real Estate	1,857,616
Almanac Realty Securities VII	Private Real Estate	1,782,165
Prudential PRISA III	Private Real Estate	1,040,081
Clarion Lion Industrial Trust	Private Real Estate	1,025,754
JP Morgan Strategic Property Fund	Private Real Estate	1,015,843
Blackstone Real Estate Ptnrs IX	Private Real Estate	967,076
NYC Vanbarnton Interborough Fund LLC (NYC Asset Investors #1 LLC)	Private Real Estate	895,143
Brookfield Strategic Real Estate Partners III	Private Real Estate	837,265
DivcoWest Fund V	Private Real Estate	715,197
Prudential PRISA II	Private Real Estate	709,649
DivcoWest Fund IV	Private Real Estate	670,969
USAA Eagle Real Estate Fund	Private Real Estate	665,117
KKR Real Estate Partners Americas II LP	Private Real Estate	630,952
DRA Growth and Income Fund IX	Private Real Estate	623,303
KKR Real Estate Credit Opp Ptnrs Agg I	Private Real Estate	616,941
DivcoWest Fund III REIT LLC	Private Real Estate	540,630
Almanac Realty Securities VIII, L.P.	Private Real Estate	531,519
Lasalle US Property Fd	Private Real Estate	479,420
MetLife Core Property	Private Real Estate	\$ 466,827

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**New York City Police Pension Funds**  
**Investment Expenses**  
**Year Ended June 30, 2020**

<u>Fund Manager</u>	<u>Asset Class</u>	<u>Total Fees</u>
Tristan European Property Investors Special Opportunities 4	Private Real Estate	\$ 448,366
RFM NYCERS Sandy LLC (NYC Asset Investors #2 -Related)	Private Real Estate	437,519
Heitman America Real Estate Trust, L.P.	Private Real Estate	403,909
Westbrook Real Estate Fund X Co-Investment	Private Real Estate	403,759
Carlyle Property Investors, LP	Private Real Estate	385,245
H/2 Special Opportunities III L.P.	Private Real Estate	364,580
UBS Trumbull Property Fd	Private Real Estate	361,124
JP Morgan Special Situation Property	Private Real Estate	351,679
H/2 Special Opportunities II L.P.	Private Real Estate	332,178
H/2 Special Opportunities IV L.P.	Private Real Estate	323,545
Lone Star Real Estate Fund V (U.S.), LP	Private Real Estate	279,336
Artemis Co-Investment (Artemis Mach II, LLC)	Private Real Estate	269,518
Almanac Realty Securities VII- SideCar	Private Real Estate	265,307
Blackstone Real Estate Ptnrs VI	Private Real Estate	264,973
Almanac Realty Securities VI	Private Real Estate	238,681
Artemis Income & Growth	Private Real Estate	234,816
Hudson Superstorm Sandy Rebuilding Fund (NYC Asset Investor #3 LLC )	Private Real Estate	225,055
RREEF America REIT II	Private Real Estate	219,787
Heitman Credit	Private Real Estate	219,320
Jamestown Premier Fund	Private Real Estate	214,933
Prudential PRISA	Private Real Estate	198,274
PW Real Estate Fund III LP	Private Real Estate	180,776
Pramerica Real Estate VI, LP	Private Real Estate	173,885
Carlyle Realty Partners VI, L.P.	Private Real Estate	163,233
Harrison Street Core Property Fund, L.P.	Private Real Estate	158,434
Aermon Capital Real Estate Fund IV	Private Real Estate	158,140
Exeter Industrial Value Fund IV LP	Private Real Estate	152,682
Blackstone Real Estate Partners Europe III L.P.	Private Real Estate	140,418
Prologis Targeted US Logistics Fd	Private Real Estate	130,848
Lone Star RE Fd III	Private Real Estate	128,363
Exeter Core Industrial Club Fund II, L.P.	Private Real Estate	123,427
Taconic New York City Investment Fund, L.P.	Private Real Estate	98,124
Westbrook Real Estate Fund VIII	Private Real Estate	89,655
Walton Street Real Estate Fund VI	Private Real Estate	83,919
AG Realty Fund VII L.P.	Private Real Estate	81,390
Avanath Affordable Housing II	Private Real Estate	79,957
BIG Real Estate Fund I	Private Real Estate	74,932
Almanac Realty Securities VI (Sidecar II), L.P.	Private Real Estate	68,015
DRA Growth and Income Fund X	Private Real Estate	\$ 66,715

Continued...

**New York City Police Pension Funds**  
**Investment Expenses**  
**Year Ended June 30, 2020**

<u>Fund Manager</u>	<u>Asset Class</u>	<u>Total Fees</u>
Silverpeak Legacy Partners III	Private Real Estate	\$ 51,428
Stockbridge Real Estate Fund III A LP	Private Real Estate	39,207
Westbrook Real Estate Fund VII, LP	Private Real Estate	39,044
Exeter Core Fund III	Private Real Estate	21,183
Almanac Realty Securities VIII Sidecar	Private Real Estate	18,451
American Value Partners Fund I	Private Real Estate	18,272
Carlyle Realty Partners V, L.P.	Private Real Estate	15,995
Harrison Street (HSRE) Core Co-investment, L.P.	Private Real Estate	13,832
Ares European Real Estate Fund III, L.P.	Private Real Estate	12,394
Thor Urban Property Fd II	Private Real Estate	8,392
Apollo Real Estate Investment Fund V, L.P.	Private Real Estate	3,664
The City Investment Fd	Private Real Estate	2,169
Canyon Johnson Urban Fd II	Private Real Estate	2,084
Blackstone Real Estate Ptnrs IV	Private Real Estate	1,512
Colony Investors VIII	Private Real Estate	1,321
Metropolitan Workforce Housing Fund, LLC	Private Real Estate	250
Colony Realty Ptnrs II	Private Real Estate	(6,018)
Canyon Johnson Urban Fd III	Private Real Estate	(18,123)
IFM Global Infrastructure	Infrastructure	2,305,551
EQT Infrastructure IV (No.2) USD SCSp	Infrastructure	1,451,888
Global Infrastructure Partners III	Infrastructure	1,289,993
Global Infrastructure Partners IV-A/B, L.P.	Infrastructure	955,674
Actis Energy 4	Infrastructure	816,177
Global Energy & Power Infrastructure Fund III	Infrastructure	774,970
Brookfield Infrastructure Fund IV-B	Infrastructure	751,208
Brookfield Infrastructure Fund III	Infrastructure	667,962
EQT Infrastructure III	Infrastructure	539,885
Global Energy & Power Infrastructure Fund II	Infrastructure	498,505
ASF VII Infrastructure B LP	Infrastructure	415,288
Brookfield Infrastructure Fund II	Infrastructure	386,008
Ardian Infrastructure Fund V	Infrastructure	295,605
KKR Global Infrastructure Investors III	Infrastructure	258,608
AxInfra US II L.P.	Infrastructure	180,456
Axium Infrastructure Canada II (Intl) L.P.	Infrastructure	56,978
EIG Energy Partners	Infrastructure	29,867
Brookfield Infrastructure Fund IV Co-Invest	Infrastructure	\$ 3,821

Continued...

**New York City Police Pension Funds**  
**Investment Expenses**  
**Year Ended June 30, 2020**

Brookfield Infrastructure Fund III Co-Invest	Infrastructure	694
<b>Total Police FY 2020</b>		<b>\$ 210,002,168</b>
 <b><u>Legal Fees</u></b>		
MORGAN LEWIS BOCKIUS LLP		\$ 138,765
FOSTER GARVEY PC		96,139
REINHART BOERNER VAN DUEREN		78,949
COX CASTLE NICHOLSON LLP		64,755
PILLSBURY WINTHROP SHAW PITTMAN LLP		47,547
SEWARD KISSEL LLP		42,444
DAY PITNEY LLP		26,379
FOLEY AND LARDNER LLC		11,872
SQUIRE PATTON BOGGS (US) LLP		1,129
HITCHCOCK LAW FIRM PLLC		263
NIXON PEABODY LLP		25
<b>Total Legal Fees</b>		<b>\$ 508,267</b>
 <b><u>Consultant Fees</u></b>		
STEPSTONE GROUP LLC		\$ 898,184
WILSHIRE ASSOCIATES		408,916
TOWNSEND HOLDINGS LLC		378,180
AKSIA LLC		313,042
MSCI BARRA LLC		160,318
MSCI - RISKMETRICS GROUP		100,946
MSCI-INVESTMENT PROPERTY DATABANK LTD		36,633
THE BURGESS GROUP		32,284
MSCI - ESG RESEARCH LLC		14,723
ERNST & YOUNG US LLP		10,529
<b>Total Consultant Fees</b>		<b>\$ 2,353,755</b>
 <b>Total Police FY 2020</b>		 <b>\$ 212,864,190</b>
 <b>Operating Expenses/Misc Exp</b>		 \$ 13,520,377
 <b>POVSF</b>		 \$ 997,723
 <b>PSOVSF</b>		 \$ 1,545,287
 <b>Total Investment Expenses, incurred by the Fund</b>		 <b>\$ 228,927,577</b>

## Additional Supplementary Information

### New York City Police Pension Fund Schedule of Pension Cost Allocation Fiscal Year ended June 30, 2020

#### **Administrative Expenses:**

Salaries and Fringe Benefits Paid to Plan Personnel	<b>\$14,824,811</b>
Pension Overhead Expenses	<b>11,978,647</b>
<b>Total</b>	<b><u>26,803,458</u></b>

#### **Comptrollers Expenses:**

Trading & Other	2,670,956
Pension Division	228,721
Administration	192,616
Management Division	47,962
Publication	10,600
General Administrative	8,793
Utilities, Maintenance & Telephone	750
Mailroom / Non data Processing	7
<b>Total</b>	<b><u>3,160,405</u></b>

#### **Professional Services:**

Legal	1,532,595
F I S A	1,856,370
O P A	167,442
O M B	200,096
O A	1,746,539
<b>Total</b>	<b><u>5,503,042</u></b>

**Total Administrative Expenses** **\$35,466,905**

This amount represents expenses incurred by the Fund and also by other City agencies. From these expenses, \$26,803,458 are incurred and paid by NYCPPF and the balance is incurred by other City agencies and paid by the city of New York on behalf of the Fund.

Additional Supplementary Information

New York City Police Pension Fund  
Schedule of Administrative Expenses  
Fiscal Year ended June 30, 2020

**Salaries & Fringe Benefits Paid to Plan Personnel**

Salaries Paid to Plan Personnel	\$11,809,914
Fringe Benefits Paid to Plan personnel	3,014,897
Total Salaries	<u><b>14,824,811</b></u>

**Pension Overhead Expenses**

COPS 2.0	5,045,117
Office Services	3,388,418
Equipment and Furnitures	2,126,798
Contracts	721,872
Supplies and Materials	498,704
Maintenance and Repairs	197,738
Total Pension Overhead Expenses	<u><b>11,978,647</b></u>

Total Administrative Expenses incurred and paid by NYCPPF	<u><u><b>\$26,803,458</b></u></u>
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# NEW YORK CITY POLICE PENSION FUND

A Pension Trust Fund of the City of New York  
Comprehensive Annual Financial Report



## Investment Section Part III

*fiscal year ended  
June 30, 2020*

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## Investment Report

This section is prepared by management from data provided by the Investment Managers. The Comptroller administers the Fund's investments, subject to the management and control of the Board of Trustees. The Board of Trustees has the ultimate responsibility of ensuring that all the assets of the Fund are managed prudently, in compliance with the administrative code of the City of New York and the State Retirement Social Security Laws. The Board monitors and measures market and various other risk factors associated with investments. Independent investment consultants are employed as investment advisors to the Fund. Investment managers are utilized to manage long term debt and equity portfolios and seek to increase investment returns and provide greater safety for the assets of the Fund. The performance of the investment managers is reviewed frequently to insure that their activities in dealing securities are consistent with the best practices in the industry.

### Investment Policy

Investment Policy is approved by the Board of Trustees. The New York City Comptroller is the Treasurer, Chief Custodian and Investment Advisor to the Board. The primary objective of the Board is to provide retirement and other benefits for its members.

The Board realizes that increasing investment returns will strengthen the Fund and significantly enhance benefits enjoyed by the members. Increased returns will further assure the safety of assets held in trust for pension benefits. The Investment Policy adopted by the Board of Trustees is one that minimizes credit and market risks while maintaining a competitive yield on the Fund's portfolio. All returns are time-weighted rates of return. For periods greater than one year, returns are analyzed.

### Investment Philosophy

The investment philosophy of the Board is influenced by key factors that affect investment and strategy, i.e. Risk Tolerance, Returns, Diversification and Liquidity.

#### 1-Risk Tolerance

The Board shall always act to assure that the level of investment risk in the portfolio will be prudent and not exceed levels that may jeopardize the primary objective.

#### 2-Returns

The Board believes that over the long term there is a relationship between the level of investment risk taken and the rate of investment return realized. In order to enhance the level of returns, the assumption of a moderate level of risks is therefore reasonable and justified.

#### 3-Diversification

The Board seeks diversification through investing in a broad array of instruments in order to reduce overall portfolio risks.

#### 4-Liquidity

The system anticipates positive cash flow over the near and intermediate term. Liquidity requirements for payment of current and intermediate benefits will therefore not be an issue for the future.

## Investment Objectives

The Board has adopted the following general investment objectives in order to enhance returns, provide greater benefits and ensure the safety of assets held in trust for benefits.

1. In recognition that obligations of the Fund will increase as a result of inflation, the Board seeks to maximize the total return on assets held in trust for pension benefits, while operating within the bounds of regulatory restrictions and prudent parameters of risk.

2. The Board also aims to protect the system from depreciation of assets during adverse market conditions and to attain a level of return that is competitive, not only with similar funds but also with the wider market. These results are attained through broad diversification, careful review of risks and emphasis on long term results.

3. The Board of Trustees, where possible and not in conflict with other provisions, is interested in increased economic activity in local communities. The Comptroller's Office has made substantial efforts to broaden the Pension Fund's activity in economically targeted investments in the City of New York. This will promote growth in communities while increasing returns. All existing targeted investments are guaranteed by government agencies and earn a rate of return commensurate with risk.

## Asset Allocation

The Board's investment policy is implemented using a strategic allocation of assets that meet its objectives, while working within the confines of the Administrative Code of New York City and the State Retirement and Social Security Laws. The code authorizes the investment of Plan Assets, except equities, subject to the terms, conditions, limitations and restrictions imposed by law for investment by Savings Banks. The code imposes specific criteria for Plan investments. Fixed income investments may be made mostly in U.S. Government securities or agencies backed by the U.S Government, companies rated BBB or better by the Standard and Poor's Corporation or Moody's Investor's Services or in companies on the Legal Investments lists published by the New York State Banking Department.

Equity investments may be made only in stocks that meet the qualifications of the New York State Retirement and Social Security Laws. Short Term Investments may be made in U.S. Government Securities or other securities fully guaranteed by the Government, commercial paper rated AI or PI or fully collateralized repurchase agreements. Investments are made in a broad array of financial instruments; including domestic stocks, bonds and international securities, through a collective fund investment vehicle. Diversification of investments provides greater security for the assets held in trust, enabling the Fund to become stronger and to meet its obligation. The policy mix targeted for the Fund in fiscal year 2020 included securities from the following categories: U.S. Equities 31.7%, U.S. Core 15.4%, International Equities 8.9%, Emerging Markets 6.5%, Private Real Estate And Equities 8.1%, Hedge Funds 7.1% & Others 22.3%.

## Results

The Consolidated Performance report prepared for the Fund through June 30, 2020 showed the following portfolio returns: the Russell 3000 Index decreased to 6.53%. The World ex-USA Custom BM Index decreased to -5.11%, with Emerging markets decreased to -3.39%. For the fiscal year that just ended, Police Pension Fund Total Investments increased from \$49,102,785 thousand to \$50,366,975 thousand. Total assets increased from \$50,264,843 thousand to \$51,224,434 thousand, with net investment income decreasing from \$2,861,543 thousand to \$2,038,305 thousand. The total portfolio of the Police Pension Fund investments returned 4.7%, compared to the policy benchmark of 4.9%.

**New York City  
Police Pension Fund  
June 30, 2020**

**The following are Consultants and Advisors for the various investment types:**

**U.S. Equities**

Brown Asset Mgmt US SCG  
William Blair-US SCG  
Ceredex US SCV  
Cooke and Bieler-US SCV  
Dalton US SCV  
Pzena-US SCV  
DFA US SCC  
RAFI US SCE  
BlackRock US SCG R2000  
BlackRock US SCV R2000  
Wellington US MCC  
Legal General US LMCE  
PIMCO RAFI US LMCE  
BlackRock US LMC R1000 Core  
SSGA US LMC Top 200 Core

**Sub Managers**

Altravue US SCV - Legato  
Bowling US SCV - Legato  
Bridge City US SCG - Legato  
Dean US SCV - Legato  
Essex US SCG - Legato  
Lisanti US SCG - Legato

**International Equities**

Baillie Gifford WorldxUS LMCC  
Walter Scott WorldxUS LMCC  
Causeway WorldxUS LMCC  
Sprucegrove WorldxUS LMCC  
Acadian WorldxUS SCC  
Algert EAFE SCC  
Fidelity WorldxUS SCC  
SSGA WorldxUS SC Custom IDX  
SSGA WorldxUS LMC NYC Custom IDX  
Acadian EM  
Baillie Gifford EM  
DFA EM  
Parametric EM  
Pzena-EM ACV  
UBS-EM ACC  
BlackRock MSCI EM Core

**Sub Managers**

Ativo-EAFE ACG - FIS  
Aubrey-EM ACG - FIS  
Change Global-EM ACV - FIS  
Denali-EAFE ACV - FIS  
Dundas-EAFE ACG - FIS  
Martin-EAFE ACG - FIS  
Metis-EAFE ACV - FIS

Osmosis-EAFE ACV - FIS  
Redwood-EAFE ACG - FIS  
Ativo-WorldxUS ACC - Leading Edge  
Blackcrane-WorldxUS ACC - Leading Edge  
Haven-WorldxUS LMCV - Leading Edge  
Henry James-WorldxUS LMCC - Leading Edge  
Redwood-WorldxUS LMCC - Leading Edge

**Hedge Funds**

Total Permal Hedge Fund of Funds  
Altimeter Partners  
Brevan Howard AH Fund  
CASPIAN SELECT CF  
D.E. SHAW COMPOSITE FD  
DL PARTNERS OPP LP  
FIR TREE VAL FD  
Florin Court Capital  
Gemsstock Fund  
Gotham Asset Management  
GRESHAM QUANT ACAR FD  
GSA Capital Partners LP  
JEFFERIES STRC ALPHA B  
KEY SQUARE GROUP LP  
LANSDOWNE EURO ABS OPP  
Luxor Capital  
Perry Capital Lp  
Pharo Gaia Fund Ltd  
PHARO MACRO FD  
QUEST PARTNERS LLC  
SRS Investment Management  
STANDARD GENERAL  
Turiya Capital Management  
VOLORIDGE AGGRESSIVE  
VOLORIDGE FUND  
Voloridge Sustainability Fund Master

**Private Equity Investments**

ACON Equity Partners III LP  
ACOF V  
Aisling Capital II, LP  
Aisling Capital III, L.P.  
Altaris Health Partners III, L.P.  
American Securities Partners VI, L.P.  
American Securities Partners VII  
Ampersand 2011 L.P.  
APAX IX USD  
Apollo Investment Fund V, L.P.  
Apollo Investment Fund VI, L.P.  
Apollo Investment Fund VII, L.P.  
Apollo Investment Fund VIII  
Apollo IX

**New York City  
Police Pension Fund  
June 30, 2020**

**The following are Consultants and Advisors for the various investment types:**

Ardian Secondary VI	CVC VII
Ares Corp. Opportunities Fund I, L.P.	CVC Capital Partners VI
Ares Corporate Opportunities Fund II, L.P.	CVC European Equity Partners III, L.P.
Ares Corporate Opportunities Fund III, L.P.	CVC European Equity Partners V, L.P. (Global)
Ares Corporate Opportunities Fund IV, L.P.	Cypress Merchant Banking Partners II, L.P.
ASF VI Co-Invest	EQT VI, L.P.
ASF VII	EQT VII
ASF VII Side Car	EQT VIII
ASF VIII B	EQT VIII CO-INVEST
ASF VIII B Co-Invest	ERASMUS
Arlington Capital Partners II, L.P.	Falconhead Capital Partners II, L.P.
Atlantic Equity Partners IV, L.P.	FdG Capital Partners, L.P.
Arsenal Capital Partners II	FdG Capital Partners II LP
Avista Capital Partners, L.P.	FirstMark IV, L.P.
Avista Capital Partners II, L.P.	First Reserve Fund XI, L.P.
AXA Secondary Fund V B L.P.	First Reserve Fund XII, L.P.
BC European Capital IX	FS Equity Partners V, L.P.
BC PRTNR X	FS Equity Partners VI, L.P.
BC Prtnr X - SC	FTVentures III, L.P.
BDCM Opportunity Fund III, L.P.	FTV IV, LP
Blackstone Capital Partners IV, L.P.	FTV V Capital
Blackstone Capital Partners V, L.P.	FTV VI
Blackstone Capital Partners VI, L.P.	GEI VII
Blackstone Mezzanine Partners II L.P.	GF Capital Private Equity Fund, L.P.
Blue Wolf Capital Fund II, L.P.	GI Partners Fund III
Bridgepoint Europe IV	Gleacher Mezzanine Fund II, LP
Bridgepoint EUR V	Grain Fund II
Bridgepoint EUR V SC	Green Equity Investors VI
Bridgepoint VI	Grey Mountain Partners Fund III, LP
Bridgepoint VI CO-INV	GSO Capital Opportunities Fund, L.P.
Capital Partners PE Income Fund, L.P.	Highland Consumer Fund I
Capital Partners PE Income Fund II, L.P.	ICV Partners III, L.P.
Carlyle Acosta	ICV PTR IV
Carlyle Partners V, L.P.	Incline Equity Partners III, L.P.
Carlyle Partners VI, L.P.	Intermedia Partners VII, L.P.
Catterton Partners VI, L.P.	JP Morgan Fleming, L.P.
Centerbridge Cap III	KKR Americas Fund XII
Clearlake Capital Partners VI	KKR Europe V
Coller International Partners V, L.P.	Landmark Equity Partners XIII
ComVest Investment Partners III, L.P.	Landmark Equity Partners XIV, L.P.
ComVest Investment Partners IV, L.P.	Landmark Equity Partners XV
Constellation Venture Capital III, L.P.	Landmark NYC Fund I
Crestview Partners II, L.P.	Levine Leichtman Capital Partners IV LP
CRESTVIEW PRTNR III	Lexington Capital Partners VII, L.P.
Crestview III SC	Lexington CAP VIII
Crestview Partners IV	Lexington IX
Crestview IV Side Car	Lincolnshire Equity Fund II, L.P.
CS NYCERS Emerging Manager Fund, L.P.	Lincolnshire Equity Fund III, L.P.

**New York City  
Police Pension Fund  
June 30, 2020**

**The following are Consultants and Advisors for the various investment types:**

Lincolnshire Equity Fund IV, L.P.  
LINDSAY GOLDBERG V  
Euro Choice III L.P.  
Euro Choice IV L.P. (Global)  
Markstone Capital Partners, L.P.  
Medica III Investments (Intl) L.P.  
MidOcean Partners III, L.P.  
Milestone Partners III, LP  
Mill City Capital II  
Montreux Equity Partners IV L.P.  
NB Strategic Co - Invest II, LP  
NB Co-Investment Partners LP  
NorthBound Emerging Manager Custom Fd LP  
New Mainstream Capital II  
New Mountain Partners II, L.P.  
New Mountain Partners III, L.P.  
NGN BioMed Opportunity II, L.P.  
NMS Fund III  
Olympus Capital Asia III  
Olympus Growth Fund VI, L.P.  
Onex Partners III LP  
Paladin III, L.P.  
Palladium Equity Partners III, L.P.  
Palladium Equity Partners IV  
PALLADIUM V  
Patriot III  
Patriot Partners II  
PCG Clean Energy Tech Fund East, L.P.  
Pegasus Partners IV, L.P.  
Pegasus Partners V, L.P.  
Permira IV  
Pine Brook Capital Partners  
Platinum Equity Capital Partners III, LP  
Platinum IV  
Platinum Equity V  
PLATINUM IV SC  
Platinum Small Cap I  
Psilos Group Partners III, L.P.  
Quaker BioVentures II, L.P.  
Raine Partners II  
Raine Partners III  
REVERENCE CAP II SC  
REVERENCE CAPITAL II  
RiverstoneCarlyle Gbl Engy-Pwr Fd IV LP  
RRE Ventures IV, L.P.  
Scale Venture Partners III, LP  
SCP Private Equity Partners II, L.P.  
SCP Vitalife Partners II, L.P.

