



# New York City Police Pension Fund

A Pension Trust Fund of the City of NewYork



### Comprehensive Annual Financial Report

for the fiscal years ended

June 30, 2017 and June 30, 2016

### New York City Police Pension Fund Comprehensive Annual Financial Report A Pension Trust Fund of the City of New York For the Fiscal Year Ended June 30, 2017

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# New York City Police Pension Fund

Comprehensive Annual Financial Report

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## Introductory Section Part I

fiscal year ended

June 30, 2017

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Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

**New York City** 

Police Pension Fund, Subchapter 2

**New York** 

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2016

Executive Director/CEO

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December 15, 2017

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, 2017. Responsibility for accuracy of the data, the completeness and fairness of the presentation, including all disclosures, rest 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.

#### 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 Police Department prior to 1940. By legislation enacted in 1995, Article 1 was merged into the Plan.

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 presidents 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 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 fifteen years, many Information Technology enhancements have been implemented. The latest accomplishment was replacing the six year-old desktop computers at our Manhattan headquarters and the

Staten Island Telehouse disaster recovery site. The new desktop computers allow us to run MS Windows 10 and Office 13 software.

#### 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 does 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 2017 was audited in accordance with generally accepted auditing standards and the Fund received an unmodified opinion from external auditor's Marks Paneth, 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 (GASB) 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 75.2% and 69.4% as of June 30, 2017 and 2016, 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 and is the Treasurer of 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, 2017, the policy mix for the Fund Portfolio Asset Allocation consisted of the following categories; Domestic Equity 34.97%, NYC Core U.S. Fixed 15.89%, International Equities 10.29%, Emerging Markets 6.59%, Enhanced Yields 4.68%, Private Real Estate and Equities 10.60%, Hedge Funds 5.35% and others 11.63%. With \$38.0 billion under investment management, the June 30, 2017 Total Portfolio Return was 13.2%, which outperformed the policy benchmark return of 12.8%. For the 3 years trailing, a 6.0% return was noted which fell slightly below the policy benchmark of 6.3%. Financial information regarding investment activities, policy, 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.

#### Financial Highlights

The combined financial statements of the Fund for Fiscal Year 2017 show total net position restricted for benefits increased by \$3.9 billion to \$39.2 billion, or 10.6% percent over the prior fiscal year. In Fiscal Year 2016 the increase was \$0.153 billion or 0.44% to \$35.3 billion, compared to Fiscal Year 2015. The \$39.2 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 ("POVSF") for \$35.5 billion, \$1.7 billion and \$2.0 billion, respectively. For the fiscal year investment costs were higher. Both interest income and employer contributions declined. However, growth was experienced in member contributions and dividend income, supported further by higher income from litigation and securities lending. Overall, net-appreciation in fair values of investments improved and the Fund reported a substantial increase in net investment income for Fiscal Year 2017.

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 2017	FY 2016	(%) Change
Member Contributions	\$ 276,301	\$ 249,921	11.0
Employer Contributions	2,293,840	2,393,940	(4.2)
Interest Income	410,332	433,009	(5.2)
Dividend Income	515,725	484,994	6.3
Net Investment Income	4,286,894	403,534	962.3
Benefits Paid & Withdrawals	2,984,833	2,882,223	3.6

#### **Economic Conditions**

The national economy, as measured by real Gross Domestic Product (GDP), grew 2.2% in Fiscal Year 2017 compared to 1.2% in Fiscal Year 2016, according to the Bureau of Economic Analysis (BEA). The national housing market and the labor market continued to improve. Also, the financial markets marked a successful FY 2017 with certain stock indices reaching record levels. Meanwhile, the Gross City Product (GCP) was up 2.1% for the same period indicating that the New York City ("The City") local economy continued to grow.

The 2.2% GDP growth suggests that expansion of the national economy in Fiscal Year 2017 was moderate. Based on a recent BEA report, the result was mainly driven by consumer spending, business investments, exports and federal government spending. Also noted, corporate profits were up 7.1% and, short term interest rates remained low with the Fed funds rate standing at 1.25%, up from .50% a year ago. The housing market continued to show improvement while, labor market conditions tightened with steady jobs growth and a further decline in the unemployment rate to 4.4%.