Siris Partners III  
Siris Partners IV  
Snow Phipps Group, L.P.  
Snow Phipps II, L.P.  
Solera Partners, L.P.  
Stellex Capital Management LP  
Summit Partners Growth Equity VIII-A  
Terra Firma Capital Partners III, L.P.  
Thomas, Mc Nerney & Partners II, L.P.  
Trident V, L.P.  
Trilantic Capital Partners IV L.P.  
Trilantic Capital Partners V L.P.  
TRILANTIC CAPITAL VI  
US Power Fund II  
United States Power Fund III, L.P.  
Valor Equity III  
VALOR IV  
Vista Equity Partners Fund III, L.P.  
Vista Equity Partners Fund IV, L.P.  
VISTA EQUITY V  
Vista VI  
Vista VII  
Vista Foundation Fund II, L.P.  
WCAS XII  
WCAS XIII  
Warburg Pincus  
Warburg Pincus Private Equity XI, LP  
Warburg Pincus XII  
WP Global Growth  
Webster Capital III  
Wellspring Capital Partners V, L.P.  
Welsh, Carson, Anderson & Stowe XI, L.P.  
Yucaipa American Alliance Fund I, L.P.  
Yucaipa American Alliance Fund II, LP  
Yucaipa Corporate Initiatives Fund II LP

**Private Real Estate**

Aermont Fund IV  
AG Realty Fund VII (Global)  
Almanac Realty Sec VI  
ALMANAC REALTY VII  
NYC-ERS-ALMANAC VII SIDECAR  
Almanac Fund VIII  
Almanac VIII Sidecar  
Amer Value Ptnrs I LP  
Ares European RE Fund III  
ARES RE FD V (fka Apollo RE Fund V)  
ARS VI-SIDECAR

**New York City  
Police Pension Fund  
June 30, 2020**

**The following are Consultants and Advisors for the various investment types:**

Artemis Income & Growth	LONE STAR RE FD III
Artemis Co-Investment	Lone Star RE Part V
Avanath Aff Housing II	METLIFE CORE PROPERTY
Big Real Estate Fund I	Metro Wkforce Housing FD
Blackstone REP EUR III	PRAMERICA VI LP
Blackstone Europe IV	PRISA
BLACKSTONE RE EUR VI	PRISA II
Blackstone REP IV	PRISA III
Blackstone REP VI	PROLOGIS Inc
Blackstone REP VII	PW Real Estate Fund III LP
Blackstone Real Estate VIII	Related Sep Acct
BLACKSTONE RE PTNRS IX	RREEF America II Inc
Brookfield Strat RE Partners	Silverpeak Legacy Partners III
Brookfield STRA RE III	Stockbridge Real Estate Fund III
Brookfield Property Group	Taconic NYC Investmt Fd
Canyon-Jonhson Urban Fund II	City Investment Fund
CARLYLE PROP INVEST	Thor Urban Property Fd II
Carlyle Realty V	Tristan Euro Property
Carlyle Realty VI	UBS Trumbull Property Fd
CARLYLE REALTY FUND VII	USAA Eagle RE Fund
Colony Investors VIII	Walton ST REF VI (Global)
Cortland Growth and Income	Westbrook Fund VII
DIVCO WEST FD III	Westbrook Real Estate Fund VIII
DIVCO WEST FD IV	Westbrook RE X CO-INV
DivcoWest Fund V, LP	
DRA G&I Fund IX, LLC	<b><u>Infrastructure</u></b>
DRA Growth and Income Fund X	Actis Energy IV
EMMES	Ardian Investment UK Ltd.
Exeter Fund II LP	Ardian Infra Fund V
EXETER CORE FUND III	Total Axiom North America
Exeter Value Fnd IV	BIF III COINV
GREENOAK ASIA USD III	BIF IV Co-Invest Snow
H/2 Special Opportunities Fund II	Brookfield Infr Fd II
H/2 Special Opp Fund III	Brookfield Infra IV-B
H/2 SO MANAGER IV, LP	EQT INF III
HARRISON CORE PROP	EQT INFRA FUND IV
HARRISON CORE PROP SC	EQT Infra IV Co-Inv Saber
Heitman America RE Trust	FIRST RESERVE EIF II
Heitman Credit	GEPF III
HUDSON SEP AC	GLOBAL INFRASTRUCTURE MGMT LLC
Jamestown Premier Fund	IFM GL INFRASTRUCTURE
JPMC Strategic Property Fund	INFRA-EIG
JPMC Special Situations Fund	Infrastructure-BIF III
Kayne Anderson Core Real Estate	KKR Infra III
KKR Real Estate Partners Americas II	
KKR Real Estate Credit Opp Prtnrs Agg I	<b><u>Fixed Income</u></b>
LaSalle US Property Fund	BlackRock LI Treasury
LION INDUSTRIAL TRUST	SSGA IT Treasury 1-10Y



**New York City  
Police Pension Fund  
June 30, 2020**

**The following are Consultants and Advisors for the various investment types:**

SSGA ST Treasury 1-3Y	Credit Suisse Bank Loans
SSGA LI Treasury	Guggenheim Bank Loans
SSGA LT Treasury 10Y Plus	Pinebridge Bank Loans
BlackRock Mortgages	Advent Convertible Bonds
Neuberger Berman Mortgages	Victory Convertible Bonds
BlackRock Credit	RBC Access MBS
Prudential Credit	AFL-CIO Housing Investment Trust
Fidelity Credit	CPC Construction Facility
Taplin Credit	BOA PPAR GNMA
T Rowe Price Credit	BOA PPAR FNMA
LM Capital-Core Plus	CFSB PPAR GNMA
Pugh-CorePlus	Citibank PPAR GNMA
GIA-Core Plus	Citibank PPAR FNMA
Ramirez-Core - Progress	CPC PPAR FNMA
BlackRock TIPS	ECLF PPAR FNMA
SSGA TIPS	JPMC PPAR FNMA

**OFI**

Ave Special Situation Fd VI	LIIF PPAR GNMA
Brightwood Capital Advisors III, LP	LIIF PPAR FNMA
Brightwood Capital Advisors FD IV, LP	LISC PPAR FNMA
Fortress Ctr St Ptnrs	NCBCI PPAR GNMA
Lone Star Fd VIII	NCBCI PPAR FNMA
Oaktree Opp Fd IX	NHS PPAR GNMA
Torchlight Debt Oppy Fund III, LLC	Wells Fargo PPAR FNMA
Torchlight Debt Opp V	CPC PPAR GNMA
TORCHLIGHT DEBT OPP VI	
Angelo Gordon Ct St Ptnrs	
Apollo Centre Street Partnership, L.P	
Ares Centre Street	
Contrarian Partnership, L.P	
FCO MA Centre Street II ER	
Golden Tree OD	
ICG Centre St Partner	
KKR NYC CREDIT A & B	
Maranon Partnership	
Marathon Centre Street Partnership, L.P.	
Oak Hill Ctr St Ptnrs	

**Fixed Income**

Brigade High Yield  
Eaton Vance High Yield  
Mackay Shields High Yield  
Neuberger Berman High Yield  
Nomura High Yield  
Oaktree High Yield  
Stone Harbor High Yield  
Shenkman High Yield  
T Rowe Price High Yield  
Barings Bank Loans

# Consolidated Performance Report

Through June 30, 2020



	Fair Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE								Inception Date		
						2019	2019	2018	2017	1 Year	3 Year	5 Year	10 Year	ITD		
<b>SYSTEM RETURN SUMMARY</b>																
5	POLICE-TOTAL PORTFOLIO - GROSS	41,474	100.00	9.76	4.89	(1.16)	7.18	17.68	(2.15)	16.80	4.89	7.21	7.23	9.27	8.50	07/01/1987
	POLICE - ESTIMATED INVESTMENT FEES			0.06	(0.22)	(0.09)	(0.22)	(0.26)	(0.18)	(0.24)	(0.22)	(0.22)	(0.22)			
	EST MANAGEMENT FEES - PUBLIC MARKET (ACCRUAL)			(0.03)	(0.11)	(0.05)	(0.10)	(0.11)	(0.10)	(0.11)	(0.11)	(0.11)	(0.11)			
	EST MANAGEMENT FEES - ALTERNATIVE MARKETS (CASH)			0.09	(0.11)	(0.04)	(0.12)	(0.15)	(0.08)	(0.13)	(0.11)	(0.11)	(0.11)			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	POLICE-TOTAL PORTFOLIO - NET MGR			9.81	4.67	(1.25)	6.95	17.41	(2.33)	16.56	4.67	6.99	7.01			
	POLICE POLICY BENCHMARK			10.40	5.06	(1.42)	7.58	18.89	(2.67)	16.04	5.06	7.08	7.17	9.56		
	EXCESS RETURN			(0.58)	(0.39)	0.17	(0.63)	(1.48)	0.35	0.52	(0.39)	(0.09)	(0.16)	(0.29)		
<b>EQUITY RETURN DETAIL</b>																
18	POLICE-TOTAL EQUITY (INCLUDES ALTERNATIVES & REITS) - GROSS	27,688	66.76	13.55	2.95	(4.31)	6.74	21.58	(3.54)	22.30	2.95	7.65	8.04	11.11	7.83	04/01/2004
	ESTIMATED INVESTMENT FEES			0.11	(0.25)	(0.09)	(0.28)	(0.33)	(0.21)	(0.30)	(0.25)	(0.26)	(0.27)			
	EST MANAGEMENT FEES			0.11	(0.25)	(0.09)	(0.28)	(0.33)	(0.21)	(0.30)	(0.25)	(0.26)	(0.27)			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	POLICE-TOTAL EQUITY (INCLUDES ALTERNATIVES & REITS) - NET MGR			13.67	2.70	(4.40)	6.47	21.24	(3.75)	22.00	2.70	7.39	7.78			
26	POLICE-TOTAL EQUITY - GROSS	19,540	47.11	20.99	2.53	(6.04)	5.83	27.51	(8.67)	24.71	2.53	7.09	7.65	11.02	8.63	08/01/1993
	ESTIMATED INVESTMENT FEES			(0.05)	(0.14)	(0.07)	(0.16)	(0.18)	(0.12)	(0.17)	(0.14)	(0.15)	(0.16)			
	EST MANAGEMENT FEES			(0.05)	(0.14)	(0.07)	(0.16)	(0.18)	(0.12)	(0.17)	(0.14)	(0.15)	(0.16)			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	POLICE-TOTAL EQUITY - NET MGR			20.94	2.38	(6.11)	5.68	27.33	(8.80)	24.54	2.38	6.94	7.50			
34	POLICE-TOTAL DOMESTIC EQUITY - GROSS	13,157	31.72	21.37	4.39	(5.04)	8.28	30.01	(5.47)	20.57	4.39	9.10	9.21	13.32	10.91	12/01/1984
	ESTIMATED INVESTMENT FEES			(0.04)	(0.09)	(0.05)	(0.10)	(0.11)	(0.07)	(0.08)	(0.09)	(0.09)	(0.09)			
	POLICE-TOTAL DOMESTIC EQUITY - NET MGR			21.33	4.30	(5.09)	8.19	29.91	(5.54)	20.49	4.30	9.01	9.11			
	RUSSELL 3000 (DAILY)			22.03	6.53	(3.48)	8.98	31.02	(5.24)	21.13	6.53	10.04	10.03	13.72	11.07	
	EXCESS RETURN			(0.70)	(2.23)	(1.61)	(0.80)	(1.11)	(0.30)	(0.64)	(2.23)	(1.03)	(0.92)	(0.40)	(0.15)	
44	POLICE-TOTAL SMALL CAP ACTIVE - GROSS	750	1.81	28.59	(2.83)	(7.76)	(0.93)	23.89	(9.61)	14.39	(2.83)	4.38	6.61	11.74	8.00	04/01/2004
	ESTIMATED INVESTMENT FEES			(0.23)	(0.61)	(0.32)	(0.55)	(0.70)	(0.50)	(0.62)	(0.61)	(0.60)	(0.62)			
	POLICE-TOTAL SMALL CAP ACTIVE - NET MGR			28.36	(3.44)	(8.07)	(1.49)	23.19	(10.11)	13.76	(3.44)	3.78	6.00			
	RUSSELL 2000 (DAILY)			25.42	(6.63)	(12.98)	(3.31)	25.52	(11.01)	14.65	(6.63)	2.01	4.29	10.50	7.08	
	EXCESS RETURN			2.94	3.18	4.91	1.82	(2.34)	0.90	(0.88)	3.18	1.77	1.71	1.24	0.92	

Calculations of the rate of return for investments were prepared using annualized rates of return.

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	Fair Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE					1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
<b>EQUITY RETURN DETAIL</b>																
56	POLICE-TOTAL SMALL CAP PASSIVE - GROSS	111	0.27	23.73	(10.58)	(16.02)	(0.65)	28.07	(9.65)	16.88	(10.58)	2.32	4.18		6.05	10/01/2013
	ESTIMATED INVESTMENT FEES			(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)			
	POLICE-TOTAL SMALL CAP PASSIVE - NET MGR			23.72	(10.58)	(16.02)	(0.65)	28.06	(9.66)	16.87	(10.58)	2.31	4.17			
	RUSSELL 2000 (DAILY)			25.42	(6.63)	(12.98)	(3.31)	25.52	(11.01)	14.65	(6.63)	2.01	4.29		5.91	
	EXCESS RETURN			(1.69)	(3.96)	(3.05)	2.66	2.54	1.36	2.22	(3.96)	0.30	(0.11)		0.14	
66	POLICE-TOTAL MIDCAP - GROSS	345	0.83	25.50	0.78	(4.72)	1.69	30.17	(14.95)	23.25	0.78	5.13	6.77	12.48	8.05	04/01/2004
	ESTIMATED INVESTMENT FEES			(0.90)	(0.95)	(0.75)	(0.85)	(1.01)	(0.36)	(0.45)	(0.95)	(0.77)	(0.63)			
	POLICE-TOTAL MIDCAP - NET MGR			24.61	(0.17)	(5.47)	0.84	29.16	(15.30)	22.80	(0.17)	4.35	6.14			
	RUSSELL MIDCAP (DAILY)			24.61	(2.24)	(9.13)	7.83	30.54	(9.06)	18.52	(2.24)	5.79	6.76	12.35	8.98	
	EXCESS RETURN			0.00	2.07	3.65	(6.99)	(1.38)	(6.25)	4.28	2.07	(1.44)	(0.62)	0.13	(0.93)	
86	POLICE-TOTAL RUSSELL 1000 ACTIVE - GROSS	2,367	5.71	17.50	(5.57)	(13.52)	4.53	23.96	(6.85)	17.41	(5.57)	3.84	5.60	11.57	7.46	04/01/2004
	ESTIMATED INVESTMENT FEES			(0.03)	(0.09)	(0.05)	(0.12)	(0.11)	(0.11)	(0.18)	(0.09)	(0.11)	(0.12)			
	POLICE-TOTAL RUSSELL 1000 ACTIVE - NET MGR			17.47	(5.66)	(13.57)	4.42	23.84	(6.96)	17.23	(5.66)	3.72	5.48			
	RUSSELL 1000 (DAILY)			21.82	7.48	(2.81)	10.02	31.43	(4.78)	21.69	7.48	10.64	10.47	13.97	8.80	
	EXCESS RETURN			(4.36)	(13.15)	(10.76)	(5.60)	(7.58)	(2.17)	(4.46)	(13.15)	(6.92)	(5.00)	(2.40)	(1.34)	
96	POLICE-TOTAL RUSSELL 1000 PASSIVE - GROSS	7,909	19.07	21.78	7.69	(2.60)	10.24	31.48			7.69				9.71	04/01/2018
	ESTIMATED INVESTMENT FEES			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)			(0.00)				(0.00)	
	POLICE-TOTAL RUSSELL 1000 PASSIVE - NET MGR			21.78	7.69	(2.60)	10.24	31.48			7.69				9.71	
	RUSSELL 1000 (DAILY)			21.82	7.48	(2.81)	10.02	31.43			7.48				9.43	
	EXCESS RETURN			(0.04)	0.21	0.21	0.22	0.05			0.21				0.28	
106	POLICE-TOTAL RUSSELL TOP 200 PASSIVE - GROSS	1,610	3.88	20.89	11.24	(0.43)	10.97	31.75			11.24				11.87	05/01/2018
	ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.00)	(0.01)	(0.00)			(0.01)				(0.01)	
	POLICE-TOTAL RUSSELL TOP 200 PASSIVE - NET MGR			20.89	11.24	(0.43)	10.97	31.74			11.24				11.86	
	RUSSELL TOP 200 INDEX (DAILY)			20.91	11.20	(0.49)	10.89	31.75			11.20				11.82	
	EXCESS RETURN			(0.02)	0.04	0.06	0.08	(0.01)			0.04				0.04	
116	POLICE-TOTAL FUND OF FUNDS - GROSS	65	0.16	25.10	(7.74)	(13.01)	0.44	23.95	(7.81)		(7.74)	2.19			2.28	05/01/2017
	ESTIMATED INVESTMENT FEES			(0.15)	(0.46)	(0.21)	(0.50)	(0.62)	(0.46)		(0.46)	(0.51)			(0.52)	
	POLICE-TOTAL FUND OF FUNDS - NET MGR			24.95	(8.20)	(13.22)	(0.06)	23.33	(8.27)		(8.20)	1.68			1.76	
	RUSSELL 2000 (DAILY)			25.42	(6.63)	(12.98)	(3.31)	25.52	(11.01)		(6.63)	2.01			2.33	
	EXCESS RETURN			(0.47)	(1.57)	(0.24)	3.25	(2.19)	2.74		(1.57)	(0.32)			(0.57)	

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	Fair Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE					1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
						2019	2019	2018	2017							
<b>EQUITY RETURN DETAIL</b>																
128 POLICE-TOTAL WORLD ex-USA - GROSS	3,695	8.91	20.75	2.15	(5.67)	0.23	25.50	(14.42)	31.18	2.15	4.63	5.48	7.58	5.90	04/01/2004	
ESTIMATED INVESTMENT FEES			(0.06)	(0.23)	(0.10)	(0.25)	(0.30)	(0.21)	(0.36)	(0.23)	(0.25)	(0.27)				
EST MANAGEMENT FEES			(0.06)	(0.23)	(0.10)	(0.25)	(0.30)	(0.21)	(0.36)	(0.23)	(0.25)	(0.27)				
EST INCENTIVE FEES																
EST OTHER FEES																
EST FEE OFFSETS																
POLICE-TOTAL WORLD ex-USA - NET MGR			20.69	1.91	(5.78)	(0.02)	25.20	(14.63)	30.82	1.91	4.38	5.21				
WORLD EX-USA CUSTOM BM			16.21	(5.11)	(11.68)	0.16	22.91	(14.68)	26.40	(5.11)	0.82	2.32	6.03	4.87		
EXCESS RETURN			4.48	7.02	5.91	(0.18)	2.30	0.05	4.42	7.02	3.56	2.89	1.54	1.03		
138 POLICE-TOTAL TOTAL WORLD ex-USA LARGE & MID ACTIVE - GROSS	2,719	6.56	21.77	4.45	(3.59)	1.31	26.54	(13.50)	31.96	4.45	6.29	6.19	4.93	11/01/2013		
ESTIMATED INVESTMENT FEES			(0.08)	(0.28)	(0.13)	(0.28)	(0.35)	(0.24)	(0.35)	(0.28)	(0.29)	(0.29)	(0.29)			
POLICE-TOTAL TOTAL WORLD ex-USA LARGE & MID ACTIVE - NET MGR			21.69	4.16	(3.72)	1.03	26.19	(13.74)	31.61	4.16	6.00	5.90	4.64			
NYC CUSTOM WORLD EX-USA LG & MID ACT INDEX			15.34	(5.42)	(11.49)	1.29	22.49	(14.09)	25.18	(5.42)	0.81	2.05	1.93			
EXCESS RETURN			6.35	9.59	7.77	(0.26)	3.70	0.35	6.42	9.59	5.19	3.84	2.71			
148 POLICE-TOTAL TOTAL WORLD ex-USA SMALL CAP ACTIVE - GROSS	286	0.69	19.67	(1.09)	(9.06)	(6.36)	22.73	(18.37)	35.53	(1.09)	1.34	5.05	6.38	05/01/2013		
ESTIMATED INVESTMENT FEES			(0.09)	(0.35)	(0.12)	(0.45)	(0.55)	(0.40)	(0.62)	(0.35)	(0.44)	(0.48)				
POLICE-TOTAL TOTAL WORLD ex-USA SMALL CAP ACTIVE - NET MGR			19.58	(1.44)	(9.18)	(6.81)	22.18	(18.76)	34.90	(1.44)	0.90	4.57				
S&P EPAC SMALL CAP USD NET			20.83	(4.00)	(12.67)	(6.38)	23.71	(18.58)	33.47	(4.00)	0.00	3.21	5.14			
EXCESS RETURN			(1.26)	2.56	3.49	(0.44)	(1.53)	(0.18)	1.44	2.56	0.89	1.36	1.23			
158 POLICE-TOTAL TOTAL WORLD ex-USA SMALL CAP PASSIVE - GROSS	228	0.55	21.63	(2.72)	(12.59)	(5.95)	25.70	(17.95)	33.51	(2.72)	1.01	4.27	4.41	02/01/2014		
ESTIMATED INVESTMENT FEES			(0.01)	(0.03)	(0.02)	(0.03)	(0.03)	(0.02)	(0.08)	(0.03)	(0.03)	(0.03)	(0.03)			
POLICE-TOTAL TOTAL WORLD ex-USA SMALL CAP PASSIVE - NET MGR			21.62	(2.75)	(12.60)	(5.98)	25.67	(17.97)	33.44	(2.75)	0.97	4.24	4.38			
WORLD EX USA SC PASSIVE CUSTOM BM			21.66	(3.20)	(12.87)	(6.17)	25.41	(18.07)	33.31	(3.20)	0.74	3.94	4.05			
EXCESS RETURN			(0.05)	0.45	0.27	0.19	0.26	0.10	0.12	0.45	0.23	0.30	0.32			
168 POLICE-TOTAL TOTAL WORLD ex-USA LARGE & MID CAP PASSIVE - GROSS	462	1.11	15.39	(5.09)	(11.21)	1.44	22.76	(14.04)	24.59	(5.09)	1.07	2.14	3.63	02/01/2011		
ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)				
POLICE-TOTAL TOTAL WORLD ex-USA LARGE & MID CAP PASSIVE - NET MGR			15.38	(5.11)	(11.22)	1.43	22.75	(14.05)	24.58	(5.11)	1.06	2.13				
NYC CUSTOM WORLD EX US INDEX			15.34	(5.42)	(11.49)	1.29	22.49	(14.09)	24.12	(5.42)	0.84	1.88	3.33			
EXCESS RETURN			0.04	0.32	0.27	0.14	0.26	0.04	0.47	0.32	0.22	0.25	0.29			

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						2019	2019	2018	2017							
<b>EQUITY RETURN DETAIL</b>																
180 POLICE-EMERGING MARKETS - GROSS	2,442	5.89	18.70	(7.05)	(12.51)	2.40	18.09	(14.52)	38.77	(7.05)	0.83	2.68	3.33	6.54	11/01/1996	
ESTIMATED INVESTMENT FEES			(0.09)	(0.26)	(0.13)	(0.27)	(0.32)	(0.22)	(0.42)	(0.26)	(0.28)	(0.29)				
POLICE-EMERGING MARKETS - NET MGR			18.61	(7.32)	(12.64)	2.12	17.77	(14.74)	38.36	(7.32)	0.55	2.39				
MSCI EMERGING MARKETS			18.08	(3.39)	(9.78)	1.21	18.42	(14.57)	37.28	(3.39)	1.90	2.86	3.27			
EXCESS RETURN			0.53	(3.93)	(2.85)	0.92	(0.65)	(0.17)	1.07	(3.93)	(1.35)	(0.47)	0.06			
190 POLICE-EMERGING MARKETS ACTIVE - GROSS	1,812	4.37	19.31	(8.80)	(13.80)	2.97	17.78	(14.52)	39.79	(8.80)	0.33	2.69	3.35	7.44	04/01/2004	
ESTIMATED INVESTMENT FEES			(0.13)	(0.38)	(0.19)	(0.41)	(0.47)	(0.34)	(0.61)	(0.38)	(0.41)	(0.44)				
POLICE-EMERGING MARKETS ACTIVE - NET MGR			19.19	(9.17)	(13.98)	2.56	17.32	(14.86)	39.18	(9.17)	(0.08)	2.25				
MSCI EMERGING MARKETS			18.08	(3.39)	(9.78)	1.21	18.42	(14.57)	37.28	(3.39)	1.90	2.86	3.27	7.10		
EXCESS RETURN			1.11	(5.79)	(4.20)	1.36	(1.11)	(0.29)	1.89	(5.79)	(1.97)	(0.61)	0.08	0.33		
200 POLICE-EMERGING MARKETS PASSIVE - GROSS	630	1.52	17.65	(3.70)	(10.16)	1.44	18.79	(14.46)	37.41	(3.70)	1.84	2.85	0.74	04/01/2011		
ESTIMATED INVESTMENT FEES			(0.01)	(0.02)	(0.01)	(0.02)	(0.03)	0.00	(0.15)	(0.02)	(0.04)	(0.04)				
POLICE-EMERGING MARKETS PASSIVE - NET MGR			17.64	(3.72)	(10.16)	1.42	18.76	(14.45)	37.26	(3.72)	1.80	2.81				
MSCI EMERGING MARKETS			18.08	(3.39)	(9.78)	1.21	18.42	(14.57)	37.28	(3.39)	1.90	2.86	0.71			
EXCESS RETURN			(0.44)	(0.34)	(0.38)	0.21	0.34	0.11	(0.02)	(0.34)	(0.10)	(0.05)	0.03			
210 POLICE-TOTAL INTERNATIONAL FUND OF FUND - GROSS	246	0.59	19.38	(0.02)	(7.35)	0.60	25.71	(14.63)		(0.02)	3.83		4.75	05/01/2017		
ESTIMATED INVESTMENT FEES			(0.22)	(0.55)	(0.28)	(0.48)	(0.62)	(0.42)		(0.55)	(0.53)		(0.53)			
POLICE-TOTAL INTERNATIONAL FUND OF FUND - NET MGR			19.16	(0.57)	(7.63)	0.12	25.10	(15.05)		(0.57)	3.30		4.22			
MSCI ACWI EX USA IMI NET			16.96	(4.74)	(11.24)	0.26	21.63	(14.76)		(4.74)	0.96		2.01			
EXCESS RETURN			2.20	4.17	3.61	(0.14)	3.47	(0.29)		4.17	2.34		2.20			

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<b>ALTERNATIVE EQUITY RETURN DETAIL</b>															
228 POLICE-TOTAL HEDGE FUNDS* - NET MGR	2,864	6.91	2.29	6.36	6.82	4.54	5.49	2.12	9.66	6.36	6.61	4.69		4.38	07/01/2011
HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			8.17	1.50	(1.08)	2.16	9.47	(3.06)	8.84	1.50	3.28	2.51		3.39	
EXCESS RETURN			(5.87)	4.86	7.90	2.38	(3.98)	5.17	0.82	4.86	3.33	2.18		0.99	
238 POLICE-TOTAL DIRECT HEDGE FUNDS* - NET MGR	2,827	6.82	2.33	6.92	7.55	4.80	5.46	2.31	10.38	6.92	7.00	5.01		5.36	01/01/2012
HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			8.17	1.50	(1.08)	2.16	9.47	(3.06)	8.84	1.50	3.28	2.51		4.22	
EXCESS RETURN			(5.84)	5.42	8.64	2.64	(4.01)	5.36	1.54	5.42	3.72	2.50		1.15	
248 POLICE-TOTAL PERMAL HEDGE FUNDS* - NET MGR	37	0.09	2.48	(7.97)	(10.22)	0.06	5.97	(0.71)	2.18	(7.97)	(1.22)	(0.70)		1.05	07/01/2011
HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			8.17	1.50	(1.08)	2.16	9.47	(3.06)	8.84	1.50	3.28	2.51		3.39	
EXCESS RETURN			(5.68)	(9.47)	(9.14)	(2.10)	(3.49)	2.35	(6.66)	(9.47)	(4.49)	(3.21)		(2.35)	

\*Information provided by Alpha Frontier.

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						2019	2019	2018	2017							
<b>ALTERNATIVE EQUITY RETURN DETAIL</b>																
266	POLICE-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - GROSS	2,502	6.03	(8.89)	1.50	(5.61)	14.29	11.94	18.79	21.49	1.50	11.75	11.58	12.46	12.75	04/01/2004
	ESTIMATED INVESTMENT FEES			(0.18)	(0.99)	(0.37)	(1.13)	(1.21)	(0.83)	(1.04)	(0.99)	(0.98)	(0.98)			
	POLICE-TOTAL PRIVATE EQUITY (TIME WEIGHTED) - NET MGR			(9.07)	0.51	(5.99)	13.16	10.72	17.96	20.45	0.51	10.77	10.59			
	NYC R3000 +3% LAGGED			(20.26)	(6.37)	(12.38)	12.01	6.00	21.06	22.22	(6.37)	7.12	8.93	13.70	11.72	
	EXCESS RETURN			11.20	6.88	6.40	1.15	4.72	(3.10)	(1.77)	6.88	3.65	1.67	(1.24)	1.02	
276	POLICE-TOTAL PRIVATE REAL ESTATE (TIME WEIGHTED) - GROSS	2,185	5.27	(4.97)	2.67	(0.88)	8.47	7.20	11.19	12.77	2.67	7.94	9.83	13.51	8.17	04/01/2004
	ESTIMATED INVESTMENT FEES			1.61	(0.70)	(0.33)	(0.54)	(0.69)	(0.62)	(0.70)	(0.70)	(0.66)	(0.68)			
	POLICE-TOTAL PRIVATE REAL ESTATE (TIME WEIGHTED) - NET MGR			(3.36)	1.97	(1.21)	7.93	6.51	10.58	12.07	1.97	7.28	9.15			
	NCREIF NFI-ODCE NET + 100 BP			(1.51)	2.34	(0.52)	6.51	5.43	8.43	7.72	2.34	5.76	7.40			
	EXCESS RETURN			(1.85)	(0.37)	(0.69)	1.42	1.08	2.15	4.34	(0.37)	1.52	1.74			
286	POLICE-TOTAL INFRASTRUCTURE (TIME WEIGHTED) - GROSS	506	1.22	(3.33)	5.45	(1.90)	13.56	13.99	16.11	20.56	5.45	12.48	12.71	14.20	12/01/2013	
	ESTIMATED INVESTMENT FEES			(0.39)	(1.63)	(0.75)	(1.45)	(1.48)	(1.50)	(3.15)	(1.63)	(1.83)	(1.73)	(2.67)		
	POLICE-TOTAL INFRASTRUCTURE (TIME WEIGHTED) - NET MGR			(3.73)	3.82	(2.65)	12.11	12.51	14.61	17.41	3.82	10.66	10.99	11.52		
	CPI + 4%			0.70	4.74	1.50	5.75	6.38	6.02	6.20	4.74	5.82	5.66	5.50		
	EXCESS RETURN			(4.43)	(0.92)	(4.14)	6.36	6.12	8.59	11.21	(0.92)	4.84	5.33	6.02		

Calculations of the rate of return for investments were prepared using annualized rates of return.

# Consolidated Performance Report

Through June 30, 2020



	Fair Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE 2019	2019	2018	2017	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
<b>FIXED INCOME RETURN DETAIL</b>															
298 POLICE-TOTAL FIXED INCOME - GROSS	13,785	33.24	3.26	8.34	5.02	7.61	10.57	(0.23)	5.56	8.34	5.89	5.06	5.15	8.09	02/01/1980
ESTIMATED INVESTMENT FEES			(0.03)	(0.14)	(0.07)	(0.13)	(0.14)	(0.12)	(0.13)	(0.14)	(0.13)	(0.13)			
EST MANAGEMENT FEES			(0.03)	(0.14)	(0.07)	(0.13)	(0.14)	(0.12)	(0.13)	(0.14)	(0.13)	(0.13)			
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
POLICE-TOTAL FIXED INCOME - NET MGR			3.23	8.20	4.96	7.48	10.42	(0.35)	5.43	8.20	5.76	4.93			
306 POLICE-TOTAL FIXED INCOME (ex ALTERNATIVE CREDIT & CASH) - GROSS	9,128	22.01	3.21	12.85	9.57	8.47	10.79	(0.71)	4.78	12.85	7.22	5.63		5.12	11/01/2013
ESTIMATED INVESTMENT FEES			(0.02)	(0.08)	(0.04)	(0.08)	(0.08)	(0.07)	(0.08)	(0.08)	(0.08)	(0.09)		(0.09)	
EST MANAGEMENT FEES			(0.02)	(0.08)	(0.04)	(0.08)	(0.08)	(0.07)	(0.08)	(0.08)	(0.08)	(0.09)		(0.09)	
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
POLICE-TOTAL FIXED INCOME (ex ALTERNATIVE CREDIT & CASH) - NET MGR			3.19	12.77	9.53	8.39	10.71	(0.79)	4.70	12.77	7.14	5.54		5.04	
314 POLICE-TOTAL STRUCTURED FIXED INCOME - GROSS	5,952	14.35	1.90	15.64	12.51	9.51	10.80	(0.85)	5.16	15.64	8.13	6.24	5.38	7.73	01/01/1985
ESTIMATED INVESTMENT FEES			(0.01)	(0.05)	(0.02)	(0.04)	(0.05)	(0.04)	(0.06)	(0.05)	(0.05)	(0.06)			
POLICE-TOTAL STRUCTURED FIXED INCOME - NET MGR			1.89	15.59	12.49	9.47	10.75	(0.89)	5.10	15.59	8.08	6.18			
NYC CUSTOM STRUCTURED INDEX-POLICE			1.93	18.69	14.73	10.80	13.17	(1.29)	6.95	18.69	9.52				
EXCESS RETURN			(0.04)	(3.10)	(2.24)	(1.34)	(2.42)	0.39	(1.84)	(3.10)	(1.44)				
324 POLICE-TOTAL GOVERNMENT - GROSS	2,991	7.21	(0.17)	19.24	16.45	9.77	10.48	(0.99)	4.82	19.24	9.26	6.59	5.57	7.50	02/01/1987
ESTIMATED INVESTMENT FEES			(0.01)	(0.03)	(0.02)	(0.02)	(0.03)	(0.02)	(0.04)	(0.03)	(0.03)	(0.04)			
POLICE-TOTAL GOVERNMENT - NET MGR			(0.18)	19.21	16.44	9.75	10.45	(1.02)	4.79	19.21	9.23	6.55			
FTSE TREASURY 10+			0.51	25.45	21.24	12.24	14.89	(1.89)	8.60	25.45	12.06	9.30	7.79	8.25	
EXCESS RETURN			(0.69)	(6.24)	(4.80)	(2.49)	(4.44)	0.87	(3.82)	(6.24)	(2.83)	(2.76)	(2.22)	(0.74)	
334 POLICE-TOTAL MORTGAGE - GROSS	1,217	2.93	1.38	5.84	3.62	6.66	6.87	1.00	2.61	5.84	4.16	3.35	3.46	6.31	02/01/1987
ESTIMATED INVESTMENT FEES			(0.01)	(0.05)	(0.02)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)			
POLICE-TOTAL MORTGAGE - NET MGR			1.37	5.79	3.60	6.61	6.83	0.95	2.55	5.79	4.12	3.30			
FTSE MORTGAGE INDEX			0.32	5.96	3.60	6.39	6.68	1.01	2.47	5.96	4.11	3.29	3.09	6.13	
EXCESS RETURN			1.05	(0.17)	(0.00)	0.23	0.15	(0.06)	0.08	(0.17)	0.00	0.00	0.36	0.18	
344 POLICE-TOTAL INVESTMENT GRADE CREDIT - GROSS	1,744	4.20	9.63	9.30	4.63	10.56	14.56	(2.19)	6.74	9.30	6.36	5.80	5.72	7.14	01/01/1987
ESTIMATED INVESTMENT FEES			(0.03)	(0.11)	(0.05)	(0.11)	(0.11)	(0.09)	(0.10)	(0.11)	(0.10)	(0.10)			
POLICE-TOTAL INVESTMENT GRADE CREDIT - NET MGR			9.61	9.19	4.58	10.45	14.44	(2.28)	6.65	9.19	6.26	5.70			
NYC - INVESTMENT GRADE CREDIT			8.28	9.26	5.02	10.13	13.40	(1.90)	6.04	9.26	6.11	5.48	5.16		
EXCESS RETURN			1.33	(0.07)	(0.44)	0.32	1.05	(0.38)	0.61	(0.07)	0.15	0.22	0.56		

Calculations of the rate of return for investments were prepared using annualized rates of return.



# Consolidated Performance Report

Through June 30, 2020



	Fair Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE					1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
						2019	2019	2018	2017							
<b>FIXED INCOME RETURN DETAIL</b>																
356	POLICE-TOTAL CORE FI-DEVELOPING MGRS - GROSS	191	0.46	5.21	8.75	5.81	7.97	10.01	(0.99)	4.18	8.75	5.31	4.63	4.49	5.25	05/01/2009
	ESTIMATED INVESTMENT FEES			(0.05)	(0.21)	(0.10)	(0.22)	(0.22)	(0.20)	(0.20)	(0.21)	(0.21)	(0.21)			
	POLICE-TOTAL CORE FI-DEVELOPING MGRS - NET MGR			5.17	8.54	5.71	7.75	9.79	(1.19)	3.98	8.54	5.10	4.42			
	BBG BARC AGG (DLY)			2.90	8.74	6.14	7.87	8.72	0.01	3.54	8.74	5.32	4.30	3.82	4.38	
	EXCESS RETURN			2.27	(0.20)	(0.43)	(0.12)	1.08	(1.20)	0.43	(0.20)	(0.22)	0.12	0.66	0.87	
366	POLICE-TOTAL CORE FI-EMERGING MGRS - GROSS	-	-				8.22	9.25	0.29	4.51						06/01/2012
	ESTIMATED INVESTMENT FEES						(0.37)	(0.37)	(0.34)	(0.48)						
	POLICE-TOTAL CORE FI-EMERGING MGRS - NET MGR						7.85	8.88	(0.05)	4.02						
	BBG BARC AGG (DLY)						7.87	8.72	0.01	3.54						
	EXCESS RETURN						(0.02)	0.16	(0.06)	0.48						
376	POLICE-TOTAL TIPS - GROSS	1,727	4.16	4.32	8.45	6.18	4.84	8.46	(1.25)	3.10	8.45	5.13	3.80	3.58	4.14	06/01/2005
	ESTIMATED INVESTMENT FEES			(0.00)	(0.02)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)			
	POLICE-TOTAL TIPS - NET MGR			4.31	8.43	6.17	4.82	8.44	(1.27)	3.09	8.43	5.11	3.78			
	BBG BARC GBL INF-LK: US TIPS (DLY)			4.24	8.28	6.01	4.84	8.43	(1.26)	3.01	8.28	5.05	3.75	3.52	4.01	
	EXCESS RETURN			0.07	0.15	0.16	(0.02)	0.01	(0.00)	0.08	0.15	0.06	0.04	0.06	0.13	
386	POLICE-TOTAL CONVERTIBLE BONDS - GROSS	816	1.97	12.62	4.85	(1.99)	7.25	17.38	(0.17)	14.74	4.85	6.93	6.56	8.38	7.07	07/01/2008
	ESTIMATED INVESTMENT FEES			(0.10)	(0.39)	(0.18)	(0.40)	(0.44)	(0.38)	(0.43)	(0.39)	(0.40)	(0.41)			
	POLICE-TOTAL CONVERTIBLE BONDS - NET MGR			12.52	4.47	(2.17)	6.85	16.94	(0.55)	14.31	4.47	6.53	6.15			
	ICE BOFA ALL US CONV EX MANDATORY			25.92	17.79	9.64	8.00	22.89	0.65	15.70	17.79	12.99	10.45	11.65	9.75	
	EXCESS RETURN			(13.40)	(13.32)	(11.81)	(1.15)	(5.95)	(1.19)	(1.39)	(13.32)	(6.46)	(4.30)	(3.27)	(2.68)	
396	POLICE-TOTAL TARGETED INVESTMENTS (NO CASH) - GROSS	442	1.07	1.14	7.62	5.34	9.52	8.85	1.03	3.83	7.62	5.37	5.27	5.07	7.99	12/01/1984
	ESTIMATED INVESTMENT FEES			(0.04)	(0.17)	(0.08)	(0.21)	(0.19)	(0.21)	(0.21)	(0.17)	(0.19)	(0.21)	(0.21)	(0.10)	
	POLICE-TOTAL TARGETED INVESTMENTS (NO CASH) - NET MGR			1.10	7.45	5.25	9.31	8.67	0.82	3.62	7.45	5.18	5.06	4.85	7.89	
	POLICE CUSTOM BENCHMARK (NO CASH)			1.50	7.40	4.91	7.19	7.60	0.96	3.08	7.40	4.88	3.99	3.69		
	EXCESS RETURN			(0.41)	0.05	0.35	2.12	1.07	(0.15)	0.54	0.05	0.30	1.07	1.17		

Calculations of the rate of return for investments were prepared using annualized rates of return.

# Consolidated Performance Report

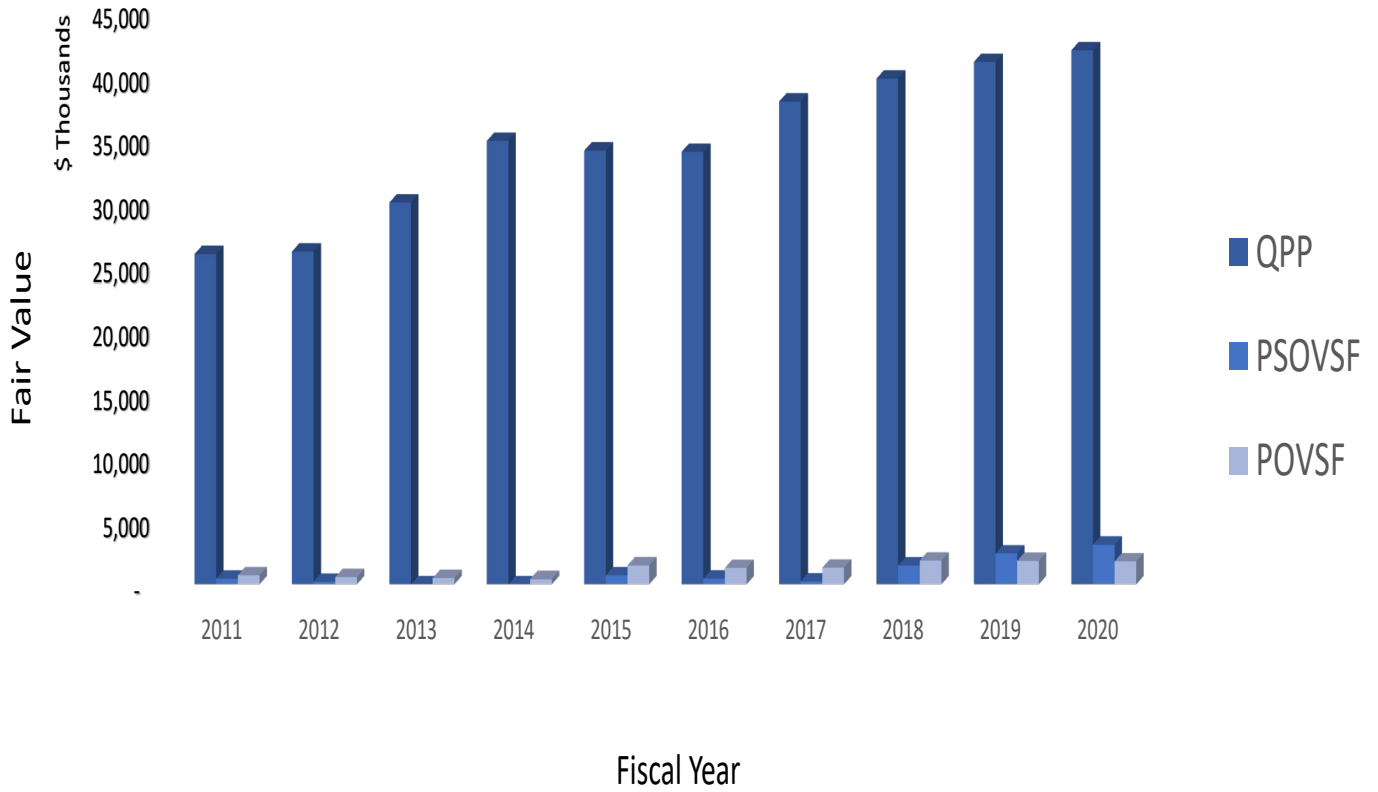
Through June 30, 2020



	Fair Value (\$MM)	% of Total	3 Month	FYTD	CYTD	FYE					1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
						2019	2019	2018	2017							
<b>ALTERNATIVE CREDIT INCOME RETURN DETAIL</b>																
408 POLICE-TOTAL HIGH YIELD - GROSS	2,147	5.18	10.13	0.87	(3.37)	7.39	14.99	(2.82)	6.93	0.87	3.37	4.43	6.58	7.39	10/01/1994	
ESTIMATED INVESTMENT FEES			(0.09)	(0.32)	(0.15)	(0.33)	(0.36)	(0.30)	(0.34)	(0.32)	(0.33)	(0.34)				
POLICE-TOTAL HIGH YIELD - NET MGR			10.05	0.55	(3.52)	7.07	14.63	(3.12)	6.59	0.55	3.05	4.09				
HIGH YIELD CUSTOM BENCHMARK			10.14	(0.00)	(3.83)	7.48	14.32	(2.34)	7.03	(0.00)	3.25	4.35	6.34	6.63		
EXCESS RETURN			(0.09)	0.56	0.31	(0.41)	0.31	(0.78)	(0.44)	0.56	(0.20)	(0.26)	0.24	0.76		
418 POLICE- TOTAL BANK LOANS - GROSS	657	1.58	7.55	(1.40)	(4.51)	3.79	8.33	1.13	4.72	(1.40)	2.39	3.23		3.91	12/01/2012	
ESTIMATED INVESTMENT FEES			(0.07)	(0.28)	(0.13)	(0.31)	(0.32)	(0.30)	(0.31)	(0.28)	(0.30)	(0.31)				
POLICE-TOTAL BANK LOANS - NET MGR			7.47	(1.68)	(4.64)	3.49	8.02	0.82	4.41	(1.68)	2.09	2.93				
CSFB LEVERAGED LOAN INDEX			9.71	(2.27)	(4.76)	4.15	8.17	1.14	4.25	(2.27)	2.13	2.94		3.50		
EXCESS RETURN			(2.24)	0.59	0.11	(0.66)	(0.16)	(0.32)	0.17	0.59	(0.04)	(0.01)		0.41		
428 POLICE-TOTAL OPPORTUNISTIC FIXED INCOME - GROSS	1,492	3.60	(4.67)	(1.87)	(4.21)	5.30	5.47	6.41	7.93	(1.87)	3.46	3.97	7.48	7.15	10/01/2007	
ESTIMATED INVESTMENT FEES			(0.03)	(0.18)	(0.09)	(0.15)	(0.18)	(0.17)	(0.10)	(0.18)	(0.18)	(0.17)				
POLICE-TOTAL OPPORTUNISTIC FIXED INCOME - NET MGR			(4.70)	(2.05)	(4.29)	5.15	5.29	6.23	7.83	(2.05)	3.29	3.80				
OPPORTUNISTIC FIXED INCOME JPMGHY / CSFB 50/50 BLEND PLUS 300			11.06	0.88	(3.82)	9.26	14.66	2.36	9.42	0.88	5.56	6.89	8.66	8.49		
EXCESS RETURN			(15.76)	(2.94)	(0.48)	(4.11)	(9.37)	3.87	(1.59)	(2.94)	(2.28)	(3.09)	(1.18)	(1.34)		
<b>CASH SUMMARY</b>																
440 Short Term - POLICE - GROSS	362	0.87	0.04	1.50	0.51	2.34	2.25	1.96	1.13	1.50	1.79	1.36	0.87		04/01/1982	
ESTIMATED INVESTMENT FEES			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Short Term - POLICE - NET MGR			0.04	1.50	0.51	2.34	2.25	1.96	1.13	1.50	1.79	1.36	0.87			
444 Cash Account	0	-														
446 Securities Lending	0	-														
448 KKR Cash Account	0	-														

Calculations of the rate of return for investments were prepared using annualized rates of return.

New York City Police Pension Fund  
Investment Performance 10 Year Comparison  
June 30, 2011 - June 30, 2020



## Investment Summary

Year Ended June 30, 2020

(In thousands)

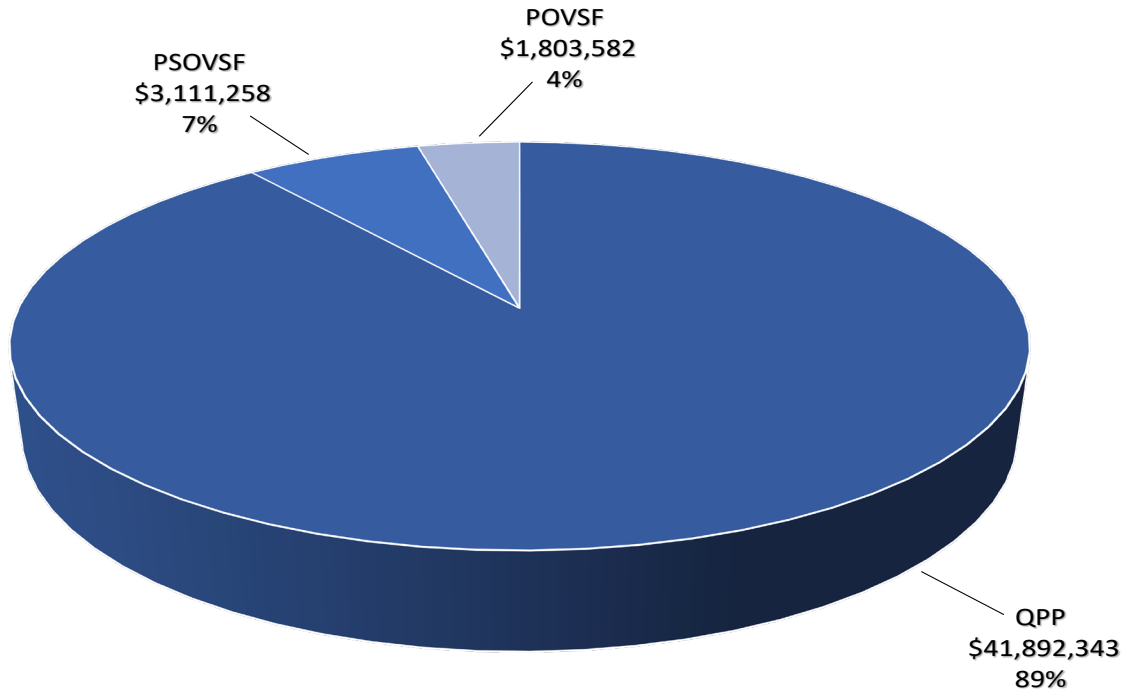
Type of Investments	Fair Value	Percentage of Total Fair Value
<b>Debt Securities:</b>		
U.S Government agency Corporate & Other	<b>\$10,781,708</b>	<b>23.03%</b>
<b>Equity Securities:</b>		
Domestic Equity	15,128,091	32.32%
International Equity	2,814,260	6.01%
	<b>17,942,351</b>	<b>38.33%</b>
<b>Alternative Investments:</b>		
Infrastructure	504,681	1.08%
Opportunistic Fixed Income	1,354,060	2.89%
Private Equity	2,489,568	5.32%
Private Real Estate	2,181,695	4.66%
Hedge Fund Investment	2,955,325	6.31%
	<b>9,485,329</b>	<b>20.26%</b>
<b>Collective Trusts Funds:</b>		
Bank Loans	514,197	1.10%
Corporate and Other	550,719	1.18%
Domestic Equity	540,854	1.16%
International Equity	4,193,013	8.96%
Mortgage Debt Securities	712,959	1.52%
Opportunistic Fixed Income	137,770	0.29%
U.S. Government and Agency	700,194	1.50%
	<b>7,349,706</b>	<b>15.70%</b>
<b>Short-term Investments:</b>		
Short-term Investments	294,602	0.63%
Commercial Paper	310,555	0.66%
Discount Notes & Treasury Bills	642,933	1.37%
	<b>1,248,090</b>	<b>2.67%</b>
<b>Total Investments*</b>	<b>\$46,807,184</b>	<b>100.00%</b>

\*Security lending transactions of \$3,559,791 not included in total.

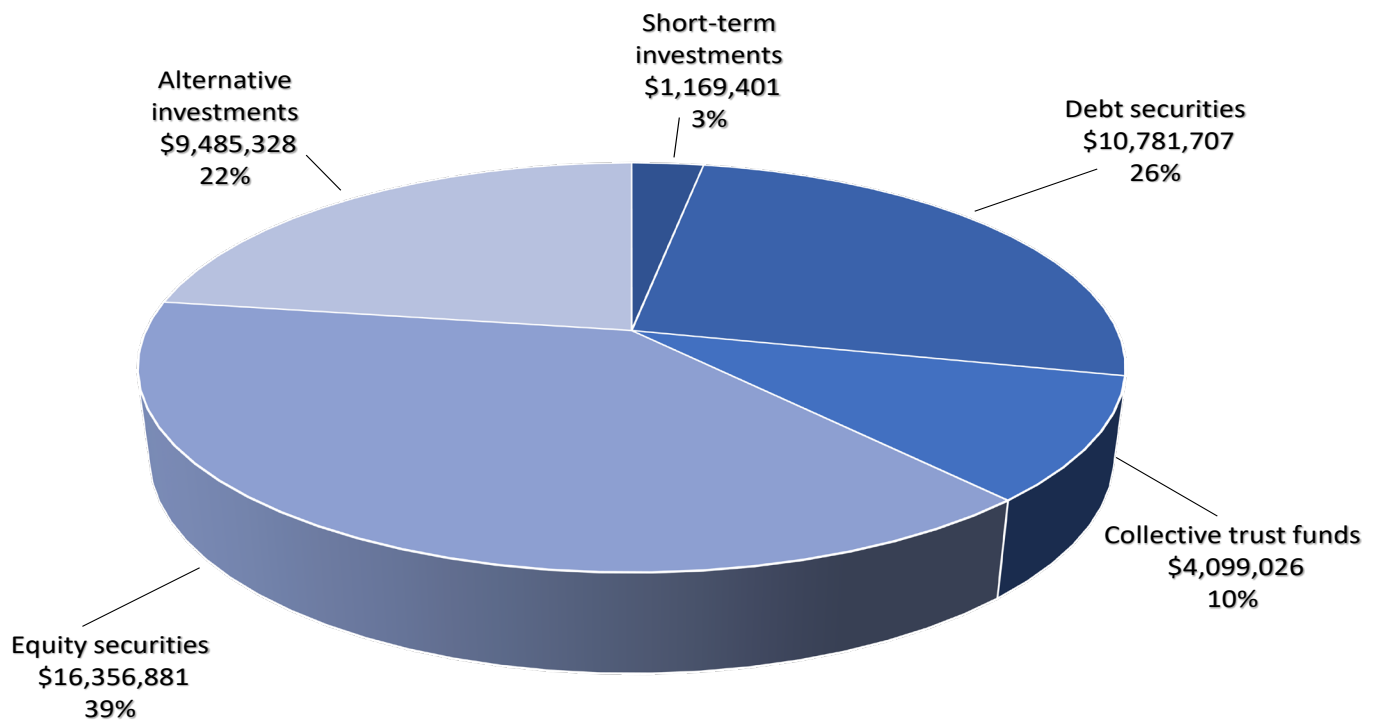
All returns are time weighted rates of return.

New York City Police Pension Fund  
Investment Charts  
Year Ended June 30, 2020

**Investment Allocation (\$46.8Billion)**

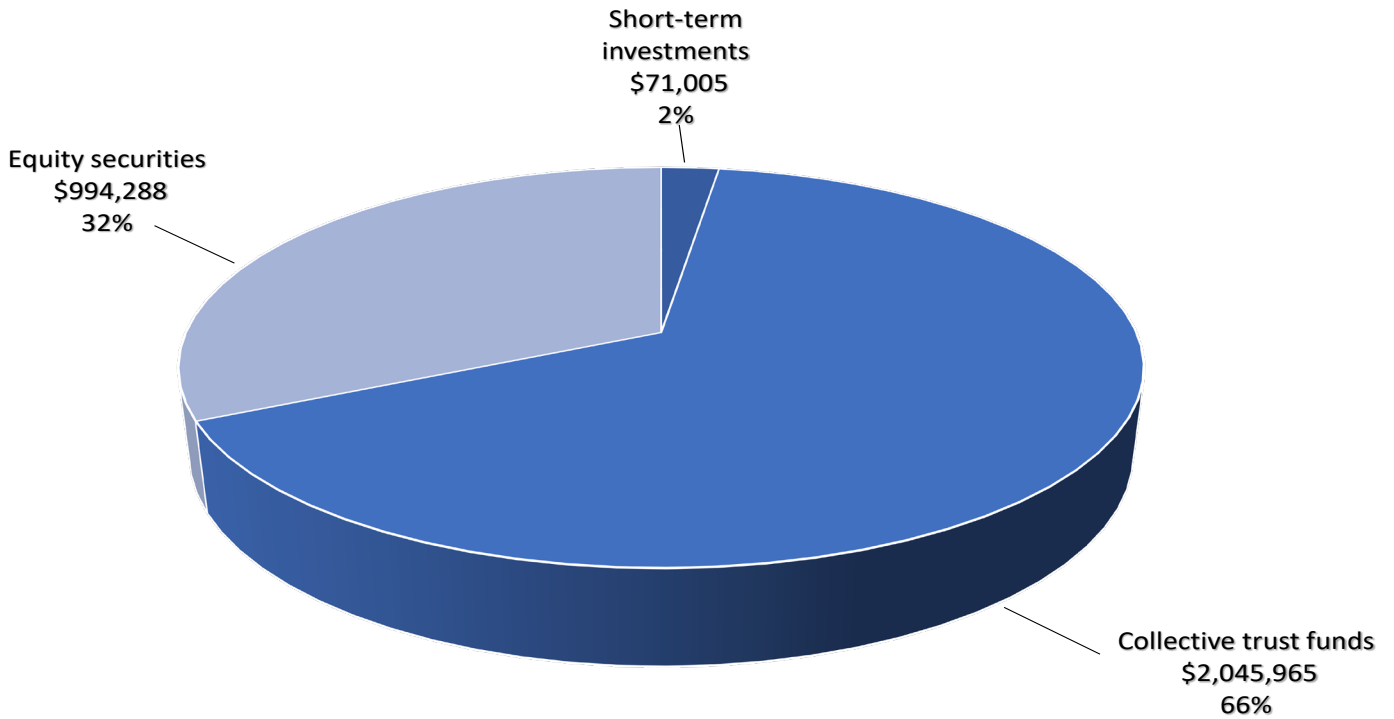


**Qualified Pension Plan (\$41.9Billion)**

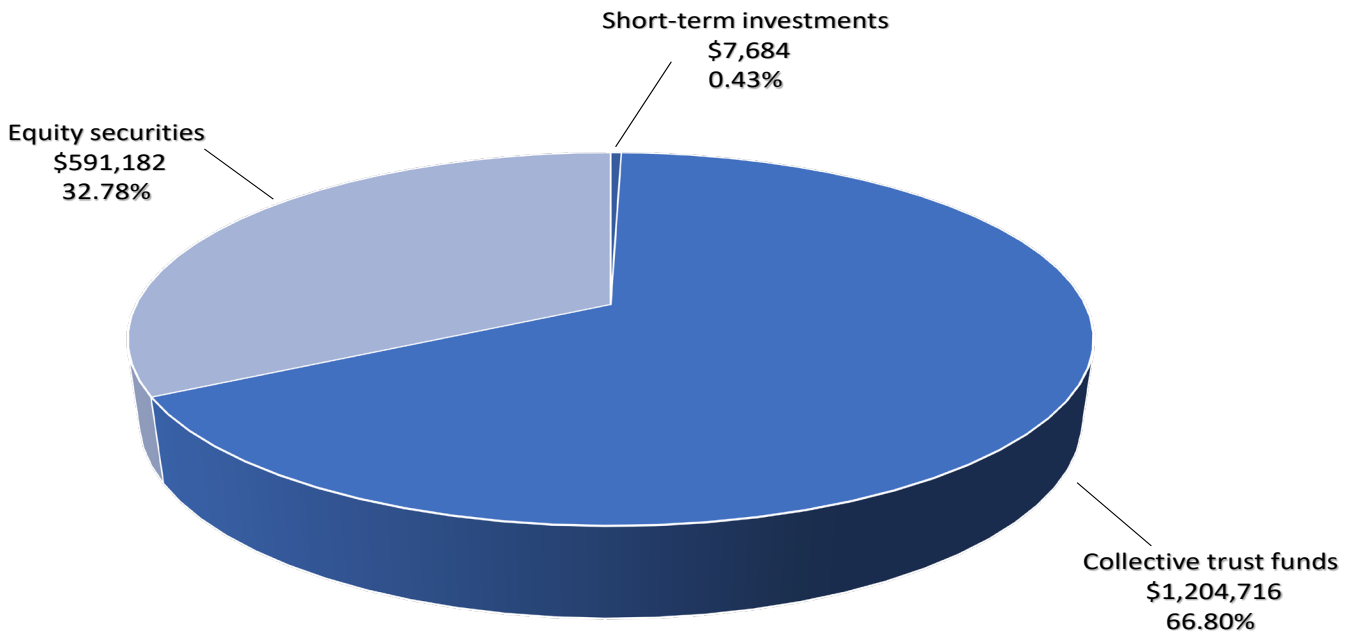


New York City Police Pension Fund  
Investment Charts  
Year Ended June 30, 2020

**Police Superior Officers Variable Supplements Fund (\$3.1Billion)**



**Police Officers Variable Supplements Fund (\$1.8Billion)**



New York City Police Pension Fund  
List of Top 100 Fixed Asset Holdings  
As of June 30, 2020