The City anticipated moderate economic growth, continued job creation and a further decline in the unemployment rate for Fiscal Year 2017. The Comptroller's Office has since reported that the local economy improved slowly with a Gross City Product (GCP) recorded at 2.1%. The City's housing market is strengthening with higher residential home prices noted in Manhattan and Brooklyn and new commercial space leasing activity in the metro area increasing. Accompanied

by an increase of 69,000 new private sector jobs, the City's unemployment rate declined to 4.8%. Also, the New York Stock Exchange member firms showed strong growth in pre-tax profits and the stock market was less volatile with indices reaching record levels. The City also accounted for 13.6% of total national venture capital investments.

By the end of the fiscal year, other sectors of the local economy had shown improvement. At the national level, the unemployment rate dipped further to 4.1% in October, holding at a 17 year low. But, the targeted inflation rate was not achieved and the Fed funds rate moved little. The Federal Reserve acknowledged there was improvement in various sectors of the economy and at a recent December meeting agreed to raise the benchmark interest rate by a quarter point to 1.50%. As of now, monetary policy remains unchanged pending further strengthening of the labor market with a return to the 2% inflation target, over the medium term. However, a shift in monetary policy early in 2018 seems possible, when the recent appointment of a new central bank chairman becomes effective.

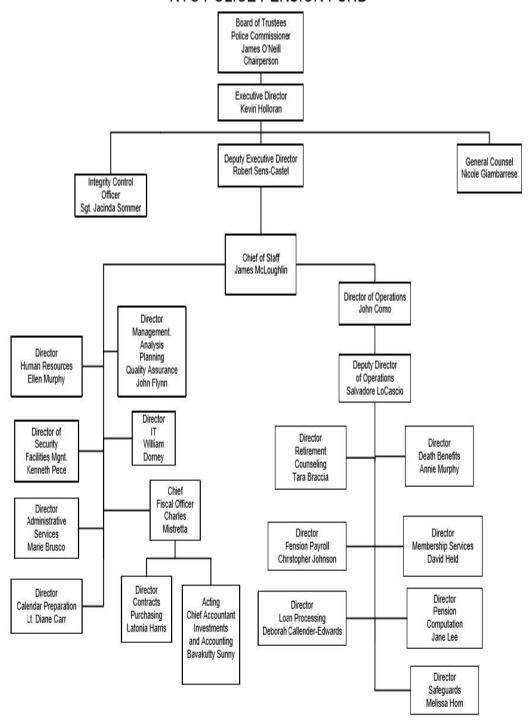
#### Acknowledgements/Other

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,

Kevirl Hofloran Executive Director This page is intentionally left blank

### NYC POLICE PENSION FUND



# New York City Police Pension Fund

Comprehensive Annual Financial Report

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**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

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Executive Director

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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: <a href="www.nyc.gov/nycppf">www.nyc.gov/nycppf</a>. 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.

The Fund is also now on Facebook! Members, their beneficiaries, and fans of the Fund can "like" us on Facebook at <a href="https://www.facebook.com/nycppf">www.facebook.com/nycppf</a>.



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 nonuniformed 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.

<u>Under Chapter 498 of the Laws of 2005</u>, 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%

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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. <u>It is</u> 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 City of New York recently reached a settlement with the United States Attorney's Office in Goodman, et al. v. City of New York, et al., which became effective March 17, 2014. At issue was the calculation of pensionable earnings and member contributions for members on active duty military leaves from the NYPD.

The case was brought pursuant to the Uniformed Services Employment and Reemployment Rights Act of 1994, 38 U.S.C. §§ 4301–35 ("USERRA") by a class of retired NYPD officers who performed active military service, while employed by the NYPD, on or after September 11, 2001. 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."

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 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.

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

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

PPF will be recalculating the retired class member's pension in accordance with the settlement agreement. Class members will be notified in writing when their pensions have been

recalculated; all recalculations must be completed by March 17, 2015. Class members would have received a settlement notice, and must not have filed an opt out with the Court.

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 <a href="https://www.nyc.gov/nycppf">www.nyc.gov/nycppf</a>.

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.

#### Individuals Whose Membership with PPF Has Ceased

Uniformed NYPD employees who went on military leaves between September 11, 2001 and March 17, 2014, but are no longer members of PPF because of a transfer to another system or withdrawal of member contributions are not entitled to recalculation. If a former member transferred to another public retirement system, he or she should make an application to the new retirement system to be recalculated in accordance with the statutory requirements of USERRA. Please note that active membership also ceases by death or retirement; however, deceased or retired members who are eligible for pension recalculation were identified as class members of the Goodman case.