<u>CUSIP</u>	<u>Security Description</u>	<u>Maturity Date</u>	<u>Nominal</u>	<u>Quantity</u>	<u>Fair Value</u>	<u>Par Value</u>	<u>Gain/Loss</u>
			<u>Interest Rate</u>				
'01F042673	FNMA TBA 30 YR 4.5	7/14/2050	4.50	118,469,000	\$ 127,289,017	\$ 127,873,888	\$ (584,871)
'01F030678	FNMA TBA 30 YR 3	7/14/2050	3.00	82,554,995	86,946,921	86,672,732	274,188
'21H030674	GNMA II TBA 30 YR 3	7/21/2050	3.00	77,464,500	82,072,863	81,930,640	142,223
'01F040677	FNMA TBA 30 YR 4	7/14/2050	4.00	66,547,300	70,520,839	70,654,798	(133,959)
'36179VBG4	GNMA II POOL MA6339	12/20/2049	3.50	62,939,210	66,476,393	66,713,532	(237,139)
'01F032674	FNMA TBA 30 YR 3.5	7/14/2050	3.50	62,741,000	65,988,474	65,966,372	22,102
'01F022683	FNMA TBA 30 YR 2.5	8/13/2050	2.50	44,835,000	46,667,855	46,423,521	244,334
'01F030686	FNMA TBA 30 YR 3	8/13/2050	3.00	35,400,000	37,220,268	37,128,418	91,850
'21H040673	GNMA II TBA 30 YR 4	7/21/2050	4.00	33,563,000	35,582,821	35,690,515	(107,694)
'31359MEU3	FANNIE MAE	5/15/2029	6.25	23,430,000	33,957,568	32,017,918	1,939,650
'21H032688	GNMA II TBA 30 YR 3.5	8/20/2050	3.50	27,253,000	28,753,005	28,696,557	56,448
'21H032670	GNMA II TBA 30 YR 3.5	7/21/2050	3.50	27,212,100	28,714,208	28,789,802	(75,594)
'670008AD3	NOVELLUS SYSTEMS INC	5/15/2041	2.63	2,280,000	23,173,601	9,785,564	13,388,037
'880591EU2	TENN VALLEY AUTHORITY	2/1/2027	2.88	18,625,000	21,109,575	18,572,340	2,537,235
'34959JAK4	FORTIVE CORPORATION	2/15/2022	0.88	20,845,000	20,473,959	21,500,594	(1,026,635)
'94973VBG1	ANTHEM INC	10/15/2042	2.75	5,545,000	20,283,444	14,158,292	6,125,151
'452327AH2	ILLUMINA INC	6/15/2021	0.50	12,853,000	19,119,095	16,378,426	2,740,668
'958102AP0	WESTERN DIGITAL CORP	2/1/2024	1.50	20,324,000	19,105,170	19,744,320	(639,150)
'02917TAB0	VEREIT INC	12/15/2020	3.75	18,820,000	18,773,515	19,250,136	(476,622)
'01F032641	FNMA TBA 30 YR 3.5	4/15/2050	3.50	17,295,029	18,241,240	18,144,855	96,385
'36179TLS2	GNMA II POOL MA4837	11/20/2047	3.50	15,481,713	16,469,755	16,071,953	397,803
'84860WAB8	SPIRIT REALTY CAPITAL IN	5/15/2021	3.75	16,517,000	16,362,236	16,882,514	(520,278)
'36179S5L7	GNMA II POOL MA4451	5/20/2047	3.50	15,056,634	16,058,201	16,072,957	(14,756)
'48129KAE0	JPMORGAN CHASE FINANCIAL	5/1/2023	0.25	16,570,000	15,990,050	16,084,333	(94,283)
'09857LAM0	BOOKING HOLDINGS INC	5/1/2025	0.75	12,395,000	15,311,791	14,031,978	1,279,814
'235851AF9	DANAHER CORP	1/22/2021	0.00	2,255,000	15,214,372	7,146,677	8,067,695
'36179R4E6	GNMA II POOL MA3521	3/20/2046	3.50	14,091,262	15,089,205	14,183,649	905,556
'01F022477	FNMA TBA 15 YR 2.5	7/16/2035	2.50	13,191,000	13,810,317	13,780,988	29,329
'780099CH8	ROYAL BK SCOTLND GRP PLC	5/28/2024	5.13	12,025,000	13,154,027	13,100,121	53,906
'04010LAT0	ARES CAPITAL CORP	2/1/2022	3.75	13,343,000	13,128,711	13,546,661	(417,949)
'21H022671	GNMA II TBA 30 YR 2.5	7/21/2050	2.50	12,364,000	13,015,088	12,990,770	24,318
'225433AR2	CRED SUIS GP FUN LTD	4/17/2026	4.55	10,585,000	12,171,268	12,286,771	(115,503)
'3137FLZS6	FREDDIE MAC	6/15/2049	0.60	11,904,595	11,916,990	11,887,854	29,136
'075887BW8	BECTON DICKINSON AND CO	6/6/2027	3.70	10,266,000	11,474,411	10,997,173	477,238
'844741BG2	SOUTHWEST AIRLINES CO	5/1/2025	1.25	9,405,000	11,295,687	10,528,435	767,252
'01F050676	FNMA TBA 30 YR 5	7/14/2050	5.00	10,092,000	11,028,639	11,030,241	(1,602)
'161175AY0	CHARTER COMM OPT LLC/CAP	7/23/2025	4.91	9,275,000	10,629,892	10,626,314	3,578
'25470MAB5	DISH NETWORK CORP	8/15/2026	3.38	11,502,000	10,565,967	10,685,912	(119,944)
'037833BW9	APPLE INC	2/23/2036	4.50	7,970,000	10,513,785	9,568,195	945,590
'594918BK9	MICROSOFT CORP	11/3/2035	4.20	8,040,000	10,464,301	9,360,530	1,103,771
'472145AD3	JAZZ INVESTMENTS I LTD	8/15/2024	1.50	11,214,000	10,253,297	10,574,553	(321,256)
'94106LBF5	WASTE MANAGEMENT INC	6/15/2024	2.95	10,000,000	10,237,300	10,713,400	(476,100)
'3135G0K36	FANNIE MAE	4/24/2026	2.13	9,390,000	10,233,034	9,310,373	922,661
'00287YBR9	ABBVIE INC	11/21/2039	4.05	8,698,000	10,171,963	9,755,055	416,908
'22160KAQ8	COSTCO WHOLESALE CORP	4/20/2032	1.75	10,000,000	10,132,600	10,175,300	(42,700)
'38141GXJ8	GOLDMAN SACHS GROUP INC	4/1/2025	3.50	9,000,000	9,868,590	9,834,570	34,020
'00206RJY9	AT+T INC	6/1/2031	2.75	9,400,000	9,787,186	9,738,400	48,786
'46647PAV8	JPMORGAN CHASE + CO	7/23/2029	4.20	8,295,000	9,725,639	9473014.66	252623.99
'01F030470	FNMA TBA 15 YR 3	7/16/2035	3.00	9,084,000	9,548,102	9560200.31	-12098.75
'74348TAR3	PROSPECT CAPITAL CORP	7/15/2022	4.95	10,457,000	\$ 9,511,896	\$ 10,337,572	\$ (825,675)

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New York City Police Pension Fund  
List of Top 100 Fixed Asset Holdings  
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<u>CUSIP</u>	<u>Security Description</u>	<u>Maturity Date</u>	<u>Nominal</u>	<u>Quantity</u>	<u>Fair Value</u>	<u>Par Value</u>	<u>Gain/Loss</u>
			<u>Interest Rate</u>				
'723787AN7	PIONEER NATURAL RESOURCE	5/15/2025	0.25	7,950,000	\$ 9,379,331	\$ 8,814,160	\$ 565,171
'3140J9AY7	FNMA POOL BM4522	2/1/2048	3.50	8,432,391	9,353,546	8,241,345	1,112,201
'595112BL6	MICRON TECHNOLOGY INC	2/6/2024	4.64	8,270,000	9,115,608	8,818,189	297,418
'00971TAJ0	AKAMAI TECHNOLOGIES INC	5/1/2025	0.13	7,270,000	9,053,331	7,784,700	1,268,631
'958102AP0	WESTERN DIGITAL CORP	2/1/2024	1.50	9,517,000	8,946,266	9,229,280	(283,015)
'552848AB9	MGIC INVESTMENT CORP	4/1/2063	9.00	7,435,000	8,922,000	9,962,273	(1,040,273)
'595112AX1	MICRON TECHNOLOGY INC	5/1/2032	3.13	1,700,000	8,687,374	9,448,076	(760,702)
'785592AS5	SABINE PASS LIQUEFACTION	3/15/2027	5.00	7,647,000	8,556,152	8,373,622	182,530
'36179VMD9	GNMA II POOL MA6656	5/20/2050	3.00	8,024,200	8,514,077	8,494,994	19,083
'21H042679	GNMA II TBA 30 YR 4.5	7/21/2050	4.50	7,940,000	8,480,317	8,484,324	(4,007)
'02261WAB5	ALZA CORP	7/28/2020	0.00	4,265,000	8,244,970	7,022,712	1,222,258
'55608BAB1	MACQUARIE INFRASTRUCTURE	10/1/2023	2.00	9,440,000	8,164,939	8,755,041	(590,102)
'694308JF5	PACIFIC GAS + ELECTRIC	8/1/2027	2.10	8,240,000	8,154,716	8,176,514	(21,798)
'69867DAC2	CLARIOS GLOBAL LP/US FIN	5/15/2027	8.50	8,075,000	8,114,971	8,049,156	65,815
'89788KAA4	TRUIST BANK	3/11/2030	2.25	7,965,000	8,039,552	8,109,055	(69,502)
'34959JAK4	FORTIVE CORPORATION	2/15/2022	0.88	8,154,000	8,008,859	8,278,153	(269,294)
'90184LAF9	TWITTER INC	6/15/2024	0.25	8,422,000	7,933,861	7,741,728	192,133
'68389XBX2	ORACLE CORP	4/1/2050	3.60	7,070,000	7,868,062	7,769,103	98,958
'06051GHD4	BANK OF AMERICA CORP	12/20/2028	3.42	7,050,000	7,852,643	7,599,195	253,448
'92840VAG7	VISTRA CORP	1/30/2027	3.70	7,468,000	7,690,770	7,668,093	22,677
'110122CD8	BRISTOL MYERS SQUIBB CO	10/26/2049	4.25	5,750,000	7,585,400	7,570,335	15,065
'89153VAV1	TOTAL CAPITAL INTL SA	5/29/2050	3.13	7,345,000	7,535,750	7,602,813	(67,064)
'04010LAW3	ARES CAPITAL CORP	3/1/2024	4.63	7,728,000	7,525,140	7,844,032	(318,892)
'05352AAC4	AVANTOR INC	10/1/2025	9.00	6,998,000	7,522,850	7,433,943	88,907
'95000U2S1	WELLS FARGO + COMPANY	6/2/2028	2.39	7,250,000	7,490,773	7,473,373	17,400
'04650NAB0	AT+T INC	9/1/2040	5.35	5,955,000	7,486,686	7,433,770	52,916
'912833LP3	STRIPS	11/15/2023	0.00	7,505,000	7,438,956	5,910,215	1,528,741
'404280CG2	HSBC HOLDINGS PLC	6/4/2026	2.10	7,340,000	7,415,749	7,404,600	11,149
'880591EP3	TENN VALLEY AUTHORITY	12/15/2042	3.50	5,875,000	7,406,143	5,900,849	1,505,294
'842587DE4	SOUTHERN CO	4/30/2030	3.70	6,500,000	7,371,845	7,425,422	(53,577)
'278865BE9	ECOLAB INC	3/24/2030	4.80	5,750,000	7,286,285	7,306,525	(20,240)
'880591EH1	TENN VALLEY AUTHORITY	9/15/2039	5.25	4,700,000	7,242,042	5,919,414	1,322,628
'67020YAK6	NUANCE COMMUNICATIONS	12/15/2035	1.00	6,131,000	7,232,986	5,736,875	1,496,110
'67020YAK6	NUANCE COMMUNICATIONS	12/15/2035	1.00	6,090,000	7,184,617	6,325,141	859,475
'298736AL3	EURONET WORLDWIDE INC	3/15/2049	0.75	7,425,000	7,179,084	8,349,408	(1,170,324)
'36179RBW8	GNMA II POOL MA2753	4/20/2045	3.00	6,650,559	7,078,789	6,855,787	223,002
'844741BG2	SOUTHWEST AIRLINES CO	5/1/2025	1.25	5,881,000	7,063,257	6,160,932	902,325
'313747BA4	FEDERAL REALTY INVESTMEN	6/1/2030	3.50	6,657,000	7,021,804	7,014,614	7,190
'04649VAU4	ASURION LLC	8/4/2025	0.00	7,000,000	6,982,500	6,900,043	82,457
'95000U2Q5	WELLS FARGO + COMPANY	4/30/2041	3.07	6,630,000	6,915,687	6,761,156	154,531
'3622A2TM4	GNMA II POOL 784156	8/20/2045	4.00	6,460,763	6,904,617	7,001,851	(97,234)
'110122AN8	BRISTOL MYERS SQUIBB CO	9/15/2023	0.24	4,565,000	6,848,048	6,644,540	203,508
'20030NCM1	COMCAST CORP	10/15/2048	4.70	5,080,000	6,832,194	5,986,286	845,907
'06738EBH7	BARCLAYS PLC	5/7/2025	3.93	6,295,000	6,800,929	6,724,572	76,357
'05971KAE9	BANCO SANTANDER SA	5/28/2025	2.75	6,400,000	6,632,448	6,578,872	53,576
'25278XAM1	DIAMONDBACK ENERGY INC	12/1/2026	3.25	6,535,000	6,570,550	6,579,914	(9,364)
'741503AX4	BOOKING HOLDINGS INC	9/15/2021	0.90	6,133,000	6,516,251	6,345,672	170,579
'11120VAH6	BRIXMOR OPERATING PART	5/15/2029	4.13	6,185,000	6,421,886	6,434,690	(12,805)
'6174468P7	MORGAN STANLEY	4/1/2031	3.62	5,515,000	6,300,171	6,300,722	(552)
'023135BT2	AMAZON.COM INC	6/3/2050	2.50	6,120,000	\$ 6,282,914	\$ 6,091,592	\$ 191,322



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<u>CUSIP</u>	<u>Security Description</u>	<u>Quantity</u>	<u>Fair Value</u>	<u>Par Value</u>	<u>Gain/Loss</u>
'594918104	MICROSOFT CORP	2,051,069	\$ 417,413,052	\$ 197,875,586	\$ 219,537,466
'037833100	APPLE INC	1,120,233	408,660,998	198,627,985	210,033,013
'023135106	AMAZON.COM INC	116,139	320,406,596	185,332,965	135,073,631
'923CXG908	AFL CIO HOUSING INV TRUST	151,890	180,054,815	170,668,772	9,386,043
'30303M102	FACEBOOK INC CLASS A	657,700	149,343,939	117,081,052	32,262,887
'02079K305	ALPHABET INC CL A	82,220	116,592,071	93,485,707	23,106,364
'02079K107	ALPHABET INC CL C	81,159	114,727,174	92,040,312	22,686,862
'594918104	MICROSOFT CORP	559,717	113,908,007	51,481,024	62,426,983
'037833100	APPLE INC	305,670	111,508,416	51,585,966	59,922,450
'478160104	JOHNSON + JOHNSON	722,245	101,569,314	95,569,208	6,000,106
'084670702	BERKSHIRE HATHAWAY INC CL B	533,992	95,322,912	110,151,758	(14,828,846)
'74199B911	PRUDENTIALS PRISA II	48,071,785	93,368,866	48,071,785	45,297,081
'92826C839	VISA INC CLASS A SHARES	462,453	89,332,046	57,998,757	31,333,289
'023135106	AMAZON.COM INC	31,663	87,352,518	44,914,079	42,438,439
'742718109	PROCTER + GAMBLE CO/THE	667,470	79,809,388	53,970,945	25,838,443
'46625H100	JPMORGAN CHASE + CO	829,626	78,034,622	93,688,729	(15,654,107)
'91324P102	UNITEDHEALTH GROUP INC	258,562	76,262,862	59,823,213	16,439,649
'437076102	HOME DEPOT INC	294,224	73,706,054	52,558,442	21,147,612
'57636Q104	MASTERCARD INC A	241,633	71,450,878	44,312,491	27,138,387
'ACI02GTQ9	ASML HOLDING NV	189,469	69,565,011	19,543,502	50,021,509
'458140100	INTEL CORP	1,160,977	69,461,254	58,723,762	10,737,491
'037833100	APPLE INC	187,186	68,285,453	22,831,149	45,454,304
'92343V104	VERIZON COMMUNICATIONS INC	1,134,900	62,567,037	55,826,502	6,740,535
'67066G104	NVIDIA CORP	161,689	61,427,268	38,401,467	23,025,801
'00206R102	AT+T INC	1,953,116	59,042,697	69,120,797	(10,078,101)
'00724F101	ADOBE INC	131,757	57,355,140	29,281,282	28,073,858
'ACI076JS3	BROOKFIELD INFR FD II	42,810,910	57,337,337	42,810,910	14,526,427
'70450Y103	PAYPAL HOLDINGS INC	321,657	56,042,299	26,790,909	29,251,390
'254687106	WALT DISNEY CO/THE	495,010	55,198,565	50,298,909	4,899,656
'17275R102	CISCO SYSTEMS INC	1,163,061	54,245,165	52,272,395	1,972,770
'58933Y105	MERCK + CO. INC.	691,938	53,507,566	39,895,298	13,612,267
'64110L106	NETFLIX INC	116,516	53,019,441	36,991,060	16,028,380
'30231G102	EXXON MOBIL CORP	1,159,198	51,839,335	85,209,154	(33,369,819)
'060505104	BANK OF AMERICA CORP	2,118,534	50,315,183	66,257,831	(15,942,649)
'713448108	PEPSICO INC	380,159	50,279,829	42,612,541	7,667,288
'717081103	PFIZER INC	1,523,116	49,805,893	56,425,225	(6,619,331)
'20030N101	COMCAST CORP CLASS A	1,242,355	48,426,998	44,581,967	3,845,031
'00287Y109	ABBVIE INC	482,508	47,372,635	50,966,244	(3,593,608)
'191216100	COCA COLA CO/THE	1,057,421	47,245,570	46,705,438	540,133
'B02K2M903	M3 INC	1,090,372	46,339,673	10,837,704	35,501,969
'931142103	WALMART INC	381,672	45,716,672	33,823,760	11,892,912
'166764100	CHEVRON CORP	512,038	45,689,151	58,677,770	(12,988,619)
'79466L302	SALESFORCE.COM INC	237,208	44,436,175	30,083,177	14,352,997
'ACI0JKHV4	FERRARI NV	258,267	44,047,523	10,600,655	33,446,868
'01609W102	ALIBABA GROUP HOLDING SP ADR	203,391	43,871,500	26,284,021	17,587,479
'88160R101	TESLA INC	40,503	43,735,544	13,565,089	30,170,455
'002824100	ABBOTT LABORATORIES	473,250	43,269,248	30,286,740	12,982,508
'975EFB902	VISTA EQUITY PARTNERS FUND IV,	22,946,826	42,075,071	22,946,826	19,128,245
'L8681T102	SPOTIFY TECHNOLOGY SA	159,147	41,090,164	26,707,142	14,383,022
'ACI00WK02	BC EUROPEAN CAPITAL IX, L.P	28,845,770	\$ 41,021,861	\$ 34,609,354	\$ 6,412,507

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<u>CUSIP</u>	<u>Security Description</u>	<u>Quantity</u>	<u>Fair Value</u>	<u>Par Value</u>	<u>Gain/Loss</u>
'30303M102	FACEBOOK INC CLASS A	179,453	\$ 40,748,393	\$ 28,172,366	\$ 12,576,027
'BMMV2K903	TENCENT HOLDINGS LTD	620,755	39,934,252	12,470,575	27,463,677
'883556102	THERMO FISHER SCIENTIFIC INC	108,170	39,194,318	23,362,811	15,831,507
'BMMV2K903	TENCENT HOLDINGS LTD	603,436	38,820,093	9,200,583	29,619,510
'031162100	AMGEN INC	161,220	38,025,349	30,574,300	7,451,049
'532457108	ELI LILLY + CO	230,704	37,876,983	19,115,604	18,761,379
'580135101	MCDONALD S CORP	203,897	37,612,880	33,264,987	4,347,893
'G1151C101	ACCENTURE PLC CL A	174,577	37,485,173	28,056,499	9,428,674
'BK6YZP902	ALIBABA GROUP HOLDING LTD	1,364,356	36,897,086	20,927,190	15,969,895
'22160K105	COSTCO WHOLESALE CORP	120,671	36,588,654	23,063,001	13,525,653
'110122108	BRISTOL MYERS SQUIBB CO	620,089	36,461,233	38,360,859	(1,899,625)
'BQV0SV900	ZALANDO SE	507,663	35,796,008	15,795,700	20,000,308
'550507909	KERING	62,340	33,905,816	19,008,642	14,897,174
'11135F101	BROADCOM INC	107,122	33,808,774	28,281,633	5,527,141
'G5960L103	MEDTRONIC PLC	367,388	33,689,480	30,539,092	3,150,388
'654106103	NIKE INC CL B	331,761	32,529,166	22,696,929	9,832,237
'65339F101	NEXTERA ENERGY INC	134,036	32,191,426	21,968,020	10,223,406
'649099009	KEYENCE CORP	76,928	32,108,892	7,100,315	25,008,578
'882508104	TEXAS INSTRUMENTS INC	251,412	31,921,782	27,210,940	4,710,842
'M98068105	WIX.COM LTD	124,438	31,883,504	8,402,951	23,480,554
'02079K305	ALPHABET INC CL A	22,389	31,748,721	22,976,630	8,772,092
'907818108	UNION PACIFIC CORP	185,938	31,436,538	25,425,316	6,011,222
'02079K107	ALPHABET INC CL C	22,175	31,346,802	22,518,969	8,827,833
'03027X100	AMERICAN TOWER CORP	120,642	31,190,783	18,105,354	13,085,428
'74999Y962	RREEF AMERICA REIT II	27,256,133	31,172,349	27,256,133	3,916,216
'G5494J103	LINDE PLC	143,857	30,513,508	23,288,956	7,224,552
'235851102	DANAHER CORP W/D	171,363	30,302,119	17,932,366	12,369,754
'594918104	MICROSOFT CORP	147,349	29,986,995	6,705,570	23,281,425
'68389X105	ORACLE CORP	540,573	29,877,470	27,696,145	2,181,324
'718172109	PHILIP MORRIS INTERNATIONAL	426,175	29,857,821	42,510,831	(12,653,010)
'BMMV2K903	TENCENT HOLDINGS LTD	458,641	29,505,177	7,845,408	21,659,770
'459200101	INTL BUSINESS MACHINES CORP	243,326	29,386,481	37,123,626	(7,737,145)
'172967424	CITIGROUP INC	570,278	29,141,206	40,564,474	(11,423,268)
'688910900	TAIWAN SEMICONDUCTOR MANUFA	2,693,112	28,570,017	8,721,579	19,848,437
'688910900	TAIWAN SEMICONDUCTOR MANUFA	2,668,974	28,313,943	11,839,790	16,474,154
'747525103	QUALCOMM INC	308,249	28,115,391	18,422,587	9,692,805
'548661107	LOWE S COS INC	207,007	27,970,786	17,931,257	10,039,529
'438516106	HONEYWELL INTERNATIONAL INC	192,307	27,805,669	27,640,145	165,524
'478160104	JOHNSON + JOHNSON	197,036	27,709,173	24,653,870	3,055,303
'097023105	BOEING CO/THE	146,510	26,855,283	47,698,350	(20,843,067)
'375558103	GILEAD SCIENCES INC	343,901	26,459,743	26,623,407	(163,664)
'459200101	INTL BUSINESS MACHINES CORP	218,477	26,385,467	31,975,042	(5,589,575)
'464287622	ISHARES RUSSELL 1000 ETF	153,498	26,352,537	25,594,961	757,575
'949746101	WELLS FARGO + CO	1,029,139	26,345,958	56,928,362	(30,582,404)
'375558103	GILEAD SCIENCES INC	341,195	26,251,543	25,469,006	782,537
'BZ1HM4902	ADYEN NV	17,986	26,170,365	16,394,832	9,775,533
'084670702	BERKSHIRE HATHAWAY INC CL B	145,705	26,009,800	28,478,518	(2,468,719)
'676396005	SMC CORP	49,235	25,182,252	11,670,924	13,511,329
'539830109	LOCKHEED MARTIN CORP	67,770	24,730,628	22,208,571	2,522,058
'874039100	TAIWAN SEMICONDUCTOR SP ADR	433,928	\$ 24,634,093	\$ 7,525,136	\$ 17,108,957

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'932QNA900	BREVAN HOWARD AH FUND	155,551	\$ 364,902,710	\$ 172,851,302	\$ 192,051,408
'922VQL904	DE SHAW COMPOSITE FUND, LLC	76,255	252,245,126	114,321,474	137,923,652
'922VQE900	CASPIAN SELECT CREDIT FUND	189,549	206,036,760	193,004,116	13,032,644
'ACI08C7T0	LUXOR CAPITAL	117,596	198,353,434	112,956,596	85,396,838
'ACI06VHR3	APOLLO CENTRE ST PARTNERSHIP	18,464,017	192,252,919	175,972,802	16,280,117
'ACI06DFK0	QUEST PARTERS LLC	152,136	186,203,300	163,000,000	23,203,300
'ACI06VJW0	MARATHON CTR ST PARTNERSHIP	9,497,667	179,232,293	161,704,166	17,528,127
'931UXY909	GSA CAP PRTNERS LP	188,835	175,889,206	184,000,000	(8,110,794)
'932SBK907	KEY SQUARE PARTNERS	193,290	166,954,801	194,500,000	(27,545,199)
'ACI06VJX8	OAK HILL CTR ST PARTNERSHIP	9,968,414	161,289,034	123,335,608	37,953,426
'962BFY903	LION INDUSTRIAL TRUST	117,342,742	139,773,394	117,342,742	22,430,652
'926FDP900	SRS PARTNERS	39,064,312	137,620,369	103,312,497	34,307,872
'ACI0B2M46	ARES CENTRE STREET PARTNERSHIP	84,681	127,142,259	90,000,000	37,142,259
'ACI08B440	LASALLE US PROPERTY FUND	100,845,491	124,225,207	100,845,491	23,379,716
'963ECW903	DL PARTNERS OPPORTUNITIES FUND	120,500	120,281,742	120,500,000	(218,258)
'962RLN905	KKR NYC CREDIT B LP	114,499,023	120,263,934	117,024,103	3,239,832
'976ENK902	TURIYA CAPITAL MANAGEMENT	114,194	118,933,388	111,067,989	7,865,399
'933JWW907	FLORIN COURT CAPITAL FUND	101,000,000	117,368,262	101,000,000	16,368,262
'ACI084PS0	METLIFE CORE PROPERTY FUND	99,000,000	112,182,741	99,000,000	13,182,741
'930WSN906	PHARO MACRO FUND LTD. CLASS A	27,445	111,238,450	84,923,618	26,314,832
'933GHF907	VOLORIDGE FUND	75,000	108,404,412	75,000,000	33,404,412
'979GFS906	PRUDENTIAL PRISA III	65,757,179	106,934,390	65,757,179	41,177,211
'ACI06VK08	AG CENTRE ST PARTNERSHIP	67,932	105,869,174	90,957,335	14,911,839
'976HWQ902	WARBURG PINCUS XII	82,162,650	101,952,099	82,162,650	19,789,449
'ACI0C35L4	BLACKSTONE RE PRTNRS VIII	77,327,136	96,825,792	77,327,136	19,498,656
'ACI06CN64	CVC CAPITAL PARTNERS VI	49,757,561	91,663,753	56,834,049	34,829,704
'928EDW906	VISTA EQUITY PARTNERS VI, L.P.	70,508,848	90,763,361	70,508,848	20,254,513
'927RTF908	USAA EAGLE RE FUND	78,795,072	88,589,063	78,795,072	9,793,991
'ACI06VJ42	FORTRESS CNTRE ST PARTNERSHIP	568,025	88,080,846	82,090,779	5,990,068
'ACI006PI5	JP MORGAN STR PROPERTY FD	8,621,025	87,762,899	65,970,243	21,792,656
'926BKS905	IFM GLOBAL INFRASTURE (US) LP	63,616,008	87,027,081	63,616,008	23,411,073
'962BGA904	BROOKFIELD PREMIER RE PARTNERS	69,698,995	85,053,404	69,698,995	15,354,410
'ACI082WV9	VISTA EQUITY PARTNERS FUND V	56,190,835	84,178,984	55,220,684	28,958,300
'964KDL901	LANSDOWNE EURO ABSOLUTE OPP FD	89,000	76,985,394	89,000,000	(12,014,606)
'930MHC904	CARLYLE PROPERTY INVESTORS	68,193,015	72,711,484	68,193,015	4,518,469
'934LML906	JEFFERIES STRC ALPHA B	75,000	71,811,261	75,000,000	(3,188,739)
'ACI0CLXD1	EQT VII	50,961,131	69,608,830	58,053,134	11,555,696
'930WSG901	PHARO GAIA FUND LTD CL A S 19	31,607	68,873,906	50,000,000	18,873,906
'ACI064Z93	APOLLO INVESTMENT FUND VIII	62,997,193	68,379,673	62,997,193	5,382,480
'932TTQ903	KKR RE CREDIT OPP PRNTS AGG I	72,243,221	67,611,853	72,243,221	(4,631,368)
'930LAB905	APAX IX USD L.P.	49,949,600	66,928,119	49,949,600	16,978,519
'423079912	HEITMAN AMERICA REAL ESTATE TR	13,398,213	61,412,935	47,344,011	14,068,924
'930WSK902	PHARO GAIA FUND LTD R P SHS A	24,021	60,855,978	38,000,000	22,855,978
'930WSJ905	PHARO GAIA FUND LTD. CL A S 20	27,284	59,850,601	43,161,059	16,689,542
'964KPR905	GRESHAM QUANT ACAR FD LLC	55,000	56,326,913	55,000,000	1,326,913
'ACI018UL7	GREEN EQUITY INVESTORS VI	44,402,276	55,213,075	44,402,276	10,810,800
'928BWN901	ALTIMETER PARTNERS FUND LP	38,000	55,079,482	38,000,000	17,079,482
'933REU903	MARANON PARTNERSHIP	10,708,591	53,753,677	53,286,538	467,139
'ACI07YY48	LEXINGTON CAPT PRTNRS VIII	50,762,715	51,259,682	50,762,715	496,967
'976LFP904	GLOBAL INFRASTRUCTURE PRT III	51,669,008	\$ 50,782,161	\$ 51,669,008	\$ (886,847)

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'ACI06CZS3	CARLYLE PARTNERS VI	39,762,293	\$ 50,531,115	\$ 39,762,293	\$ 10,768,822
'964MXZ904	TORCHLIGHT DEBT OPPORTUNITY VI	10,240,109	50,465,858	51,001,006	(535,148)
'965SET905	FCO MA CENTRE ST II	20,886,485	50,056,153	48,195,000	1,861,153
'932SBJ900	ICG CENTRE ST PARTNERS	8,874,304	48,153,041	43,856,319	4,296,722
'ACI06VK40	CONTRARIAN CTR ST PARTNERSHIP	5,547,288	48,001,625	55,000,000	(6,998,375)
'976XMN905	BRIGHTWOOD CAPITAL FUND IV LP	8,285,263	46,912,926	48,415,684	(1,502,758)
'932SJQ906	EQT VIII	35,639,415	45,728,896	39,575,465	6,153,431
'931PNS904	CVC VII	36,868,276	45,467,477	41,179,807	4,287,669
'922WLC907	RFM NYCERS SANDY LLC	42,071,115	44,407,155	42,071,115	2,336,041
'98899C937	YUCAIPA AMERICAN ALLIANCE II	26,316,738	43,855,817	26,316,738	17,539,079
'ACI01BY28	BLACKSTONE RE PARTNERS VII	33,561,025	42,791,415	33,561,025	9,230,389
'933GHG905	VOLORIDGE AGGRESSIVE	28,700	41,888,549	29,013,831	12,874,718
'928QUK906	GREEN EQUITY INVESTORS VII	36,735,857	41,697,255	36,735,857	4,961,398
'930HBL901	H/2 SPECIAL OPP IV LP	57,257,347	41,192,481	57,257,347	(16,064,866)
'966MRQI10	VOLORIDGE SUSTAINABILITY MSTER	39,000	41,003,224	39,000,000	2,003,224
'ACI01YEJ3	WARBURG PINCUS XI LP	29,354,965	40,750,446	29,354,965	11,395,480
'932TWH909	KKR AMERICAS FUND XII LP	37,859,946	40,724,278	37,859,946	2,864,332
'ACI05JGB7	OAKTREE OPPORTUNITIES FUND IX,	21,612,057	40,171,778	40,739,373	(567,595)
'930LZY908	KKR RE PARTNERS AMERICAS II LP	34,746,685	37,786,221	34,746,685	3,039,536
'931GLG902	EQT INFRASTRUCTURE III	24,497,249	37,119,198	28,437,929	8,681,269
'979FZS906	CREDIT SUISSE EM DOM MGRS FD	33,991,690	36,986,460	33,991,690	2,994,770
'962SKE904	WARBURG PINCUS FINANCIAL SECTO	33,919,811	36,871,750	33,919,811	2,951,939
'922VQG905	CITY PLAN FUND, LLC	14,620	36,368,099	24,029,125	12,338,974
'930VRP904	BC EUROPEAN CAPITAL X	29,549,402	36,059,508	33,558,699	2,500,809
'931ARB900	PLATINUM EQUITY CAP PTNRS IV	39,232,143	35,782,657	39,232,143	(3,449,486)
'979FZQ900	PALADIN HOMELAND SEC III	22,848,466	35,460,545	22,848,466	12,612,079
'935XQV903	EQT INFRA FUND IV	35,102,481	35,435,253	35,102,481	332,772
'ACI0BN8K0	GOTHAM TARGETED	39,000,000	35,156,043	39,000,000	(3,843,957)
'ACI00PZ50	SUMMIT PTN GROWTH EQTY FD VIII	21,514,524	34,711,684	21,514,524	13,197,160
'962TGC901	BROOKFIELD STRATEGIC RE III LP	32,239,259	34,323,656	32,239,259	2,084,397
'930ADP905	BROOKFIELD INFRA FUND III	32,999,889	34,313,945	32,999,889	1,314,056
'927NJZ904	ARES CORPORATE OPPORTUNITIES	32,353,889	34,031,762	32,353,888	1,677,874
'931KLY904	APOLLO IX	32,536,675	33,704,937	32,536,675	1,168,262
'923UYB908	BLACKSTONE RE EUROPE IV	26,657,608	33,673,304	26,657,608	7,015,696
'976PSH909	ARTEMIS REAL ESTATE PARTNERS	31,916,784	33,308,803	31,916,784	1,392,019
'ACI06YXS7	HUDSON SANDY MANAGER, LLC	21,996,034	32,277,112	21,996,034	10,281,078
'ACI0CDWS7	WCAS XII	26,039,210	32,013,126	26,039,210	5,973,916
'ACI020X48	ARES CORPORATE OPPS FUND IV	27,862,792	31,230,345	27,862,792	3,367,553
'ACI06KJW4	BROOKFIELD STRATEGIC RE PRTNRS	19,086,734	31,171,977	19,086,734	12,085,243
'931HMK900	ACTIS ENERGY FUND 4	22,703,607	30,848,412	22,703,607	8,144,805
'74299D916	PRISA	18,132,806	30,426,178	18,132,806	12,293,372
'932FET903	HEITMAN CREDIT	30,490,263	30,353,240	30,490,263	(137,023)
'963DBT903	VISTA VII	28,752,029	29,041,533	28,752,029	289,504
'928HWJ907	DIVCO WEST FUND V LP	24,409,424	28,772,389	24,282,253	4,490,136
'976GLQ906	BRIDGEPOINT EUR V	18,919,072	28,538,899	21,666,470	6,872,429
'928DCR900	PW REAL ESTATE FUND III LP	16,524,880	28,437,695	18,871,417	9,566,278
'ACI06KHR7	LANDMARK EQUITY PRTNRS XV	12,845,410	28,117,446	12,845,400	15,272,046
'962VLX904	SIRIS PARTNERS IV	31,046,709	27,455,195	31,046,709	(3,591,514)
'ACI0C34Z4	JAMESTOWN PREMIER FUND	33,942,883	27,305,149	33,942,883	(6,637,734)
'ACI002FY0	BDCM OPPORTUNITY FUND III LP	16,863,655	\$ 26,899,790	\$ 16,863,655	\$ 10,036,135

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'912828B25	TSY INFL IX N/B	46,840,165	\$ 49,329,720	\$ 48,015,695	\$ 1,314,025	\$ 135,116
'912828WU0	TSY INFL IX N/B	45,837,129	47,875,048	45,341,455	2,533,593	26,445
'912828SA9	TSY INFL IX N/B	45,971,965	46,591,667	46,161,870	429,797	26,522
'912828VM9	TSY INFL IX N/B	43,668,471	45,473,725	44,146,867	1,326,858	75,580
'912828SA9	TSY INFL IX N/B	44,543,202	45,143,644	44,314,936	828,708	25,698
'912828UH1	TSY INFL IX N/B	44,022,660	45,094,612	44,103,889	990,723	25,398
'912828X39	TSY INFL IX N/B	43,466,078	44,097,640	43,396,212	701,428	11,431
'912828H45	TSY INFL IX N/B	39,664,364	41,728,101	39,778,338	1,949,764	45,767
'912828Z37	TSY INFL IX N/B	36,630,563	39,571,997	38,326,524	1,245,473	21,133
'912828XL9	TSY INFL IX N/B	36,918,996	39,426,534	36,763,259	2,663,275	63,898
'912828TE0	TSY INFL IX N/B	38,409,456	39,313,230	39,015,651	297,579	22,159
'9128283R9	TSY INFL IX N/B	33,983,040	37,252,208	33,426,858	3,825,350	78,422
'9128284H0	TSY INFL IX N/B	35,648,775	37,066,527	35,388,847	1,677,681	46,874
'912828Y38	TSY INFL IX N/B	32,855,621	37,041,755	32,740,078	4,301,678	113,731
'912828N71	TSY INFL IX N/B	32,573,448	35,266,621	33,357,178	1,909,443	93,962
'912810FR4	TSY INFL IX N/B	29,044,888	33,419,048	33,120,712	298,336	318,377
'9128284H0	TSY INFL IX N/B	31,934,092	33,204,111	32,340,140	863,971	41,990
'912828V49	TSY INFL IX N/B	30,745,866	33,128,364	30,585,892	2,542,472	53,214
'912828S50	TSY INFL IX N/B	30,984,215	32,898,110	30,776,115	2,121,996	17,876
'9128282L3	TSY INFL IX N/B	29,707,094	32,285,076	29,390,476	2,894,599	51,416
'912828ZJ2	TSY INFL IX N/B	29,780,860	31,198,727	30,946,768	251,958	7,832
'912828YL8	TSY INFL IX N/B	28,986,660	30,358,309	29,435,925	922,384	7,623
'9128287D6	TSY INFL IX N/B	27,319,488	29,886,153	27,487,538	2,398,615	31,522
'912828QV5	TSY INFL IX N/B	28,389,747	28,882,877	29,371,202	(488,325)	81,894
'9128286N5	TSY INFL IX N/B	27,376,323	28,771,968	27,575,254	1,196,715	28,797
'912828Y38	TSY INFL IX N/B	25,256,737	28,474,698	27,461,777	1,012,920	87,427
'912810RL4	TSY INFL IX N/B	22,546,188	27,551,667	21,549,562	6,002,106	63,643
'912810FH6	TSY INFL IX N/B	19,457,381	27,500,673	26,602,257	898,417	158,623
'9128285W6	TSY INFL IX N/B	21,148,255	24,093,361	21,737,349	2,356,012	85,406
'912810RL4	TSY INFL IX N/B	19,405,426	23,713,624	18,754,844	4,958,780	54,778
'912810RF7	TSY INFL IX N/B	17,319,509	23,611,513	19,924,344	3,687,170	89,631
'912810PS1	TSY INFL IX N/B	19,014,982	23,086,280	22,033,434	1,052,846	208,433
'912810PV4	TSY INFL IX N/B	19,036,135	22,707,063	21,049,274	1,657,789	153,753
'912810FD5	TSY INFL IX N/B	16,183,709	21,776,799	20,933,010	843,788	123,423
'912828XL9	TSY INFL IX N/B	20,314,099	21,693,833	20,787,689	906,143	35,159
'912810SB5	TSY INFL IX N/B	16,352,017	21,595,291	16,286,892	5,308,399	61,545
'9128283R9	TSY INFL IX N/B	19,120,203	20,959,567	20,464,298	495,269	44,124
'912810QV3	TSY INFL IX N/B	17,438,956	20,866,408	17,166,218	3,700,190	49,227
'912810RW0	TSY INFL IX N/B	15,892,906	20,245,178	15,984,010	4,261,168	52,340
'912810FS2	TSY INFL IX N/B	17,175,644	19,960,160	19,285,442	674,718	158,544
'912828N71	TSY INFL IX N/B	18,269,343	19,779,852	19,514,981	264,871	52,700
'912828H45	TSY INFL IX N/B	18,254,659	19,204,449	18,919,746	284,703	21,063
'912828S50	TSY INFL IX N/B	17,854,894	18,957,790	18,486,725	471,066	10,301
'912828UH1	TSY INFL IX N/B	18,503,872	18,954,441	18,449,545	504,896	10,675
'912828WU0	TSY INFL IX N/B	17,781,449	18,572,013	18,139,675	432,338	10,259
'912810RA8	TSY INFL IX N/B	15,575,725	18,316,741	14,957,765	3,358,975	36,639
'912810QP6	TSY INFL IX N/B	12,122,606	18,087,413	14,878,390	3,209,023	96,956
'9128285W6	TSY INFL IX N/B	15,456,619	17,609,108	17,110,212	498,896	62,421
'912828Z37	TSY INFL IX N/B	15,369,885	16,604,087	16,205,677	398,409	8,867
'912828V49	TSY INFL IX N/B	15,221,120	\$ 16,400,605	\$ 15,815,028	\$ 585,577	\$ 26,344

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'912810SG4	TSY INFL IX N/B	12,082,687	\$ 16,101,992	\$ 12,949,510	\$ 3,152,483	\$ 45,476
'9128287D6	TSY INFL IX N/B	14,705,905	16,087,524	15,649,080	438,445	16,968
'912828B25	TSY INFL IX N/B	15,156,175	15,961,726	15,612,964	348,762	43,720
'912810RR1	TSY INFL IX N/B	11,281,999	14,595,297	11,762,236	2,833,061	42,462
'9128282L3	TSY INFL IX N/B	13,329,770	14,486,528	14,125,515	361,013	23,071
'912810QV3	TSY INFL IX N/B	11,788,414	14,105,309	11,828,966	2,276,343	33,276
'912810PZ5	TSY INFL IX N/B	10,601,849	13,588,178	12,748,464	839,714	122,329
'912828ZJ2	TSY INFL IX N/B	11,730,168	12,288,642	12,193,037	95,604	3,085
'912828YL8	TSY INFL IX N/B	10,934,968	11,452,410	11,379,623	72,787	2,876
'912810FQ6	TSY INFL IX N/B	7,481,019	11,132,430	10,270,625	861,805	53,118
'912828VM9	TSY INFL IX N/B	9,317,072	9,702,240	9,694,628	7,611	16,126
'912810QF8	TSY INFL IX N/B	6,557,730	9,661,110	8,149,267	1,511,843	52,448
'912810RR1	TSY INFL IX N/B	7,417,070	9,595,316	8,304,444	1,290,872	27,916
'912810FS2	TSY INFL IX N/B	6,993,975	8,127,838	8,089,688	38,150	64,560
'912810RA8	TSY INFL IX N/B	5,834,316	6,861,039	5,819,246	1,041,793	13,724
'912810RF7	TSY INFL IX N/B	4,728,864	6,446,813	5,744,529	702,284	24,473
'912810SM1	TSY INFL IX N/B	5,536,014	6,209,636	5,898,364	311,272	5,209
'912810SG4	TSY INFL IX N/B	4,564,638	6,083,065	5,844,709	238,357	17,180
'912810QF8	TSY INFL IX N/B	3,723,206	5,485,175	4,645,347	839,828	29,778
'912810PZ5	TSY INFL IX N/B	3,324,127	4,260,466	4,004,141	256,325	38,355
'912810FQ6	TSY INFL IX N/B	2,555,798	3,803,258	3,569,689	233,569	18,147
'912810SB5	TSY INFL IX N/B	2,258,750	2,983,018	2,229,856	753,162	8,501
'912810RW0	TSY INFL IX N/B	2,161,903	2,753,940	2,424,684	329,256	7,120
'912810SB5	TSY INFL IX N/B	1,960,287	2,588,853	1,896,888	691,964	7,378
'9128286N5	TSY INFL IX N/B	2,404,732	2,527,325	2,452,726	74,599	2,530
'912810SM1	TSY INFL IX N/B	2,249,317	2,523,014	2,385,924	137,091	2,116
'912828Z37	TSY INFL IX N/B	2,277,574	2,460,463	2,448,363	12,100	1,314
'9128283R9	TSY INFL IX N/B	1,247,580	1,367,597	1,287,151	80,446	2,879
'912810FR4	TSY INFL IX N/B	1,065,256	1,225,683	1,222,041	3,642	11,677
'912810SM1	TSY INFL IX N/B	792,997	889,488	769,358	120,131	746
'912828YL8	TSY INFL IX N/B	530,156	555,243	543,245	11,998	139
'912810QP6	TSY INFL IX N/B	84,315	\$ 125,801	\$ 103,129	\$ 22,673	\$ 674

New York City Police Pension Fund  
 Broker Commission Report  
 Year Ended June 30, 2020

*Fiscal Year Beginning July 1, 2019  
 Report includes the following period: June 2020*

Broker Name	Shares/Par Value	Base Commission
ABG SECURITIES LIMITED	\$ 4,800	\$ 43
AQEEL KARIM DHEDHI	7,289,130	2,837
ARQAAM CAPITAL LIMITED	5,280,916	8,774
AS LHV PANK	674,310	1,359
ATTIJARIWafa BANK	14,069	1,409
AUTREPAT-DIV RE	2,083	100
BANCO PACTUAL S.A.	182,836	847
BANCO SANTANDER CENTRAL HISPANO	791,936	1,655
BANCO SANTANDER CHILE	2,019,279	468
BANK J.VONTOBEL UND CO. AG	29,232	3,088
BANK OF AMERICA CORPORATION	265,658	619
BANK OF AMERICA MERRILL LYNCH SECUR INC	1,939,437	8,297
BANK OF NOVA SCOTIA - SCUSA	13,072	13
BARCLAYS BANK OF BOTSWANA LTD	51,295	821
BARCLAYS CAPITAL	4,110,037	15,005
BARCLAYS CAPITAL INC./LE	147,252	1,116
BCS PRIME BROKERAGE LTD	166,836	1,202
BMO CAPITAL MARKETS	2,661	19
BNP PARIBAS SECURITIES SERVICES	4,305,432	12,731
BNP PARIBAS SECURITIES SERVICES AUSTR B	290,574	179
BNP PARIBAS SECURITIES SERVICES SA	88,507,944	35,189
BOFA SECURITIES, INC	3,004,119	20,808
BRADESCO S.A. CTVM	1,901,387	4,894
BTG PACTUAL CASA DE BOLSA	14,977	15
BTG PACTUAL CHILE S.A. CORREDORES DE BC	10,247,772	2,259
BTIG HONG KONG LIMITED	667,939	267
CABRERA CAPITAL MARKETS	48	0
CANADIAN IMPERIAL BANK OF COMMERCE	567,388	3,048
CAPITAL MARKETS BROKERS LIMITED	2,866,701	3,588
CARNEGIE A S	11,355	1,060
CARNEGIE SECURITIES FINLAND	125,579	5,185
CASABLANCA FINANCE MARKETS	37,294	3,295
CHINA INTERNATIONAL CAPITAL CO	6,580	181
CHINA INTERNATIONAL CAPITAL CORPORATIO	1,598,847	2,887
CITIBANK N.A.	81	0
CITIBANK OF COLOMBIA	658,508	1,133
CITIGROUP GLBL MARKET KOERA SECS LTD	426,026	4,507
CITIGROUP GLOBAL MARKETS AUSTRALIA PTY	229,282	401
CITIGROUP GLOBAL MARKETS INC	28,130,058	18,211
CITIGROUP GLOBAL MARKETS INDIA	86,007	521
CITIGROUP GLOBAL MARKETS LIMITED	5,292,915	26,925
CITIGROUP GLOBAL MARKETS TAIWAN	10,824,724	3,933
CL SECURITIES TAIWAN COMPANY LIMITED	6,339,075	14,915
CLSA AUSTRALIA PTY LTD	3,592,347	3,164
CLSA SECURITIES KOREA LTD.	778,583	12,803
CLSA SECURITIES MALAYSIA SDN BHD	665,038	464
CLSA SINGAPORE PTE LTD.	\$ 17,019,608	\$ 18,553

Continued...

New York City Police Pension Fund  
 Broker Commission Report  
 Year Ended June 30, 2020

*Fiscal Year Beginning July 1, 2019  
 Report includes the following period: June 2020*

Broker Name	Shares/Par Value	Base Commission
COWEN AND COMPANY, LLC	\$ 36,776	\$ 480
COWEN EXECUTION SERVICES LLC	41,059,792	85,466
CREDIBOLSA SOCIEDAD AGENTE	1,134,083	4,678
CREDICORP CAPITAL COLOMBIA S.A.	1,076,544	2,169
CREDIT LYONNAIS SECURITIES INDIA	1,106,558	2,383
CREDIT LYONNAIS SECURITIES(ASIA)	90,562,091	39,459
CREDIT SUISSE FIRST BOSTON	2,948,905	2,921
CREDIT SUISSE FIRST BOSTON (EUROPE)	116,234	6,302
CREDIT SUISSE SECS INDIA PRIVATE LTD	994,351	2,876
CREDIT SUISSE SECURITIES (EUROPE) LTD	9,934,507	21,154
CREDIT SUISSE SECURITIES (USA) LLC	13,763,665	28,818
CS FIRST BOSTON (HONG KONG) LIMITED	627,215	7,048
CSFB AUSTRALIA EQUITIES LTD	1,003,141	4,433
CSL STOCKBROKERS LIMITED	12,929,527	4,067
DAIWA SBCM EUROPE	19,070	775
DAIWA SECURITIES (HK) LTD.	45,696	484
DAIWA SECURITIES AMERICA INC	351,878	17,729
DAVY STOCKBROKERS	457,253	2,041
DBS VICKERS (HONG KONG) LIMITED	376,166	1,116
DBS VICKERS SECURITIES (SINGAPORE)	312,071	6,354
DSP MERRILL LYNCH LTD	2,122,878	6,837
ERSTE AND STEIERMAERKISCHE BANK	27,019	6,549
EUROCLEAR BANK S.A / N.V	1,266,850	7,175
EXANE S.A.	873,644	8,627
FIDELITY CAPITAL MARKETS	1,683	13
FIDELITY CLEARING CANADA ULC	2,860,872	13,181
FINANCIAL BROKERAGE GROUP (FBG)	12,176,537	23,059
FIRST NATIONAL BANK OF BOTSWANA	621,284	1,541
FLOW CORRETORA DE MERCADORIAS LTDA.	4,554,520	12,484
GOLDMAN SACHS (ASIA) LLC	1,249,219	1,148
GOLDMAN SACHS (INDIA)	2,183,996	6,419
GOLDMAN SACHS + CO LLC	17,545,153	20,318
GOLDMAN SACHS AUSTRALIA PTY LTD	1,210,723	1,102
GOLDMAN SACHS DO BRASIL CORRETORA	207,834	471
GOLDMAN SACHS INTERNATIONAL	10,596,339	23,917
GOLDMAN SACHS(ASIA)L.L.C.	18,351,335	4,414
GOODBODY STOCKBROKERS	242,471	220
GUZMAN + CO	11,072	10
HAITONG INTL SECS COMPANY LTD	2,033,642	5,049
HONGKONG AND SHANGHAI BANKING CORP LT	443	0
HONGKONG AND SHANGHAI BANKING CORPOR	2,778,740	5,183
HSBC BANK PLC	27,874,710	48,919
HSBC BANK USA	580	4
HSBC SECURITIES	347,884	749
HSBC SECURITIES (USA) INC.	46,159,758	17,233
HSBC SECURITIES INDIA HOLDINGS	142,702	204
IC SECURITIES (GH) LIMITED	\$ 214,110	\$ 1,237

Continued...



New York City Police Pension Fund  
 Broker Commission Report  
 Year Ended June 30, 2020

*Fiscal Year Beginning July 1, 2019  
 Report includes the following period: June 2020*

Broker Name	Shares/Par Value	Base Commission
ICICI BROKERAGE SERVICES	\$ 4,193,332	\$ 17,637
IM TRUST S.A. CORREDORES DE BOLSA	23,570,251	10,723
INDIA INFOLINE LTD	135,897	2,598
INSTINET	883,027	3,487
INSTINET AUSTRALIA CLEARING SRVC PTY LTD	2,704,274	3,541
INSTINET LLC	9,725,054	16,968
INSTINET PACIFIC LIMITED	94,360,887	29,345
INSTINET SINGAPORE SERVICES PT	1,636,690	2,054
INSTINET U.K. LTD	18,692,619	66,855
INTERCAPITAL SECURITIES LTD.	35,493	2,810
INVESTEC BANK PLC	231,435	470
INVESTEC MARKETS(PROPRIETARY)LIMITED	325,826	268
INVESTEC SECURITIES LTD	200,298	493
INVESTMENT TECHNOLOGY GROUP INC.	32,713	289
INVESTMENT TECHNOLOGY GROUP LTD	2,869,392	18,736
ITG AUSTRALIA LTD.	28,324,499	13,259
ITG CANADA	52,656	184
ITG INC	112,334	322
J P MORGAN INDIA PRIVATE LTD	180,447	394
J P MORGAN SECURITIES INC	5,704,177	8,508
J.P. MORGAN CLEARING CORP.	75,620	569
J.P. MORGAN SECURITIES (TAIWAN) LTD	4,721,058	2,924
J.P. MORGAN SECURITIES LIMITED	48,263	614
J.P. MORGAN SECURITIES LLC	19,585	105
J.P. MORGAN SECURITIES PLC	7,623,199	28,713
J.P.MORGAN SECURITIES(FAR EAST)LTD SEOUL	254,146	3,164
JEFFERIES + COMPANY INC	2,814,600	11,506
JEFFERIES INDIA PRIVATE LIMITED	2,325,142	6,317
JEFFERIES INTERNATIONAL LTD	41,157,911	14,982
JM FINANCIAL INSTITUTIONAL SECURITIES PR	1,797,622	16,901
JOH. BERENBERG, GOSSLER & CO. KG	1,242,696	5,375
JONESTRADING INSTITUTIONAL SERVICES LLC	788	24
JP MORGAN SECURITIES AUSTRALIA LTD	2,557,519	2,950
JP MORGAN SECURITIES SINGAPORE	742	0
JPMORGAN SECURITIES(ASIA PACIFIC)LTD	12,504,705	8,102
JUPITER SECURITIES SDN BHD	327,410	425
KBC SECURITIES ROMANIA SSIF SA	8,669,433	12,481
KEMPEN + CO N.V.	151,121	846
KEPLER EQUITIES PARIS	5,100	51
KESTREL CAPITAL EAST AFRICA LTD	4,851,839	12,318
KIM ENG SECURITIES (HK) LTD.	551,505	0
KOREA INVESTMENT AND SECURITIES CO., LTD	90,503	1,010
KOTAK SECURITIES LTD	391,797	4,698
LARRAIN VIAL	2,550,952	738
LIBERUM CAPITAL LIMITED	14,999	30
LIQUIDNET CANADA INC	25,244	57
LIQUIDNET EUROPE LIMITED	\$ 769,618	\$ 2,391

Continued...