#### **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) 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 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:

	Payment	Number of Payments	Current Principal
Loan 1	\$135.98	326	\$64,997
Loan 2	\$127.15	130	\$15,000

### 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 (<a href="www.nyc.gov/nycppf">www.nyc.gov/nycppf</a>). 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, 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:

Annual Vested Retirement Pension = \$8,461

<u>Health benefits note:</u> 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

Annuity value of City ITHP contributions = \$235

less

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. <u>Vested members and members who retire for Ordinary or Accident Disability are not eligible for VSF benefits.</u>

# 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.

<u>Note:</u> 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 (yr.) / 40 x \$63,288 = \$36,391

less

Annuity value of \$69,120 (\$5,917)

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

1/60th 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

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

plus

Annuity value of \$23,040 = \$1,972

Annual Accident Disability Retirement Pension = \$56,646

### World Trade Center Disability Law

Chapter 489 of the Laws of 2008 enables active and retired Police Pension Fund members who were active members during the World Trade Center rescue, recovery or clean-up operations, to receive an Accident Disability Pension if determined to be permanently disabled as a result of such participation. A Notice of Participation must have been filed by September 11, 2010 to preserve eligibility for this disability law.

### 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.

<u>Note:</u> 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 20th 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 20th 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 20th 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 20th 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:

- A lump sum equal to the member's accumulated deductions and any insured loan amount paid to the designated beneficiary(ies), or to the member's estate if no designation is on file.
- 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 20th 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 20th 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:

Police Officers	Patrolmen's' Benevolent Association (PBA)	212-349-7560
Sergeants	Sergeants' Benevolent Association (SBA)	212-431-6555
Detectives	Detectives' Endowment Association (DEA)	212-587-1000
Lieutenants	Lieutenants' Benevolent Association (LBA)	212-964-7500
Captains & above	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 Unit. 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. 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	233 Broadway	Suite 1801	212-964-7500
CEA	233 Broadway	Suite 1801	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/Tier 3 Revised Plan Member (also known as Tier 6) 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) who became police officers on or after July 1, 2009. Members appointed on or after April 1, 2012 are considered Tier 3 Revised Plan Members, also known as Tier 6<sup>1</sup>.

Laws affecting the plan can be added to or changed at any time, 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, 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.

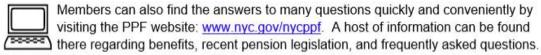
Collectively, this SPD applies to Tier 3 members—those members hired between July 1, 2009 and March 31, 2012, and Tier 3 Revised Plan members (also known as Tier 6—those members hired on or after April 1, 2012.



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



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.

The Fund is also now on Facebook! Members, their beneficiaries, and fans of the Fund can "like" us on Facebook at <a href="https://www.facebook.com/nycppf">www.facebook.com/nycppf</a>.



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. Membership in the Fund ceases upon withdrawal of contributions.

Members appointed on or after April 1, 2012 have a different Final Average Salary calculation; these members may also be referred to as Tier 6. All other benefits remain the same.

### **Credited Service**

Participation in the PPF is mandatory for uniformed employees hired on or after July 1, 2009. 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.

#### Prior Service Credit<sup>2</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.

#### 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.

<sup>&</sup>lt;sup>2</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.
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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. The contribution required by law is 3% of pensionable earnings. Pensionable earnings consist of: base salary, overtime, night differential, holiday pay, worked vacation, portal to portal and allowable longevity. Member contributions will be deducted from pay before taxes are deducted.

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.

# 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. The City of New York recently reached a settlement with the United States Attorney's Office in Goodman, et al. v. City of New York, et al., which became effective March 17, 2014. At issue was the calculation of pensionable earnings and member contributions for members on active duty military leaves from the NYPD.

The case was brought pursuant to the Uniformed Services Employment and Reemployment Rights Act of 1994, 38 U.S.C. §§ 4301–35 ("USERRA") by a class of retired NYPD who performed active military service, while employed by the NYPD, on or after September 11, 2001. 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."

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 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.

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

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

PPF will be recalculating the retired class member's pension in accordance with the settlement agreement. Class members will be notified in writing when their pensions have been recalculated; all recalculations must be completed by March 17, 2015. Class members would have received a settlement notice, and must not have filed an opt out with the Court.

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 <a href="https://www.nyc.gov/nycppf">www.nyc.gov/nycppf</a>.

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 Tier 3 SPD September 2016—Page 8

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.