New York City Police Pension Fund  
 Broker Commission Report  
 Year Ended June 30, 2020

*Fiscal Year Beginning July 1, 2019  
 Report includes the following period: June 2020*

Broker Name	Shares/Par Value	Base Commission
LIQUIDNET INC	\$ 54,717	\$ 140
LOOP CAPITAL MARKETS	1,885,747	13,230
LOOP CAPITAL MARKETS LLC	2,354,493	11,428
MACQUARIE BANK LIMITED	13,857,460	23,417
MACQUARIE CAPITAL (EUROPE) LTD	32,758	183
MACQUARIE CAPITAL (USA) INC	41,582	827
MACQUARIE SEC NZ LTD	176,104	127
MACQUARIE SECURITIES (INDIA) PVT LTD	254,211	592
MACQUARIE SECURITIES KOREA LIMITED	123,736	1,265
MAINFIRST BANK DE	500	4
MANDARIN SECURITIES CORP	2,073	35
MERRILL LYNCH INTERNATIONAL	28,407,202	70,485
MERRILL LYNCH PIERCE FENNER AND S	10,847	19
MIRAE ASSET DAEWOO CO., LTD.	40,195	1,641
MIZUHO INTERNATIONAL PLC	24,001	1,534
MIZUHO SECURITIES USA INC	48,476	2,688
MORGAN STANLEY AND CO. INTERNATIONAL	13,252,361	19,056
MORGAN STANLEY CO INCORPORATED	17,942,537	29,594
MORGAN STANLEY DEAN WITTER AUSTRALIA	622,975	772
MORGAN STANLEY INDIA COMPANY PVT LTD	741,239	5,484
MORGAN STANLEY TAIWAN LIMITED	13,472,079	8,520
NATIONAL FINANCIAL SERVICES CORPORATION	53,147	425
NH INVESTMENT AND SECURITIES CO.,LTD.	3,730	47
NIGERIAN STOCK EXCHANGE,THE	7,236,098	3,355
NOMURA FINANCIAL ADVISORY + SEC INDIA	6,364,529	15,720
NORDEA BANK AB (PUBL), FINNISH BRANCH	17,498	169
NUMIS SECURITIES LIMITED	5,599	23
ODDO ET CIE	128,315	1,100
PAREL	16,102	243
PAVILION GLOBAL MARKETS LTD	519,210	7,728
PEEL HUNT LLP	753,616	259
PENSERRA SECURITIES LLC	614,626	1,106
PERSHING LLC	1,544,890	7,921
PERSHING SECURITIES LIMITED	288,576	752
PIPER JAFFRAY & HOPWOOD	99,215	352
RAIFFEISEN ZENTRALBANK OESTERREICH AG	90,519	1,801
RBC CAPITAL MARKETS, LLC	679	5
RBC DOMINION SECURITIES INC.	421,322	5,690
REDBURN (EUROPE) LIMITED	433,967	13,062
RENAISSANCE CAPITAL (KENYA) LIMITED	3,159,373	11,715
ROSENBLATT SECURITIES	10,106	59
ROYAL BANK OF CANADA EUROPE LTD	231,006	1,061
SAMSUNG SECURITIES CO LTD	33,487	2,219
SANFORD C BERNSTEIN CO LLC	24,631	985
SANFORD C. BERNSTEIN AND CO. LLC	526,299	2,914
SANFORD C. BERNSTEIN LTD	2,513,700	23,150
SCOTIA CAPITAL (USA) INC	\$ 13,438,969	\$ 136

Continued...

New York City Police Pension Fund  
 Broker Commission Report  
 Year Ended June 30, 2020

*Fiscal Year Beginning July 1, 2019  
 Report includes the following period: June 2020*

Broker Name	Shares/Par Value	Base Commission
SCOTIA CAPITAL INC	\$ 833,083	\$ 4,804
SG AMERICAS SECURITIES LLC	3,902,156	3,114
SG ASIA SECURITIES (INOIA) PVT LTD	2,713,677	6,796
SG SECURITIES (LONDON) LTD.	13,220,259	4,236
SG SECURITIES HK	41,605,691	15,236
SHENYIN AND WANGUO SECURITIES CO. LTD	8,484	76
SHENYIN WANGUO SECURITIES (HK) LTD	131,713	1,793
SKANDINAVISKA ENSKILDA BANKEN	2,700	20
SMBC NIKKO CAPITAL MARKETS LIMITED	51,266	2,475
SMBC NIKKO SECURITIES (HONK KONG) LTD	274,167	1,549
SOCIETE GENERALE	4,305,198	7,854
SOCIETE GENERALE LONDON BRANCH	2,029,857	19,774
THE HONGKONG AND SHANGHAI BANK	4,614	106
TOPLINE SECURITIES PVT LTD.	2,509,928	4,785
TORONTO DOMINION SECURITIES INC	143,768	811
TUNISIE VALEURS	462,261	4,376
UBS AG	17,521,824	39,975
UBS AG (FORMERLY SWISS BANK CO) ZURICH	219,127	747
UBS AG LONDON BRANCH	214,018	7,780
UBS SECURITIES ASIA LTD	17,628,160	8,377
UBS SECURITIES CANADA INC	873,603	6,072
UBS SECURITIES INDIA PRIVATE LTD	316,594	1,288
UBS SECURITIES LLC	60,103	190
UBS SECURITIES PTE.LTD	2,209,705	409
UBS SECURITIES PTE.LTD., SEOUL	128,554	1,546
UBS WARBURG AUSTRALIA EQUITIES	458,617	314
UNITED FINANCIAL INVESTMENTS PLC	417,044	4,463
VIRTU AMERICAS LLC	97,440	532
WEEDEN + CO.	3,032	7
WELLS FARGO SECURITIES LLC	7,036	54
WILLIAMS CAPITAL GROUP LP (THE)	807,297	6,458
WINTERFLOOD SECURITIES LTD	177,084	236
WOOD AND COMPANY	827,262	2,105
<b>QPP</b>	<b>\$ 1,081,246,782</b>	<b>\$ 1,493,229</b>
<b>POVSF</b>	<b>\$ 50,385,436</b>	<b>\$ 68,661</b>
<b>PSOVSF</b>	<b>\$ 92,064,785</b>	<b>\$ 120,230</b>
<b>Grand Total</b>	<b>\$ 1,223,697,003</b>	<b>\$ 1,682,120</b>

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# NEW YORK CITY POLICE PENSION FUND

A Pension Trust Fund of the City of New York  
Comprehensive Annual Financial Report



**Actuarial Section  
Part IV**

*fiscal year ended  
June 30, 2020*

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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 4, 2020

Board of Trustees  
New York City Police Pension Fund  
233 Broadway  
New York, NY 10279

Re: Actuarial Information for the Comprehensive Annual Financial Report (CAFR) for the Fiscal Year Ended June 30, 2020

Dear Members of the Board of Trustees:

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

An actuarial valuation of the Plan is performed annually as of the second June 30 preceding each fiscal year to determine the Employer Contributions to be paid for that fiscal year (i.e. the June 30, 2018 (Lag) actuarial valuation is used to determine Fiscal Year 2020 Employer Contributions (Actuarial Contributions)).

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

For Fiscal Year 2020, the Actuarial Contributions to POLICE, are equal to those recommended by the Actuary of the New York City Retirement Systems and Pension Funds (the Actuary) and represent the Statutory Contributions.

Pursuant to the Governmental Accounting Standards Board (GASB) Statement No. 67 (GASB67) and Statement No. 68 (GASB68), on September 25, 2020, 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, 2020" (the Fiscal Year 2020 GASB67/68 Report). Appendix D of the Fiscal Year 2020 GASB67/68 Report contains information developed in accordance with GASB67 for POLICE.

### **Actuarial Assumptions and Methods**

The assumptions and methods used for the June 30, 2018 valuation were presented in the report titled “Proposed Changes in Actuarial Assumptions and Methods Used in Determining Employer Contributions for Fiscal Years Beginning on and After July 1, 2018 for the New York City Police Pension Fund,” dated January 2, 2019 which was adopted by the Board of Trustees at the March 13, 2019 Board meeting. There have been no changes since the prior year. These actuarial assumptions and methods meet the parameters set forth by the Actuarial Standards of Practice (ASOPs).

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

The June 30, 2018 (Lag) and June 30, 2017 (Lag) actuarial valuations are based upon the census data as of those dates submitted by the Plan’s administrative staff and the employer’s payroll facilities. A summary of the census data used in the June 30, 2018 (Lag) actuarial valuation is included in this CAFR. A summary of the census data used in the June 30, 2017 (Lag) actuarial valuation of the Plan is available in the Fiscal Year 2019 CAFR.

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

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

### **Funded Status**

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

With respect to the funded status of the Plan, included in the Actuarial Section of the CAFR is a schedule of funded status based on the Entry Age Normal cost method (Table 13).

Also included in the Actuarial Section of the CAFR is a Solvency Test (i.e. Comparative Summary of Accrued Liabilities Funded by Actuarial Value of Assets) (Table 14), as prescribed by the Government Finance Officers Association (GFOA). This Solvency Test represents an alternative approach to describing progress toward funding objectives.



### **Presentation Style and Sources of Information**

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

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

- Summary of Actuarial Assumptions and Methods in Effect for the June 30, 2018 (Lag) Actuarial Valuation.
- Summary of Active Member Valuation Data.
- Summary of Plan Membership Data.
- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls.
- Actuarial and Statutory Contribution History.
- Funded Status Based on Entry Age Normal Cost Method.
- Comparative Summary of Accrued Liabilities Funded by Actuarial Value of Assets – Solvency Test.
- Contributions.

The following items in the Financial Section of the 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.

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

Board of Trustees  
New York City Police Pension Fund  
December 4, 2020  
Page 4

### **Acknowledgement of Qualification**

I, Sherry S. Chan, am the Chief Actuary for, and independent of, the New York City Retirement Systems and Pension Funds. I am a Fellow of the Society of Actuaries, an Enrolled Actuary under the Employee Retirement Income and Security Act of 1974, a Member of the American Academy of Actuaries, and a Fellow of the Conference of Consulting Actuaries. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. To the best of my knowledge, the results contained herein have been prepared in accordance with generally accepted actuarial principles and procedures and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

Respectfully submitted,



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

SSC/eh

Att.

cc: Mr. Craig Chu - New York City Office of the Actuary  
Mr. Kevin Holloran - New York City Police Pension Fund  
Mr. Edward Hue - New York City Office of the Actuary  
Mr. Anderson Huynh - New York City Office of the Actuary  
Mr. Michael Samet - New York City Office of the Actuary  
Keith Snow, Esq. - New York City Office of the Actuary  
Ms. Bavakutty Sunny - New York City Police Pension Fund  
Mr. Stanley Thomas - New York City Police Pension Fund

## NEW YORK CITY POLICE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2018 (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 (ACCNYS), the Boards of Trustees of the five actuarially-funded NYCRS are to periodically review and adopt actuarial assumptions as proposed by the Actuary for use in the determination of Employer Contributions.

Based on the most recent actuarial experience study and recommendations prepared by Bolton, Inc. in their 10-year experience study ending on June 30, 2017, the Actuary issued a Report entitled, "Proposed Changes in Actuarial Assumptions and Methods Used in Determining Employer Contributions for Fiscal Years Beginning on and After July 1, 2018 for the New York City Police Pension Fund," dated January 2, 2019. The actuarial assumptions and methods described in that report were adopted by the Board of Trustees at the March 13, 2019 Board meeting and are referred to as the "2019 A&M." These actuarial assumptions and methods are effective beginning with Fiscal Year 2019.

2. The Actuarial Interest Rate (AIR) assumption is 7.0% per annum, net of investment expenses.
3. Active service tables are used to estimate various withdrawals from active service. Probabilities are shown in Tables 1 and 2 for members withdrawing from active service for service retirement, Table 3 for members terminating from active service, and Tables 4 and 5 for members withdrawing from active service due to disability or death, respectively.
4. The service retiree mortality, disabled retiree mortality, and beneficiary mortality base tables are projected from 2012 using mortality improvement scale MP-2018. The base tables are also multiplied by adjustment factors to convert from lives-weighted to amounts-weighted tables to reflect socioeconomic effects on mortality. Base table probabilities for service and disability pensioners are shown in Tables 6a and 6b, respectively, and for beneficiaries in Table 6c.
5. A salary scale is used to estimate salaries at termination, retirement, or death. Percentage increases are shown in Table 7. The salary scale includes a General Wage Increase (GWI) assumption of 3.0% per annum.

## NEW YORK CITY POLICE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION (Cont'd)

6. The salary data was adjusted to reflect overtime earnings. A Baseline Overtime assumption is applied to most years and a separate overtime assumption, known as a Dual Overtime assumption, is applied to the years included in the calculation of Final Salary or Final Average Salary. Baseline Overtime and Dual Overtime percentages are shown in Table 8.
7. The economic assumptions (i.e. the assumed investment return rate, GWI rate, and Cost-of-Living Adjustments (COLA)) were developed assuming a long-term Consumer Price Inflation (CPI) assumption of 2.5% per annum. The assumption is 1.5% per annum for Auto COLA and 2.5% per annum for escalation.
8. The valuation assumes a closed group of members.
9. 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.

In accordance with this AAVM, the Unexpected Investment Returns (UIR) are phased into the Actuarial Value of Assets (AVA) 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 AVA is further constrained to be within a corridor of 80% to 120% of the Market Value of Assets.

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

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

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

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

## NEW YORK CITY POLICE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION (Cont'd)

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

The explicit UALs that are developed each year under EAN are generally financed over fixed periods. Ideally, these periods are reasonably consistent with the expected future working lifetimes of all active participants.

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

11. The Employer Contribution for a fiscal year is increased by the interest-adjusted amount of administrative expenses paid from POLICE during the second prior fiscal year.
12. Obligations attributable to the WTC Disability Benefits Law and to the WTC Death Benefits Law are determined through the use of explicit assumptions in the 2019 A&M, and through estimation techniques for post-retirement reclassifications.
13. One-Year Lag Methodology uses a June 30, XX-2 valuation date to determine Fiscal Year XX employer contributions.

This methodology requires adjustments to certain components used to determine the Fiscal Year XX employer contributions as follows:

- a. Normal Cost

The normal cost as of June 30, XX-2 is rolled forward with the assumed AIR of 7.0% to derive the normal cost as of December 31, XX-1.

- b. UAL Payments

For determining the UAL payments for Fiscal Year XX, and to be consistent with the OYLM, the UAL as of June 30, XX-2 is adjusted by the discounted value of the employer normal cost and UAL payments paid during Fiscal Year XX-1 and the discounted value of Administrative Expenses reimbursed during Fiscal Years XX-1 and XX.

## NEW YORK CITY POLICE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION (Cont'd)

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



## NEW YORK CITY POLICE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION (Cont'd)

<b>Table 1</b>		
PROBABILITIES OF SERVICE RETIREMENT RETIREMENT WITH FULL COLA/ESCALATION FOR THOSE ELIGIBLE FOR UNREDUCED		
Age	Years of Service Since First Eligible	
	Year 1	Ultimate
19	0.00%	0.00%
20	0.00%	0.00%
21	0.00%	0.00%
22	0.00%	0.00%
23	0.00%	0.00%
24	0.00%	0.00%
25	0.00%	0.00%
26	0.00%	0.00%
27	0.00%	0.00%
28	0.00%	0.00%
29	0.00%	0.00%
30	0.00%	0.00%
31	0.00%	0.00%
32	0.00%	0.00%
33	0.00%	0.00%
34	0.00%	0.00%
35	0.00%	0.00%
36	45.00%	0.00%
37	45.00%	10.00%
38	45.00%	10.00%
39	45.00%	10.00%
40	45.00%	10.00%
41	45.00%	10.00%
42	45.00%	10.00%
43	45.00%	10.00%
44	45.00%	10.00%
45	45.00%	10.00%
46	45.00%	11.00%
47	45.00%	12.00%
48	45.00%	13.00%
49	45.00%	14.00%
50	45.00%	15.00%
51	45.00%	15.00%
52	45.00%	15.00%
53	45.00%	15.00%
54	45.00%	15.00%
55	45.00%	15.00%
56	45.00%	15.00%
57	45.00%	15.00%
58	45.00%	15.00%
59	45.00%	15.00%
60	45.00%	20.00%
61	45.00%	30.00%
62	45.00% <sup>1</sup>	50.00% <sup>1</sup>
63	100.00%	100.00%

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

NEW YORK CITY POLICE PENSION FUND

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION (Cont'd)

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





**NEW YORK CITY POLICE PENSION FUND**

**SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS  
IN EFFECT FOR THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION (Cont'd)**

<b>Table 3</b>	
<b>PROBABILITIES OF TERMINATION</b>	
<b>Years Of Service</b>	<b>Probability of Termination</b>
0	3.00%
1	2.25%
2	1.50%
3	1.50%
4	1.50%
5	1.50%
6	1.35%
7	1.20%
8	1.05%
9	0.90%
10	0.75%
11	0.60%
12	0.45%
13	0.38%
14	0.30%
15	0.23%
16	0.15%
17	0.15%
18	0.15%
19	0.15%
20	N/A



## NEW YORK CITY POLICE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 4					
PROBABILITIES OF DISABILITY RETIREMENT					
		Accidental Disability			
		Tier 1 and Tier 2		Tier 3 and Tier 3 Revised	
Age	Ordinary Disability	Not Eligible for WTC Benefits	Eligible for WTC Benefits	Enhanced Plan	Non-Enhanced Plan
15	0.0360%	0.098%	0.168%	0.098%	0.098%
16	0.0360%	0.098%	0.168%	0.098%	0.098%
17	0.0360%	0.098%	0.168%	0.098%	0.098%
18	0.0360%	0.098%	0.168%	0.098%	0.098%
19	0.0360%	0.098%	0.168%	0.098%	0.098%
20	0.0400%	0.105%	0.180%	0.105%	0.105%
21	0.0440%	0.112%	0.192%	0.112%	0.112%
22	0.0480%	0.119%	0.204%	0.119%	0.119%
23	0.0520%	0.126%	0.216%	0.126%	0.126%
24	0.0560%	0.133%	0.228%	0.133%	0.133%
25	0.0600%	0.140%	0.240%	0.140%	0.140%
26	0.0640%	0.182%	0.312%	0.182%	0.182%
27	0.0680%	0.224%	0.384%	0.224%	0.224%
28	0.0720%	0.266%	0.456%	0.266%	0.266%
29	0.0760%	0.308%	0.528%	0.308%	0.308%
30	0.0800%	0.350%	0.600%	0.350%	0.350%
31	0.0840%	0.420%	0.720%	0.420%	0.420%
32	0.0880%	0.490%	0.840%	0.490%	0.490%
33	0.0920%	0.560%	0.960%	0.560%	0.560%
34	0.0960%	0.630%	1.080%	0.630%	0.630%
35	0.1000%	0.700%	1.200%	0.700%	0.700%
36	0.1040%	0.735%	1.260%	0.735%	0.728%
37	0.1080%	0.770%	1.320%	0.770%	0.756%
38	0.1120%	0.805%	1.380%	0.805%	0.784%
39	0.1160%	0.840%	1.440%	0.840%	0.812%
40	0.1200%	0.875%	1.500%	0.875%	0.840%
41	0.1240%	0.910%	1.560%	0.910%	0.854%
42	0.1280%	0.945%	1.620%	0.945%	0.868%
43	0.1320%	0.980%	1.680%	0.980%	0.882%
44	0.1360%	1.015%	1.740%	1.015%	0.896%
45	0.1400%	1.050%	1.800%	1.050%	0.910%
46	0.1440%	1.120%	1.920%	1.120%	0.938%
47	0.1480%	1.190%	2.040%	1.190%	0.966%
48	0.1520%	1.260%	2.160%	1.260%	0.994%
49	0.1560%	1.330%	2.280%	1.330%	1.022%
50	0.1600%	1.400%	2.400%	1.400%	1.050%
51	0.2000%	1.540%	2.640%	1.540%	1.120%
52	0.2400%	1.680%	2.880%	1.680%	1.190%
53	0.3200%	1.820%	3.120%	1.820%	1.260%
54	0.4800%	1.960%	3.360%	1.960%	1.330%
55	0.6400%	2.100%	3.600%	2.100%	1.400%
56	0.8000%	2.380%	4.080%	2.380%	1.540%
57	1.6000%	2.660%	4.560%	2.660%	1.680%
58	2.4000%	2.940%	5.040%	2.940%	1.820%
59	3.2000%	3.220%	5.520%	3.220%	1.960%
60	4.8000%	3.500%	6.000%	3.500%	2.100%
61	6.4000%	4.200%	7.200%	4.200%	2.240%
62	8.0000% <sup>1</sup>	4.900% <sup>1</sup>	8.400% <sup>1</sup>	4.900% <sup>1</sup>	2.450% <sup>1</sup>
63	N/A	N/A	N/A	N/A	N/A

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

## NEW YORK CITY POLICE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION (Cont'd)

<b>Table 5</b>			
PROBABILITIES OF ACTIVE MEMBER MORTALITY			
	Ordinary Death		Accidental Death
Age	Males	Females	All
15	0.040%	0.030%	0.010%
16	0.040%	0.030%	0.010%
17	0.040%	0.030%	0.010%
18	0.040%	0.030%	0.010%
19	0.040%	0.030%	0.010%
20	0.040%	0.030%	0.010%
21	0.040%	0.030%	0.010%
22	0.040%	0.030%	0.010%
23	0.040%	0.030%	0.010%
24	0.040%	0.030%	0.010%
25	0.040%	0.030%	0.010%
26	0.040%	0.030%	0.010%
27	0.040%	0.030%	0.010%
28	0.040%	0.030%	0.010%
29	0.040%	0.030%	0.010%
30	0.040%	0.030%	0.010%
31	0.040%	0.030%	0.011%
32	0.040%	0.030%	0.012%
33	0.040%	0.030%	0.013%
34	0.040%	0.030%	0.014%
35	0.040%	0.030%	0.015%
36	0.042%	0.032%	0.016%
37	0.044%	0.034%	0.017%
38	0.046%	0.036%	0.018%
39	0.048%	0.038%	0.019%
40	0.050%	0.040%	0.020%
41	0.060%	0.046%	0.021%
42	0.070%	0.052%	0.022%
43	0.080%	0.058%	0.023%
44	0.090%	0.064%	0.024%
45	0.100%	0.070%	0.025%
46	0.110%	0.076%	0.026%
47	0.120%	0.082%	0.027%
48	0.130%	0.088%	0.028%
49	0.140%	0.094%	0.029%
50	0.150%	0.100%	0.030%
51	0.160%	0.110%	0.031%
52	0.170%	0.120%	0.032%
53	0.180%	0.130%	0.033%
54	0.190%	0.140%	0.034%
55	0.200%	0.150%	0.035%
56	0.220%	0.160%	0.036%
57	0.240%	0.170%	0.037%
58	0.260%	0.180%	0.038%
59	0.280%	0.190%	0.039%
60	0.300%	0.200%	0.040%
61	0.320%	0.220%	0.041%
62	0.340% <sup>1</sup>	0.240% <sup>1</sup>	0.042% <sup>1</sup>
63	N/A	N/A	N/A

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

## NEW YORK CITY POLICE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION (Cont'd)

<b>Table 6a</b>					
PROBABILITIES OF MORTALITY FOR SERVICE RETIREES					
BASE TABLE					
Age	Males	Females	Age	Males	Females
15	0.0100%	0.0084%	68	1.4988%	1.0632%
16	0.0135%	0.0103%	69	1.6917%	1.1644%
17	0.0181%	0.0112%	70	1.8929%	1.2629%
18	0.0217%	0.0131%	71	2.1028%	1.4563%
19	0.0240%	0.0140%	72	2.3212%	1.6586%
20	0.0251%	0.0142%	73	2.5833%	1.8689%
21	0.0268%	0.0150%	74	2.8558%	2.0889%
22	0.0284%	0.0158%	75	3.1397%	2.3314%
23	0.0301%	0.0168%	76	3.4343%	2.6045%
24	0.0315%	0.0179%	77	3.7415%	2.8700%
25	0.0327%	0.0191%	78	4.2304%	3.1787%
26	0.0342%	0.0204%	79	4.7399%	3.4795%
27	0.0354%	0.0217%	80	5.2682%	3.8105%
28	0.0371%	0.0231%	81	5.7202%	4.3289%
29	0.0394%	0.0247%	82	6.1782%	4.8678%
30	0.0427%	0.0265%	83	7.0179%	5.4288%
31	0.0492%	0.0316%	84	7.8631%	5.9122%
32	0.0556%	0.0360%	85	8.7167%	6.3661%
33	0.0616%	0.0398%	86	9.5810%	7.1650%
34	0.0669%	0.0427%	87	10.4516%	8.0050%
35	0.0724%	0.0455%	88	11.8437%	8.8541%
36	0.0755%	0.0474%	89	13.2486%	9.6498%
37	0.0779%	0.0497%	90	14.6752%	10.5687%
38	0.0808%	0.0521%	91	16.3354%	12.0267%
39	0.0845%	0.0551%	92	18.0374%	13.4340%
40	0.0901%	0.0588%	93	19.7642%	14.8636%
41	0.1003%	0.0633%	94	21.5622%	16.4543%
42	0.1106%	0.0702%	95	23.4692%	17.7952%
43	0.1212%	0.0792%	96	25.3619%	19.0707%
44	0.1323%	0.0907%	97	27.1816%	20.2419%
45	0.1439%	0.1052%	98	29.0095%	21.1759%
46	0.1563%	0.1228%	99	30.6920%	21.8544%
47	0.1693%	0.1427%	100	32.1584%	22.1859%
48	0.1827%	0.1652%	101	33.7521%	23.0680%
49	0.1964%	0.1865%	102	35.1259%	24.0803%
50	0.2104%	0.1992%	103	36.3671%	25.2770%
51	0.2802%	0.2104%	104	37.3834%	26.6309%
52	0.3506%	0.2186%	105	38.1051%	28.0912%
53	0.4209%	0.2250%	106	38.4698%	29.6244%
54	0.4903%	0.2863%	107	38.6325%	31.1943%
55	0.5297%	0.3409%	108	38.8076%	32.7579%
56	0.5857%	0.3910%	109	38.9794%	34.2712%
57	0.6387%	0.4376%	110	50.0000%	50.0000%
58	0.6875%	0.4613%	111	50.0000%	50.0000%
59	0.7316%	0.5005%	112	50.0000%	50.0000%
60	0.7720%	0.5393%	113	50.0000%	50.0000%
61	0.8439%	0.5785%	114	50.0000%	50.0000%
62	0.9155%	0.6152%	115	50.0000%	50.0000%
63	0.9888%	0.6536%	116	50.0000%	50.0000%
64	1.0644%	0.7279%	117	50.0000%	50.0000%
65	1.1433%	0.8032%	118	50.0000%	50.0000%
66	1.2263%	0.8884%	119	50.0000%	50.0000%
67	1.3135%	0.9736%	120	100.0000%	100.0000%

# NEW YORK CITY POLICE PENSION FUND

## SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION (Cont'd)

<b>Table 6b</b>					
PROBABILITIES OF MORTALITY FOR DISABLED RETIREES					
BASE TABLE					
Age	Males	Females	Age	Males	Females
15	0.0138%	0.0095%	68	1.8368%	1.2141%
16	0.0187%	0.0117%	69	2.0342%	1.3912%
17	0.0252%	0.0127%	70	2.2544%	1.5837%
18	0.0301%	0.0148%	71	2.5045%	1.7848%
19	0.0334%	0.0159%	72	2.7644%	1.9944%
20	0.0347%	0.0168%	73	3.0535%	2.2258%
21	0.0371%	0.0185%	74	3.3359%	2.4880%
22	0.0402%	0.0205%	75	3.6300%	2.7766%
23	0.0431%	0.0227%	76	4.1253%	3.0785%
24	0.0467%	0.0251%	77	4.6178%	3.3525%
25	0.0503%	0.0274%	78	5.1289%	3.6752%
26	0.0544%	0.0298%	79	5.5682%	4.1794%
27	0.0586%	0.0322%	80	6.0116%	4.7030%
28	0.0633%	0.0348%	81	6.7832%	5.2484%
29	0.0681%	0.0374%	82	7.6009%	5.7185%
30	0.0730%	0.0400%	83	8.4279%	6.1948%
31	0.0781%	0.0425%	84	9.2040%	7.0110%
32	0.0830%	0.0450%	85	10.1002%	7.8321%
33	0.0898%	0.0476%	86	11.5115%	8.6046%
34	0.0933%	0.0491%	87	12.7944%	9.3702%
35	0.0972%	0.0512%	88	14.1662%	10.2595%
36	0.1019%	0.0534%	89	15.7578%	11.5941%
37	0.1080%	0.0563%	90	17.3856%	12.9378%
38	0.1153%	0.0590%	91	19.0388%	14.3081%
39	0.1286%	0.0629%	92	20.6360%	15.3704%
40	0.1417%	0.0688%	93	22.5718%	16.4875%
41	0.1550%	0.0766%	94	24.4562%	17.6613%
42	0.1690%	0.0865%	95	26.1404%	18.7606%
43	0.1838%	0.0992%	96	28.0695%	19.7397%
44	0.1997%	0.1148%	97	29.6855%	20.6328%
45	0.2170%	0.1330%	98	30.9177%	21.2676%
46	0.2279%	0.1538%	99	32.6552%	21.8544%
47	0.2387%	0.1769%	100	33.9880%	22.1859%
48	0.2492%	0.2017%	101	34.9681%	23.0680%
49	0.3237%	0.2316%	102	35.9346%	24.0803%
50	0.3948%	0.2637%	103	36.6434%	25.2770%
51	0.4620%	0.2870%	104	37.3834%	26.6309%
52	0.5249%	0.3323%	105	38.1051%	28.0912%
53	0.5528%	0.3677%	106	38.4698%	29.6244%
54	0.5891%	0.4196%	107	38.6325%	31.1943%
55	0.6260%	0.4722%	108	38.8076%	32.7579%
56	0.6814%	0.5135%	109	38.9794%	34.2712%
57	0.7288%	0.5258%	110	50.0000%	50.0000%
58	0.7710%	0.5452%	111	50.0000%	50.0000%
59	0.8525%	0.5823%	112	50.0000%	50.0000%
60	0.9273%	0.6153%	113	50.0000%	50.0000%
61	1.0007%	0.6486%	114	50.0000%	50.0000%
62	1.0735%	0.7169%	115	50.0000%	50.0000%
63	1.1411%	0.7851%	116	50.0000%	50.0000%
64	1.2250%	0.8630%	117	50.0000%	50.0000%
65	1.3055%	0.9419%	118	50.0000%	50.0000%
66	1.4653%	1.0252%	119	50.0000%	50.0000%
67	1.6473%	1.1204%	120	100.0000%	100.0000%

## NEW YORK CITY POLICE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 6c					
PROBABILITIES OF BENEFICIARY MORTALITY					
BASE TABLE					
Age	Males	Females	Age	Males	Females
15	0.0105%	0.0092%	68	1.8256%	1.3605%
16	0.0142%	0.0112%	69	1.9386%	1.4332%
17	0.0191%	0.0122%	70	2.0542%	1.5007%
18	0.0222%	0.0133%	71	2.2359%	1.6745%
19	0.0240%	0.0143%	72	2.4230%	1.8463%
20	0.0251%	0.0145%	73	2.6165%	2.0157%
21	0.0268%	0.0153%	74	2.8157%	2.1838%
22	0.0284%	0.0161%	75	3.0220%	2.3492%
23	0.0301%	0.0171%	76	3.4928%	2.6652%
24	0.0315%	0.0183%	77	3.9787%	2.9831%
25	0.0327%	0.0195%	78	4.4792%	3.3011%
26	0.0342%	0.0208%	79	4.9963%	3.6207%
27	0.0354%	0.0221%	80	5.5282%	3.9391%
28	0.0371%	0.0236%	81	6.1051%	4.4386%
29	0.0394%	0.0252%	82	6.6894%	4.9473%
30	0.0427%	0.0270%	83	7.2805%	5.4665%
31	0.0495%	0.0330%	84	7.8749%	5.9942%
32	0.0562%	0.0384%	85	8.4753%	6.5354%
33	0.0625%	0.0431%	86	9.6136%	7.4659%
34	0.0682%	0.0471%	87	10.8005%	8.3995%
35	0.0743%	0.0511%	88	12.0443%	9.3428%
36	0.0780%	0.0542%	89	13.3397%	10.2918%
37	0.0818%	0.0579%	90	14.6958%	11.2477%
38	0.0861%	0.0618%	91	16.4185%	12.8868%
39	0.0917%	0.0666%	92	18.1416%	14.4887%
40	0.0997%	0.0719%	93	19.8574%	16.0801%
41	0.1394%	0.0775%	94	21.6187%	17.5854%
42	0.1774%	0.0859%	95	23.5884%	19.0626%
43	0.2143%	0.0968%	96	25.4266%	20.2474%
44	0.2507%	0.1111%	97	27.2119%	21.2937%
45	0.2875%	0.1287%	98	29.0202%	22.0663%
46	0.3207%	0.1501%	99	30.6654%	22.5443%
47	0.3534%	0.1748%	100	32.1584%	22.6473%
48	0.3849%	0.2022%	101	33.7521%	23.5294%
49	0.4150%	0.2319%	102	35.1259%	24.5619%
50	0.4431%	0.2633%	103	36.3671%	25.7825%
51	0.5156%	0.2999%	104	37.3834%	27.1635%
52	0.5928%	0.3376%	105	38.1051%	28.6530%
53	0.6740%	0.3762%	106	38.4698%	30.2169%
54	0.7583%	0.4151%	107	38.6325%	31.8182%
55	0.8440%	0.4540%	108	38.8076%	33.4131%
56	0.9048%	0.5132%	109	38.9794%	34.9566%
57	0.9604%	0.5735%	110	50.0000%	50.0000%
58	1.0101%	0.6353%	111	50.0000%	50.0000%
59	1.0536%	0.6981%	112	50.0000%	50.0000%
60	1.0919%	0.7631%	113	50.0000%	50.0000%
61	1.1835%	0.8329%	114	50.0000%	50.0000%
62	1.2676%	0.8908%	115	50.0000%	50.0000%
63	1.3473%	0.9493%	116	50.0000%	50.0000%
64	1.4238%	1.0146%	117	50.0000%	50.0000%
65	1.4985%	1.0876%	118	50.0000%	50.0000%
66	1.6059%	1.1681%	119	50.0000%	50.0000%
67	1.7146%	1.2609%	120	100.0000%	100.0000%

## NEW YORK CITY POLICE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION (Cont'd)

<b>Table 7</b>		
ANNUAL RATES OF MERIT AND SALARY INCREASE		
Years of Service	Merit Increase	Salary Increase <sup>1</sup>
0	0.00%	3.00%
1	5.00%	8.00%
2	11.00%	14.00%
3	14.00%	17.00%
4	20.00%	23.00%
5	38.00%	41.00%
6	1.60%	4.60%
7	1.80%	4.80%
8	2.00%	5.00%
9	3.60%	6.60%
10	2.30%	5.30%
11	2.20%	5.20%
12	2.10%	5.10%
13	2.00%	5.00%
14	3.30%	6.30%
15	1.70%	4.70%
16	1.60%	4.60%
17	1.50%	4.50%
18	1.40%	4.40%
19	2.70%	5.70%
20	1.20%	4.20%
21	1.00%	4.00%
22	0.90%	3.90%
23	0.80%	3.80%
24	0.70%	3.70%
25	0.60%	3.60%
26	0.50%	3.50%
27	0.50%	3.50%
28	0.50%	3.50%
29	0.50%	3.50%
30+	0.50%	3.50%

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



## NEW YORK CITY POLICE PENSION FUND

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION (Cont'd)

<b>Table 8</b>					
OVERTIME ASSUMPTION					
Years of Service	All Tiers Baseline	Tier 1 & Tier 2 Dual Service	Tier 1 & Tier 2 Dual Disability	Tier 3, Tier 3 Enhanced, & Tier 3 Revised Dual Service	Tier 3, Tier 3 Enhanced, & Tier 3 Revised Dual Disability
0	17.00%	21.00%	8.00%	20.00%	12.00%
1	17.00%	21.00%	8.00%	20.00%	12.00%
2	17.00%	21.00%	8.00%	20.00%	12.00%
3	17.00%	21.00%	8.00%	20.00%	12.00%
4	17.00%	21.00%	8.00%	20.00%	12.00%
5	17.00%	21.00%	8.00%	20.00%	12.00%
6	17.00%	21.00%	8.00%	20.00%	12.00%
7	17.00%	21.00%	8.00%	20.00%	12.00%
8	17.00%	21.00%	8.00%	20.00%	12.00%
9	17.00%	21.00%	8.00%	20.00%	12.00%
10	17.00%	21.00%	8.00%	20.00%	12.00%
11	17.00%	21.00%	8.00%	20.00%	12.00%
12	17.00%	21.00%	8.00%	20.00%	12.00%
13	17.00%	21.00%	8.00%	20.00%	12.00%
14	17.00%	21.00%	8.00%	20.00%	12.00%
15	17.00%	21.00%	8.00%	20.00%	12.00%
16	17.00%	21.00%	9.00%	20.00%	12.00%
17	17.00%	21.00%	10.00%	20.00%	13.00%
18	17.00%	21.00%	11.00%	20.00%	13.00%
19	17.00%	21.00%	12.00%	20.00%	14.00%
20	17.00%	21.00%	12.00%	20.00%	14.00%
21	17.00%	21.00%	12.00%	20.00%	14.00%
22	17.00%	21.00%	12.00%	20.00%	14.00%
23	16.00%	20.00%	11.00%	18.00%	13.00%
24	15.00%	18.00%	10.00%	17.00%	12.00%
25	14.00%	17.00%	9.00%	16.00%	11.00%
26	13.00%	16.00%	8.00%	15.00%	10.00%
27	12.00%	15.00%	7.00%	14.00%	9.00%
28	10.00%	14.00%	6.00%	13.00%	8.00%
29	9.00%	13.00%	6.00%	12.00%	7.00%
30	8.00%	12.00%	6.00%	10.00%	6.00%
31	7.00%	10.00%	6.00%	9.00%	6.00%
32	7.00%	9.00%	6.00%	9.00%	6.00%
33	7.00%	9.00%	6.00%	9.00%	6.00%
34	7.00%	9.00%	6.00%	9.00%	6.00%
35	7.00%	9.00%	6.00%	9.00%	6.00%
36	7.00%	9.00%	6.00%	9.00%	6.00%
37	7.00%	9.00%	6.00%	9.00%	6.00%
38	7.00%	9.00%	6.00%	9.00%	6.00%
39	7.00%	9.00%	6.00%	9.00%	6.00%
40	7.00%	9.00%	6.00%	9.00%	6.00%
41	7.00%	9.00%	6.00%	9.00%	6.00%
42	7.00%	9.00%	6.00%	9.00%	6.00%
43	7.00%	9.00%	6.00%	9.00%	6.00%
44	7.00%	9.00%	6.00%	9.00%	6.00%
45	7.00%	9.00%	6.00%	9.00%	6.00%



## NEW YORK CITY POLICE PENSION FUND

### SUMMARY OF ACTIVE MEMBER VALUATION DATA

<b>Table 9</b>				
ACTIVE MEMBER VALUATION DATA				
<b>June 30 (Lag) Actuarial Valuation</b>	<b>Number</b>	<b>Annual Salary</b>	<b>Average Annual Salary</b>	<b>Percentage Increase/ (Decrease) In Avg. Salary</b>
2009	35,608	\$3,261,118,111	\$91,584	4.5%
2010	34,597	3,464,096,750	100,127	9.3%
2011	33,705	3,480,066,072	103,251	3.1%
2012	34,240	3,478,153,934	101,582	(1.6%)
2013	34,775	3,607,606,894	103,741	2.1%
2014	34,402	3,618,095,284	105,171	1.4%
2015	34,435	3,564,029,659	103,500	(1.6%)
2016	35,961	3,717,425,239	103,374	(0.1%)
2017	36,165	3,968,885,246	109,744	6.2%
2018	36,562	4,053,204,563	110,858	1.0%

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



## NEW YORK CITY POLICE PENSION FUND

### SUMMARY OF PLAN MEMBERSHIP DATA

As of the June 30, 2018 (Lag) and June 30, 2017 (Lag) actuarial valuations, the Plan's Membership consisted of:

<b>Table 10</b>		
SUMMARY OF PLAN MEMBERSHIP		
<b>Group</b>	<b>June 30, 2018 (Lag)</b>	<b>June 30, 2017 (Lag)</b>
Active members	36,562	36,165
Actives Off Payroll <sup>1</sup>	1,940	1,822
Terminated vested members not yet receiving benefits	491	502
Retirees and beneficiaries currently receiving benefits	<u>50,124</u>	<u>49,799</u>
Total	89,117	88,288

<sup>1</sup>Represents members who are no longer on payroll but not otherwise classified.



## NEW YORK CITY POLICE PENSION FUND

### SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

<b>Table 11</b>								
SCHEDULE OF RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM THE ROLLS								
June 30 (Lag) Actuarial Valuation	Added to Rolls		Removed from Rolls		End of Year Rolls		% Increase In Annual Allowances	Average Annual Allowances
	Number	Annual Allowances <sup>1</sup>	Number	Annual Allowances	Number	Annual Allowances <sup>2</sup>		
2009	1,025	\$89,094,934	1,030	\$30,086,313	44,285	\$1,713,469,720	3.6%	\$38,692
2010	1,355	110,403,824	1,006	29,554,813	44,634	1,794,318,731	4.7%	40,201
2011	2,142	141,323,253	1,021	30,315,285	45,755	1,905,326,699	6.2%	41,642
2012	1,893	133,158,449	1,010	32,287,109	46,638	2,006,198,039	5.3%	43,016
2013	1,346	99,488,158	1,034	33,621,831	46,950	2,072,064,366	3.3%	44,133
2014	2,220	144,660,995	958	32,759,640	48,212	2,183,965,721	5.4%	45,299
2015	1,574	117,371,844	1,083	37,069,856	48,703	2,264,267,709	3.7%	46,491
2016 <sup>3</sup>	1,458	151,061,292	1,010	36,517,652	49,151	2,378,811,349	5.1%	48,398
2017	1,681	153,211,878	1,033	38,982,214	49,799	2,493,041,013	4.8%	50,062
2018	1,401	137,291,868	1,076	42,965,087	50,124	2,587,367,794	3.8%	51,619

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

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

<sup>3</sup> Beginning in 2016, SADB payments to beneficiaries are included.



# NEW YORK CITY POLICE PENSION FUND

## ACTUARIAL AND STATUTORY CONTRIBUTION HISTORY

<b>Table 12</b>			
ACTUARIAL AND STATUTORY CONTRIBUTION HISTORY			
<b>Fiscal Year Ended June 30</b>	<b>Actuarial Contribution Certified</b>	<b>Statutory Contribution Contributed<sup>1</sup></b>	<b>Employer Rate of Contribution<sup>2</sup></b>
2011	\$ 2,083,632,616	\$ 2,083,632,616	64.1%
2012	2,385,731,163	2,385,731,163	69.2%
2013	2,424,690,421	2,424,690,421	70.1%
2014	2,320,909,885	2,320,909,885	67.9%
2015	2,309,618,694	2,309,618,694	65.7%
2016	2,393,939,871	2,393,939,871	67.6%
2017	2,293,839,525	2,293,839,525	65.4%
2018	2,415,153,337	2,415,153,337	65.8%
2019	2,558,256,001	2,558,256,001	64.0%
2020	2,458,907,408	2,458,907,408	60.2%

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

<sup>2</sup> The Employer Rate of Contribution equals the Statutory Contribution as a percentage of the salaries of members who were on payroll or projected to be on payroll (under One-Year Lag Methodology) as of the preceding June 30 increased to reflect overtime earnings and adjusted, where applicable, to be consistent with collective bargaining agreements estimated to be achieved.

## NEW YORK CITY POLICE PENSION FUND

### FUNDED STATUS BASED ON ENTRY AGE NORMAL COST METHOD

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

The funding status and funding progress information provided in the schedule below has been prepared using the Entry Age Normal (EAN) cost method where the Present Value (PV) of any obligations of the Plan not provided by the PV of Future Contributions (Employer and Employee), as determined under the EAN cost method, equals the Accrued Liability (AL). Under the EAN cost method, the UAL equals the AL minus the Actuarial Value of Assets.

<b>Table 13</b>						
FUNDED STATUS BASED ON ENTRY AGE NORMAL COST METHOD						
(\$ Thousands)						
<b>June 30 (Lag) Valuation Date</b>	<b>(1) Actuarial Value of Assets (AVA)</b>	<b>(2) Accrued Liability<sup>1</sup> (AL)</b>	<b>(3) Unfunded AL (UAL) (2) - (1)</b>	<b>(4) Funded Ratio (1) / (2)</b>	<b>(5) Covered Payroll</b>	<b>(6) UAL as % of Covered Payroll (3) / (5)</b>
2009	\$22,676,172	\$31,822,043	\$9,145,871	71.3%	\$3,261,118	280.5%
2010	22,908,732	38,134,430	15,225,698	60.1%	3,464,097	439.5%
2011	24,748,860	40,524,580	15,775,720	61.1%	3,480,066	453.3%
2012	26,777,077	42,015,625	15,238,548	63.7%	3,478,154	438.1%
2013	29,087,154	43,900,094	14,812,940	66.3%	3,607,607	410.6%
2014	29,212,981	44,384,022	15,171,041	65.8%	3,618,095	419.3%
2015	31,092,977	45,297,561	14,204,584	68.6%	3,564,030	398.6%
2016	33,692,647	48,059,916	14,367,269	70.1%	3,717,425	386.5%
2017	34,162,505	47,696,250	13,533,745	71.6%	3,968,885	341.0%
2018	36,098,314	48,024,798	11,926,484	75.2%	4,053,205	294.2%

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

Effective June 30, 2010, AL is based on the Entry Age Normal cost method. Previously, the Frozen Initial Liability cost method was used. Salaries shown are base salaries plus assumed overtime paid and reflect the impact of recent labor contract settlements and certain non-union salary increases with retroactive effective dates, if any.

## NEW YORK CITY POLICE PENSION FUND

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

Table 14							
COMPARATIVE SUMMARY OF ACCRUED LIABILITIES FUNDED BY ACTUARIAL VALUE OF ASSETS							
SOLVENCY TEST							
(\$ Thousands)							
June 30 (Lag) Valuation Date	Accrued Liabilities for			(D) Actuarial Value of Assets	Percentage of Accrued Liabilites Funded by Actuarial Value of Assets		
	(A)	(B)	(C)		(A)	(B)	(C)
	Accumulated Member Contribution	Current Retirees and Beneficiaries	Active Members' Employer-Financed Portion				
2009	\$2,030,929	\$17,852,955	\$9,217,265	\$22,676,172	100%	100%	30%
2010	2,180,671	20,639,838	16,892,925	22,908,732	100	100	1
2011	2,564,754	21,974,393	16,953,617	24,748,860	100	100	1
2012	2,456,478	23,181,744	17,191,876	26,777,077	100	100	7
2013	2,741,297	23,991,098	17,907,612	29,087,154	100	100	13
2014	2,978,441	26,373,360	15,820,520	29,212,981	100	99	0
2015	3,053,313	27,543,329	15,438,728	31,092,977	100	100	3
2016	3,266,026	28,923,698	16,606,649	33,692,647	100	100	9
2017	3,438,701	29,780,499	17,293,602	34,162,505	100	100	5
2018	3,474,816	30,702,751	16,811,486	36,098,314	100	100	11

See following "SOLVENCY TEST - NOTES."

## NEW YORK CITY POLICE PENSION FUND

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

#### SOLVENCY TEST – NOTES

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

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

The Accrued Liabilities are the PV of projected benefits produced by the projected benefit attribution approach prorated on service. The Accrued Liabilities were calculated in accordance with Governmental Accounting Standards Board Statement No. 5 (GASB5).

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

The values in the table are dependent upon census data, benefit levels (which have changed over the past years), and the actuarial assumptions and methods employed at each valuation date.

To fully evaluate trends in financial soundness, changes in assumptions need to be evaluated. 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 8.0% per annum, gross of expenses. The two most recent changes in assumptions and methods occurred in the June 30, 2017 (Lag) valuation used to compute the Employer Contributions for Fiscal Year 2019 and in the June 30, 2014 (Lag) valuation used to compute the Employer Contributions for Fiscal Year 2016.

# NEW YORK CITY POLICE PENSION FUND

## CONTRIBUTIONS

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

### A. MEMBER CONTRIBUTIONS

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

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

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

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

Additional Member Contributions – Enhanced Plan members are required to contribute an additional 1.0% of salary for a maximum of 25 years.

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

### B. EMPLOYER CONTRIBUTIONS

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

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





# NEW YORK CITY POLICE PENSION FUND

**A Pension Trust Fund of the City of New York  
Comprehensive Annual Financial Report**



**Statistical Section  
Part V**

*fiscal year ended  
June 30, 2020*

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## **Statistical Section Overview**

### **Introduction**

The objective of the statistical section is to reflect data that is necessary to fund members' retirement benefits during their active service together with members' employer's contributions and investment income that would be required to accumulate assets to pay various retirement benefits.

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

### **Operating Information**

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

### **Demographic and Economic Information**

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

### **Financial Trends**

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

### **Revenue Capacity**

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

New York City Police Pension Fund  
Year Ended June 30, 2020

**Benefit Expenses by Type**

Fiscal Year ended June 30, 2020

(in thousands)

Fiscal Year Ended 6/30	Other Benefits	Ordinary Death	Death Gamble	Line of Duty Deaths	Total
2011	\$2,039,917	\$2,793	\$619	\$5,864	\$2,049,193
2012	2,071,124	1,945	3,870	6,967	2,083,906
2013	2,517,556	4,124	2,711	6,243	2,530,634
2014	2,678,498	3,825	3,316	5,970	2,691,609
2015	2,735,399	4,181	4,371	5,824	2,749,775
2016	2,865,208	2,257	7,095	7,663	2,882,223
2017	2,974,515	2,062	3,237	5,019	2,984,833
2018	3,184,759	3,461	5,241	4,510	3,197,971
2019	3,268,949	3,904	5,360	3,857	3,282,070
2020	\$3,474,164	\$3,019	\$11,490	\$2,822	\$3,491,495

The table offers a comparison for the Benefit Payments of the Plan for the past 10 Years.

New York City Police Pension Fund  
Year Ended June 30, 2020

<b>Table 15</b>						
AVERAGE ANNUAL BENEFIT PAYMENT AMOUNTS						
	<b>Service Retirement Benefits</b>		<b>Accidental (Line-of-Duty) Disability Benefits</b>		<b>Ordinary (Non- Line-of-Duty) Disability Benefits</b>	
<b>June 30 (Lag) Valuation Date</b>	<b>Number</b>	<b>Average Annual Allowance</b>		<b>Average Annual Allowance</b>	<b>Number</b>	<b>Average Annual Allowance</b>
2009	27,890	\$36,867	11,494	\$47,996	3,601	\$30,391
2010	28,184	38,290	11,645	49,793	3,538	30,769
2011	29,247	39,766	11,815	51,341	3,454	31,231
2012	30,119	41,205	11,948	52,806	3,346	31,468
2013	30,405	42,230	12,072	54,231	3,262	31,692
2014	31,610	43,412	12,244	55,499	3,172	31,926
2015	32,148	44,626	12,298	56,788	3,068	32,217
2016	32,491	46,141	12,430	58,360	2,996	32,457
2017	33,093	47,867	12,512	59,977	2,935	32,808
2018	33,416	49,427	12,556	61,626	2,861	33,033

New York City Police Pension Fund  
Year Ended June 30, 2020

**Schedule of Changes in Net Position**

Fiscal year Ended June 30, 2020

(In thousands)

Year Ended	<u>Additions to Plan Net Position</u>					<u>Deductions from Plan Net Position</u>				Change in Net Position
	Member Contributions	Employer Contributions	Net Investment Income (Loss)	Other Income	Total Additions	Benefit Payments	Other Deductions	Administrative Expenses	Total Deductions	
2011	\$206,859	\$2,084,563	\$4,535,097	\$2,561	\$6,829,080	\$2,049,193	-	\$16,141	\$2,065,334	\$4,763,746
2012	216,172	2,385,731	224,044	5,552	2,831,499	2,083,906	-	16,577	2,100,484	731,015
2013	229,675	2,424,691	3,101,563	6,118	5,762,047	2,530,634	8,169	17,548	2,548,182	3,213,865
2014	228,783	2,320,910	5,147,483	6,911	7,704,087	2,691,609	2,541,024	17,450	2,709,059	4,995,028
2015	241,102	2,309,619	1,098,220	4,616	3,653,557	2,749,775	590,313	17,905	2,767,680	885,877
2016	249,921	2,393,940	403,534	6,756	3,054,151	2,882,223	326,195	18,478	2,900,701	153,450
2017	276,301	2,293,840	4,286,894	10,507	6,867,542	2,984,833	2,183,364	18,917	3,003,750	3,863,792
2018	267,031	2,415,153	3,925,283	3,408	6,610,875	2,774,387	1,280,000	21,146	4,075,533	2,535,342
2019	278,087	2,558,256	2,581,702	143,944	5,561,989	2,853,799	518,628	29,005	3,401,432	2,160,557
2020	\$280,129	\$2,458,907	\$1,896,012	\$6,488	\$4,641,536	\$3,039,785	\$401,358	\$26,803	\$3,467,946	\$1,173,590

The table offers a 10 year comparison for the operations of the Police Pension Fund.

**Schedule of Changes in Net Position**

Fiscal year Ended June 30, 2020

(In thousands)

Year Ended	<u>Additions to Plan Net Position</u>					<u>Deductions from Plan Net Position</u>				Change in Net Position
	Member Contributions	Employer Contributions	Net Investment Income (Loss)	Other Income	Total Additions	Benefit Payments	Other Deductions	Administrative Expenses	Total Deductions	
2018	N/A	N/A	\$38,433	\$1,150,026	\$1,188,459	\$260,268	\$1,150,000	N/A	\$260,268	\$928,191
2019	N/A	N/A	176,147	410,663	586,810	263,076	-	N/A	263,076	323,734
2020	N/A	N/A	\$146,514	\$256,574	\$403,088	\$285,963	-	N/A	\$285,963	\$117,125

**Schedule of Changes in Net Position**

Fiscal year Ended June 30, 2020

(In thousands)

Year Ended	<u>Additions to Plan Net Position</u>					<u>Deductions from Plan Net Position</u>				Change in Net Position
	Member Contributions	Employer Contributions	Net Investment Income (Loss)	Other Income	Total Additions	Benefit Payments	Other Deductions	Administrative Expenses	Total Deductions	
2018	N/A	N/A	\$294	\$130,031	\$130,325	\$163,316	\$130,000	N/A	\$163,316	(\$32,991)
2019	N/A	N/A	103,694	108,040	211,734	165,195	139,836	N/A	305,031	(93,297)
2020	N/A	N/A	(\$4,221)	\$144,837	\$140,616	\$165,747	-	N/A	\$165,747	(\$25,131)

Starting FY 2018 a separate schedule of changes in net position for each pension plan is included.

New York City Police Pension Fund  
Year Ended June 30, 2020

**Expenses by Type**

Fiscal year Ended June 30, 2020

(In thousands)

FY Ended 6/30	Benefit Payments			Administrative Expense	Other	Total	Employer
							Contributions as %
	QPP	PSOVS	POVS				of annual covered Payroll
2011	\$2,045,129	-	-	\$16,141	\$4,064	\$2,065,334	64.1
2012	2,083,906	-	-	16,577	-	2,100,484	69.2
2013	2,530,634	-	-	17,548	8,169	2,548,182	70.1
2014	2,691,609	-	-	17,450	2,541,024	2,709,059	67.9
2015	2,749,775	-	-	17,905	590,313	2,767,680	65.7
2016	2,882,223	-	-	18,478	-	2,900,701	67.6
2017	2,984,833	-	-	18,917	-	3,003,750	65.4
2018	2,774,387	260,268	163,316	21,146	-	3,219,117	65.8
2019	2,853,799	263,076	165,195	29,005	-	3,311,075	63.2
2020	\$3,039,785	\$285,963	\$165,747	\$26,803	-	\$3,518,298	57.9

The table offers a comparison for the expenses of the plan for the past 10 Years.  
Starting FY 2018 Benefit Payments is shown separately for each fund.

**Revenue by Source**

Fiscal Year ended June 30, 2020

(In thousands)

Fiscal Year Ended 6/30	Member Contributions	Employer Contributions	Net Investment Income/Loss	Other Income	Total	Employer
						Contributions as %
						of annual covered Payroll
2011	\$206,859	\$2,084,563	\$4,535,097	\$2,561	\$6,829,080	64.1
2012	216,172	2,385,731	224,044	5,552	2,831,499	69.2
2013	229,675	2,424,691	3,101,563	6,118	5,762,047	70.1
2014	228,783	2,320,910	5,147,483	6,911	7,704,087	67.9
2015	241,102	2,309,619	1,098,220	4,616	3,653,557	65.7
2016	249,921	2,393,940	403,534	6,756	3,054,151	67.6
2017	276,301	2,293,840	4,286,894	10,507	6,867,542	65.4
2018	267,031	2,415,153	3,964,010	3,465	6,649,659	65.8
2019	278,087	2,558,256	2,861,543	4,183	5,702,069	63.2
2020	\$280,129	\$2,458,907	\$2,038,305	\$6,541	\$4,783,882	57.9

The table offers a comparison for the revenue sources of the Plan for the past 10 Years.

NEW YORK CITY POLICE PENSION FUND  
 DATA USED IN THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION  
 FOR DETERMINING FINAL FISCAL YEAR 2020 EMPLOYER CONTRIBUTIONS

MALES

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
<i>NUMBER:</i>										
UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	1,101	0	0	0	0	0	0	0	0	1,101
25 TO 29	3,626	957	7	0	0	0	0	0	0	4,590
30 TO 34	1,612	2,785	1,812	4	0	0	0	0	0	6,213
35 TO 39	566	978	3,672	1,005	6	0	0	0	0	6,227
40 TO 44	116	392	1,576	2,164	742	2	0	0	0	4,992
45 TO 49	5	33	581	1,067	1,607	648	4	0	0	3,945
50 TO 54	2	1	57	391	667	756	291	0	0	2,165
55 TO 59	0	2	2	23	149	176	200	91	0	643
60 TO 64	1	0	2	9	10	10	43	70	6	151
65 TO 69	0	1	1	3	2	1	1	0	0	9
70 & UP	0	0	1	3	1	0	0	0	1	6
<b>TOTAL</b>	<b>7,029</b>	<b>5,149</b>	<b>7,711</b>	<b>4,669</b>	<b>3,184</b>	<b>1,593</b>	<b>539</b>	<b>161</b>	<b>7</b>	<b>30,042</b>

<i>SALARIES (IN THOUSANDS):</i>										
UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	62,015	0	0	0	0	0	0	0	0	62,015
25 TO 29	235,389	96,273	680	0	0	0	0	0	0	332,343
30 TO 34	108,388	306,721	224,383	518	0	0	0	0	0	640,010
35 TO 39	37,881	106,359	459,552	131,578	780	0	0	0	0	736,150
40 TO 44	8,191	42,557	193,592	284,776	105,135	303	0	0	0	634,554
45 TO 49	398	3,822	71,881	137,712	226,477	97,030	568	0	0	537,888
50 TO 54	270	121	7,038	49,903	90,959	109,525	44,037	0	0	301,852
55 TO 59	0	282	262	2,976	19,877	24,285	29,718	15,146	0	92,545
60 TO 64	130	0	292	1,242	1,419	1,296	6,059	11,844	1,210	23,492
65 TO 69	0	147	147	416	310	230	229	0	0	1,479
70 & UP	0	0	147	475	149	0	0	0	163	934
<b>TOTAL<sup>1</sup></b>	<b>452,663</b>	<b>556,283</b>	<b>957,974</b>	<b>609,596</b>	<b>445,106</b>	<b>232,669</b>	<b>80,610</b>	<b>26,989</b>	<b>1,373</b>	<b>3,363,263</b>

<i>AVERAGE SALARIES: <sup>2</sup></i>										
UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	56,326	0	0	0	0	0	0	0	0	56,326
25 TO 29	64,917	100,599	97,134	0	0	0	0	0	0	72,406
30 TO 34	67,238	110,133	123,832	129,500	0	0	0	0	0	103,011
35 TO 39	66,928	108,752	125,150	130,923	130,061	0	0	0	0	118,219
40 TO 44	70,611	108,564	122,837	131,597	141,691	151,403	0	0	0	127,114
45 TO 49	79,623	115,820	123,719	129,065	140,931	149,738	141,916	0	0	136,347
50 TO 54	134,953	120,515	123,474	127,630	136,370	144,875	151,329	0	0	139,424
55 TO 59	0	141,120	130,812	129,407	133,401	137,981	148,588	166,436	0	143,927
60 TO 64	129,882	0	146,198	137,949	141,933	129,586	140,911	169,198	201,678	155,577
65 TO 69	0	147,086	147,165	138,652	154,917	230,343	228,942	0	0	164,369
70 & UP	0	0	147,086	158,452	149,132	0	0	0	162,747	155,720
<b>TOTAL</b>	<b>64,399</b>	<b>108,037</b>	<b>124,235</b>	<b>130,562</b>	<b>139,795</b>	<b>146,057</b>	<b>149,555</b>	<b>167,637</b>	<b>196,116</b>	<b>111,952</b>

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

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

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



NEW YORK CITY POLICE PENSION FUND  
 DATA USED IN THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION  
 FOR DETERMINING FINAL FISCAL YEAR 2020 EMPLOYER CONTRIBUTIONS

FEMALES

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
<i>NUMBER:</i>										
UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	198	0	0	0	0	0	0	0	0	198
25 TO 29	841	144	0	0	0	0	0	0	0	985
30 TO 34	509	552	303	0	0	0	0	0	0	1,364
35 TO 39	202	205	836	179	0	0	0	0	0	1,422
40 TO 44	35	104	435	539	108	0	0	0	0	1,221
45 TO 49	0	8	177	326	279	66	0	0	0	856
50 TO 54	0	0	6	121	120	97	23	0	0	367
55 TO 59	1	0	1	4	24	39	18	8	0	95
60 TO 64	0	0	0	0	1	1	5	5	0	12
65 TO 69	0	0	0	0	0	0	0	0	0	0
70 & UP	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>1,786</b>	<b>1,013</b>	<b>1,758</b>	<b>1,169</b>	<b>532</b>	<b>203</b>	<b>46</b>	<b>13</b>	<b>0</b>	<b>6,520</b>

*SALARIES (IN THOUSANDS):*

UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	10,773	0	0	0	0	0	0	0	0	10,773
25 TO 29	53,241	14,178	0	0	0	0	0	0	0	67,419
30 TO 34	32,804	59,346	36,121	0	0	0	0	0	0	128,272
35 TO 39	13,250	21,767	101,161	22,807	0	0	0	0	0	158,985
40 TO 44	2,462	10,990	52,542	69,573	15,172	0	0	0	0	150,738
45 TO 49	0	913	21,175	41,005	37,821	9,255	0	0	0	110,169
50 TO 54	0	0	716	15,289	16,164	13,366	3,440	0	0	48,976
55 TO 59	123	0	147	470	3,280	5,070	2,497	1,224	0	12,811
60 TO 64	0	0	0	0	162	120	718	799	0	1,799
65 TO 69	0	0	0	0	0	0	0	0	0	0
70 & UP	0	0	0	0	0	0	0	0	0	0
<b>TOTAL<sup>1</sup></b>	<b>112,653</b>	<b>107,194</b>	<b>211,863</b>	<b>149,144</b>	<b>72,599</b>	<b>27,811</b>	<b>6,655</b>	<b>2,023</b>	<b>0</b>	<b>689,942</b>

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

UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	54,408	0	0	0	0	0	0	0	0	54,408
25 TO 29	63,307	98,457	0	0	0	0	0	0	0	68,446
30 TO 34	64,449	107,512	119,212	0	0	0	0	0	0	94,041
35 TO 39	65,595	106,179	121,006	127,415	0	0	0	0	0	111,804
40 TO 44	70,334	105,668	120,787	129,077	140,485	0	0	0	0	123,455
45 TO 49	0	114,143	119,633	125,783	135,560	140,220	0	0	0	128,702
50 TO 54	0	0	119,410	126,354	134,702	137,795	149,559	0	0	133,448
55 TO 59	123,106	0	147,086	117,604	136,649	130,003	138,699	152,986	0	134,850
60 TO 64	0	0	0	0	161,792	119,878	143,616	159,885	0	149,932
65 TO 69	0	0	0	0	0	0	0	0	0	0
70 & UP	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>63,076</b>	<b>105,818</b>	<b>120,514</b>	<b>127,583</b>	<b>136,464</b>	<b>136,998</b>	<b>144,663</b>	<b>155,640</b>	<b>0</b>	<b>105,819</b>

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

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

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

NEW YORK CITY POLICE PENSION FUND  
DATA USED IN THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION  
FOR DETERMINING FINAL FISCAL YEAR 2020 EMPLOYER CONTRIBUTIONS

MALES AND FEMALES

AGE \ SVC	UNDER 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP	ALL YEARS
<i>NUMBER:</i>										
UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	1,299	0	0	0	0	0	0	0	0	1,299
25 TO 29	4,467	1,101	7	0	0	0	0	0	0	5,575
30 TO 34	2,121	3,337	2,115	4	0	0	0	0	0	7,577
35 TO 39	768	1,183	4,508	1,184	6	0	0	0	0	7,649
40 TO 44	151	496	2,011	2,703	850	2	0	0	0	6,213
45 TO 49	5	41	758	1,393	1,886	714	4	0	0	4,801
50 TO 54	2	1	63	512	787	853	314	0	0	2,532
55 TO 59	1	2	3	27	173	215	218	99	0	738
60 TO 64	1	0	2	9	11	11	48	75	6	163
65 TO 69	0	1	1	3	2	1	1	0	0	9
70 & UP	0	0	1	3	1	0	0	0	1	6
<b>TOTAL</b>	<b>8,815</b>	<b>6,162</b>	<b>9,469</b>	<b>5,838</b>	<b>3,716</b>	<b>1,796</b>	<b>585</b>	<b>174</b>	<b>7</b>	<b>36,562</b>

*SALARIES (IN THOUSANDS):*

UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	72,788	0	0	0	0	0	0	0	0	72,788
25 TO 29	288,631	110,451	680	0	0	0	0	0	0	399,762
30 TO 34	141,192	366,068	260,504	518	0	0	0	0	0	768,282
35 TO 39	51,131	128,126	560,713	154,385	780	0	0	0	0	895,135
40 TO 44	10,653	53,547	246,134	354,349	120,307	303	0	0	0	785,292
45 TO 49	398	4,735	93,056	178,717	264,298	106,285	568	0	0	648,057
50 TO 54	270	121	7,754	65,192	107,123	122,891	47,477	0	0	350,828
55 TO 59	123	282	409	3,447	23,156	29,355	32,214	16,370	0	105,356
60 TO 64	130	0	292	1,242	1,581	1,416	6,777	12,643	1,210	25,291
65 TO 69	0	147	147	416	310	230	229	0	0	1,479
70 & UP	0	0	147	475	149	0	0	0	163	934
<b>TOTAL<sup>1</sup></b>	<b>565,316</b>	<b>663,476</b>	<b>1,169,837</b>	<b>758,740</b>	<b>517,705</b>	<b>260,480</b>	<b>87,265</b>	<b>29,013</b>	<b>1,373</b>	<b>4,053,205</b>

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

UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	56,034	0	0	0	0	0	0	0	0	56,034
25 TO 29	64,614	100,319	97,134	0	0	0	0	0	0	71,706
30 TO 34	66,569	109,700	123,170	129,500	0	0	0	0	0	101,397
35 TO 39	66,577	108,306	124,382	130,393	130,061	0	0	0	0	117,026
40 TO 44	70,547	107,957	122,394	131,095	141,538	151,403	0	0	0	126,395
45 TO 49	79,623	115,493	122,765	128,296	140,137	148,858	141,916	0	0	134,984
50 TO 54	134,953	120,515	123,087	127,328	136,116	144,070	151,199	0	0	138,558
55 TO 59	123,106	141,120	136,236	127,658	133,851	136,534	147,772	165,349	0	142,758
60 TO 64	129,882	0	146,198	137,949	143,739	128,704	141,193	168,577	201,678	155,161
65 TO 69	0	147,086	147,165	138,652	154,917	230,343	228,942	0	0	164,369
70 & UP	0	0	147,086	158,452	149,132	0	0	0	162,747	155,720
<b>TOTAL</b>	<b>64,131</b>	<b>107,672</b>	<b>123,544</b>	<b>129,966</b>	<b>139,318</b>	<b>145,033</b>	<b>149,170</b>	<b>166,740</b>	<b>196,116</b>	<b>110,858</b>

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

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

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

NEW YORK CITY POLICE PENSION FUND  
 DATA USED IN THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION  
 FOR DETERMINING FINAL FISCAL YEAR 2020 EMPLOYER CONTRIBUTIONS  
 SUMMARY OF PENSIONERS BY CAUSE AND GENDER

ALL FILES (ALL BENEFITS)

AGE	MALE			FEMALE			TOTAL		
	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
<i>ACCIDENTAL DISABILITY:</i>									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	58	3,831,524	66,061	11	715,269	65,024	69	4,546,793	65,896
35 TO 39	239	17,317,328	72,457	51	3,376,114	66,198	290	20,693,442	71,357
40 TO 44	426	33,133,086	77,777	83	5,739,223	69,147	509	38,872,309	76,370
45 TO 49	1,271	102,542,763	80,679	187	12,993,661	69,485	1,458	115,536,424	79,243
50 TO 54	1,916	147,921,552	77,203	314	21,026,409	66,963	2,230	168,947,961	75,761
55 TO 59	1,806	119,488,795	66,162	326	20,786,154	63,761	2,132	140,274,949	65,795
60 TO 64	991	61,147,995	61,703	152	8,347,203	54,916	1,143	69,495,198	60,801
65 TO 69	871	43,729,088	50,206	55	2,890,842	52,561	926	46,619,930	50,345
70 TO 74	1,505	67,421,906	44,799	36	1,359,361	37,760	1,541	68,781,267	44,634
75 TO 79	1,352	59,277,974	43,845	25	1,078,118	43,125	1,377	60,356,092	43,832
80 TO 84	508	22,764,896	44,813	10	380,805	38,081	518	23,145,701	44,683
85 TO 89	233	10,935,677	46,934	3	105,665	35,222	236	11,041,342	46,785
90 & UP	124	5,334,059	43,017	3	130,137	43,379	127	5,464,196	43,025
<b>TOTAL</b>	<b>11,300</b>	<b>694,846,643</b>	<b>61,491</b>	<b>1,256</b>	<b>78,928,961</b>	<b>62,842</b>	<b>12,556</b>	<b>773,775,604</b>	<b>61,626</b>
<i>ORDINARY DISABILITY:</i>									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	9	342,994	38,110	3	65,094	21,698	12	408,088	34,007
35 TO 39	49	1,941,208	39,616	17	699,729	41,161	66	2,640,937	40,014
40 TO 44	71	2,900,351	40,850	43	1,588,758	36,948	114	4,489,109	39,378
45 TO 49	195	7,224,464	37,049	93	3,191,388	34,316	288	10,415,852	36,166
50 TO 54	212	7,018,804	33,108	130	3,939,245	30,302	342	10,958,049	32,041
55 TO 59	183	5,294,084	28,929	104	2,815,144	27,069	287	8,109,228	28,255
60 TO 64	94	2,463,697	26,210	59	1,537,442	26,058	153	4,001,139	26,151
65 TO 69	135	4,334,612	32,108	27	648,325	24,012	162	4,982,937	30,759
70 TO 74	360	8,758,993	24,331	16	347,610	21,726	376	9,106,603	24,220
75 TO 79	405	11,657,972	28,785	10	231,479	23,148	415	11,889,451	28,649
80 TO 84	216	8,400,060	38,889	11	238,026	21,639	227	8,638,086	38,053
85 TO 89	218	10,044,810	46,077	5	199,275	39,855	223	10,244,085	45,938
90 & UP	190	8,376,195	44,085	6	246,451	41,075	196	8,622,646	43,993
<b>TOTAL</b>	<b>2,337</b>	<b>78,758,244</b>	<b>33,701</b>	<b>524</b>	<b>15,747,966</b>	<b>30,053</b>	<b>2,861</b>	<b>94,506,210</b>	<b>33,033</b>
<i>SERVICE RETIREMENT:</i>									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	0	0	0	0	0	0
35 TO 39	0	0	0	0	0	0	0	0	0
40 TO 44	193	10,874,283	56,343	49	2,802,313	57,190	242	13,676,596	56,515
45 TO 49	2,592	164,636,264	63,517	554	30,075,156	54,287	3,146	194,711,420	61,892
50 TO 54	5,420	334,935,830	61,796	1,148	61,054,138	53,183	6,568	395,989,968	60,291
55 TO 59	6,196	331,504,097	53,503	1,324	63,545,417	47,995	7,520	395,049,514	52,533
60 TO 64	3,646	183,893,501	50,437	716	32,644,634	45,593	4,362	216,538,135	49,642
65 TO 69	2,188	100,246,713	45,817	224	9,189,627	41,025	2,412	109,436,340	45,372
70 TO 74	2,819	115,651,954	41,026	86	3,244,264	37,724	2,905	118,896,218	40,928
75 TO 79	3,227	116,693,794	36,162	64	2,309,181	36,081	3,291	119,002,975	36,160
80 TO 84	1,577	49,380,467	31,313	28	1,065,184	38,042	1,605	50,445,651	31,430
85 TO 89	850	24,162,063	28,426	19	543,601	28,611	869	24,705,664	28,430
90 & UP	481	12,833,395	26,681	15	364,318	24,288	496	13,197,713	26,608
<b>TOTAL</b>	<b>29,189</b>	<b>1,444,812,361</b>	<b>49,499</b>	<b>4,227</b>	<b>206,837,833</b>	<b>48,933</b>	<b>33,416</b>	<b>1,651,650,194</b>	<b>49,427</b>

NEW YORK CITY POLICE PENSION FUND  
 DATA USED IN THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION  
 FOR DETERMINING FINAL FISCAL YEAR 2020 EMPLOYER CONTRIBUTIONS  
 SUMMARY OF PENSIONERS BY CAUSE AND GENDER

ALL FILES (ALL BENEFITS)

AGE	MALE			FEMALE			TOTAL		
	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
<i>ACCIDENTAL DEATH:</i>									
UNDER 30	2	144,695	72,348	5	681,211	136,242	7	825,906	117,987
30 TO 34	0	0	0	1	140,848	140,848	1	140,848	140,848
35 TO 39	1	119,688	119,688	7	755,655	107,951	8	875,343	109,418
40 TO 44	2	206,041	103,021	20	2,257,002	112,850	22	2,463,043	111,957
45 TO 49	3	270,651	90,217	29	3,544,256	122,216	32	3,814,907	119,216
50 TO 54	6	663,665	110,611	62	7,417,616	119,639	68	8,081,281	118,842
55 TO 59	8	946,648	118,331	54	6,341,120	117,428	62	7,287,768	117,545
60 TO 64	2	138,707	69,354	44	5,214,505	118,511	46	5,353,212	116,374
65 TO 69	2	211,117	105,559	45	4,010,274	89,117	47	4,221,391	89,817
70 TO 74	3	316,794	105,598	50	4,417,524	88,350	53	4,734,318	89,327
75 TO 79	2	74,545	37,273	50	3,935,878	78,718	52	4,010,423	77,124
80 TO 84	3	180,737	60,246	20	1,327,953	66,398	23	1,508,690	65,595
85 TO 89	1	28,266	28,266	20	1,057,308	52,865	21	1,085,574	51,694
90 & UP	3	108,150	36,050	6	361,192	60,199	9	469,342	52,149
<b>TOTAL</b>	<b>38</b>	<b>3,409,704</b>	<b>89,729</b>	<b>413</b>	<b>41,462,342</b>	<b>100,393</b>	<b>451</b>	<b>44,872,046</b>	<b>99,495</b>
<i>OTHER BENEFICIARIES:</i>									
UNDER 30	5	173,815	34,763	9	225,214	25,024	14	399,029	28,502
30 TO 34	4	109,230	27,308	1	24,371	24,371	5	133,601	26,720
35 TO 39	0	0	0	7	187,647	26,807	7	187,647	26,807
40 TO 44	1	13,585	13,585	7	319,927	45,704	8	333,512	41,689
45 TO 49	4	155,158	38,790	19	787,051	41,424	23	942,209	40,966
50 TO 54	6	247,725	41,288	39	1,517,262	38,904	45	1,764,987	39,222
55 TO 59	5	154,620	30,924	53	2,168,240	40,910	58	2,322,860	40,049
60 TO 64	0	0	0	58	1,790,939	30,878	58	1,790,939	30,878
65 TO 69	2	52,719	26,360	72	1,914,750	26,594	74	1,967,469	26,587
70 TO 74	0	0	0	110	3,031,141	27,556	110	3,031,141	27,556
75 TO 79	1	19,550	19,550	122	3,209,065	26,304	123	3,228,615	26,249
80 TO 84	0	0	0	102	2,691,398	26,386	102	2,691,398	26,386
85 TO 89	0	0	0	93	1,909,050	20,527	93	1,909,050	20,527
90 & UP	0	0	0	120	1,861,283	15,511	120	1,861,283	15,511
<b>TOTAL</b>	<b>28</b>	<b>926,402</b>	<b>33,086</b>	<b>812</b>	<b>21,637,338</b>	<b>26,647</b>	<b>840</b>	<b>22,563,740</b>	<b>26,862</b>
<i>ALL PENSIONERS AND BENEFICIARIES:</i>									
UNDER 30	7	318,510	45,501	14	906,425	64,745	21	1,224,935	58,330
30 TO 34	71	4,283,748	60,334	16	945,582	59,099	87	5,229,330	60,107
35 TO 39	289	19,378,224	67,053	82	5,019,145	61,209	371	24,397,369	65,761
40 TO 44	693	47,127,346	68,005	202	12,707,223	62,907	895	59,834,569	66,854
45 TO 49	4,065	274,829,300	67,609	882	50,591,512	57,360	4,947	325,420,812	65,781
50 TO 54	7,560	490,787,576	64,919	1,693	94,954,670	56,087	9,253	585,742,246	63,303
55 TO 59	8,198	457,388,244	55,793	1,861	95,656,075	51,400	10,059	553,044,319	54,980
60 TO 64	4,733	247,643,900	52,323	1,029	49,534,723	48,139	5,762	297,178,623	51,576
65 TO 69	3,198	148,574,249	46,458	423	18,653,818	44,099	3,621	167,228,067	46,183
70 TO 74	4,687	192,149,647	40,996	298	12,399,900	41,610	4,985	204,549,547	41,033
75 TO 79	4,987	187,723,835	37,643	271	10,763,721	39,719	5,258	198,487,556	37,750
80 TO 84	2,304	80,726,160	35,037	171	5,703,366	33,353	2,475	86,429,526	34,921
85 TO 89	1,302	45,170,816	34,693	140	3,814,899	27,249	1,442	48,985,715	33,971
90 & UP	798	26,651,799	33,398	150	2,963,381	19,756	948	29,615,180	31,240
<b>TOTAL</b>	<b>42,892</b>	<b>2,222,753,354</b>	<b>51,822</b>	<b>7,232</b>	<b>364,614,440</b>	<b>50,417</b>	<b>50,124</b>	<b>2,587,367,794</b>	<b>51,619</b>

NEW YORK CITY POLICE OFFICERS' VARIABLE SUPPLEMENTS FUND  
DATA USED IN THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION  
FOR DETERMINING FINAL FISCAL YEAR 2020 EMPLOYER CONTRIBUTIONS  
SUMMARY OF PENSIONERS BY GENDER

AGE	MALE			FEMALE			BOTH MALE & FEMALE		
	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
SERVICE RETIREMENT:									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	0	0	0	0	0	0
35 TO 39	0	0	0	0	0	0	0	0	0
40 TO 44	74	888,000	12,000	15	180,000	12,000	89	1,068,000	12,000
45 TO 49	947	11,364,000	12,000	245	2,940,000	12,000	1,192	14,304,000	12,000
50 TO 54	2,022	24,264,000	12,000	571	6,852,000	12,000	2,593	31,116,000	12,000
55 TO 59	2,273	27,276,000	12,000	625	7,500,000	12,000	2,898	34,776,000	12,000
60 TO 64	1,258	15,096,000	12,000	270	3,240,000	12,000	1,528	18,336,000	12,000
65 TO 69	710	8,520,000	12,000	82	984,000	12,000	792	9,504,000	12,000
70 TO 74	910	10,920,000	12,000	17	204,000	12,000	927	11,124,000	12,000
75 TO 79	1,236	14,832,000	12,000	21	252,000	12,000	1,257	15,084,000	12,000
80 TO 84	707	8,484,000	12,000	7	84,000	12,000	714	8,568,000	12,000
85 TO 89	418	5,016,000	12,000	9	108,000	12,000	427	5,124,000	12,000
90 & UP	250	3,000,000	12,000	8	96,000	12,000	258	3,096,000	12,000
<b>TOTAL</b>	<b>10,805</b>	<b>129,660,000</b>	<b>12,000</b>	<b>1,870</b>	<b>22,440,000</b>	<b>12,000</b>	<b>12,675</b>	<b>152,100,000</b>	<b>12,000</b>

NEW YORK CITY POLICE SUPERIOR OFFICERS' VARIABLE SUPPLEMENTS FUND  
DATA USED IN THE JUNE 30, 2018 (LAG) ACTUARIAL VALUATION  
FOR DETERMINING FINAL FISCAL YEAR 2020 EMPLOYER CONTRIBUTIONS  
SUMMARY OF PENSIONERS BY GENDER

AGE	MALE			FEMALE			BOTH MALE & FEMALE		
	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE
SERVICE RETIREMENT:									
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	0	0	0	0	0	0
35 TO 39	0	0	0	0	0	0	0	0	0
40 TO 44	90	1,080,000	12,000	31	372,000	12,000	121	1,452,000	12,000
45 TO 49	1,396	16,752,000	12,000	237	2,844,000	12,000	1,633	19,596,000	12,000
50 TO 54	3,179	38,148,000	12,000	489	5,868,000	12,000	3,668	44,016,000	12,000
55 TO 59	3,786	45,432,000	12,000	632	7,584,000	12,000	4,418	53,016,000	12,000
60 TO 64	2,341	28,092,000	12,000	428	5,136,000	12,000	2,769	33,228,000	12,000
65 TO 69	1,431	17,172,000	12,000	138	1,656,000	12,000	1,569	18,828,000	12,000
70 TO 74	1,716	20,592,000	12,000	65	780,000	12,000	1,781	21,372,000	12,000
75 TO 79	1,681	20,172,000	12,000	40	480,000	12,000	1,721	20,652,000	12,000
80 TO 84	736	8,832,000	12,000	18	216,000	12,000	754	9,048,000	12,000
85 TO 89	382	4,584,000	12,000	8	96,000	12,000	390	4,680,000	12,000
90 & UP	175	2,100,000	12,000	6	72,000	12,000	181	2,172,000	12,000
<b>TOTAL</b>	<b>16,913</b>	<b>202,956,000</b>	<b>12,000</b>	<b>2,092</b>	<b>25,104,000</b>	<b>12,000</b>	<b>19,005</b>	<b>228,060,000</b>	<b>12,000</b>



*New York City Police Pension Fund  
233 Broadway, 25th Floor  
New York, NY 10279*