#### Individuals Whose Membership with PPF Has Ceased

Uniformed NYPD employees who went on military leaves between September 11, 2001 and March 17, 2014, but are no longer members of PPF because of a transfer to another system or withdrawal of member contributions are not entitled to recalculation. If a former member transferred to another public retirement system, he or she should make an application to the new retirement system to be recalculated in accordance with the statutory requirements of USERRA. Please note that active membership also ceases by death or retirement, however, deceased or retired members who are eligible for pension recalculation were identified as class members of the Goodman case.

# 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, <a href="https://www.nyc.gov/nycppf">www.nyc.gov/nycppf</a>, 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 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. 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, 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

Members appointed between July 1, 2009 and March 31, 2012: Final average salary (FAS) is the average wages earned by a member during any 3 consecutive calendar years or 36 months 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 prior two years by more than 10%, the amount in excess of 10% shall be excluded.

Members appointed on or after April 1, 2012: 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. Additionally, if the last five years produce the highest average wage, and the member was on a leave of absence without pay (e.g. suspension) at any time during the five year period, that time will be excluded from the calculation and the same period of time immediately preceding the five year period will be included for the final average salary.

# Social Security Offset

A member's service, vested, or disability benefit is reduced, pursuant to statute, by 50% of the member's primary Social Security retirement or disability benefit. This reduction occurs either at age 62, or at such time the member becomes eligible to receive Social Security Disability benefits, whichever occurs first. The payment will not be reduced if the Social Security benefit increases after separation from service.

Even though the reduction occurs at either 62, or upon eligibility for Social Security Disability benefits, the Social Security Offset is determined at the time of the member's retirement. All public earnings up to the point of retirement from the NYPD will be factored into the calculation of the 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.

A member is appointed to the NYPD at age 37, resigns and vests with 10 years at age 47. The member may elect to take the Vested benefit at either age 55, with what would have been 18 years of service, or age 57 at what would have been 20 years of service.

If the member defers collection until age 57 there will be no reduction; however, if the member elects to receive the Vested benefit at age 55, the benefit will be reduced 1/30th for each of the two years prior to the 20th anniversary date.

Therefore, if the Vested benefit would be \$30,000 for 10 years of service, the Fund would multiply that by 28/30 to allow for the reduction and the benefit would be \$28,000 a year.

Conversely, if the member is appointed at age 25, completes 10 years of service at 35 and resigns, the member would not be able to collect until age 45 because the law allows for what would have been 20 years of service or age 55, whichever comes first.

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

A member is age 37, separates from service and decides to vest with 10 years of credited service and a final average salary of \$82,000. The member chooses to collect the pension benefit at what would have been the 20th year of service. The Vested retirement calculation is as follows:

The member will receive an annual pension benefit of \$17,220 from age 47 through age 62. At age 62, the pension benefit is reduced as follows:

Reduce by 50% of the Primary Social Security Retirement benefit

$$(0.50 \times 6096) = $3,048*$$

At age 62 the member will receive an adjusted annual pension benefit of \$14,172.

\*Example based on set of compensation assumptions

#### 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

A member elects to retire at age 44 with 20 years and one month of credited service and a final average salary of \$84,000. The member begins collecting immediately. The Early Service Retirement is calculated as follows:

2.1% of FAS per year of credited service

 $(0.021 \times 84000) \times 20 = $35,280$ 

**PLUS** 

1/3% of final average salary per month in excess of 20 years

 $(.00333 \times 84000) \times 1 = $280$ 

The member receives an annual pension benefit of \$35,560 from age 44 through age 62. At age 62, the pension benefit is reduced as follows:

Reduce by 50% of the Primary Social Security Retirement benefit\*

 $(0.50 \times 11724) = $5,862$ 

At 62 the member will receive an adjusted annual pension benefit of \$29,698.

\*Example based on set of compensation assumption

#### **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

A member decides to retire at age 46 with 22 years of credited service and a final average salary of \$89,000. The member elects payment immediately. The Normal Service Retirement calculation is as follows:

#### 50% of FAS

 $(0.50 \times 89000) = $44,500$ 

The member will receive an annual pension benefit of \$44,500 from age 46 through age 62. At age 62, the pension benefit is reduced as follows:

Reduce by 50% of the Primary Social Security Retirement benefit

 $(0.50 \times 13044) = $6,522*$ 

At age 62 this member will receive an adjusted annual pension benefit of \$37,978.

\*Example based on set of compensation assumptions

#### **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. To apply for ODR or ADR, a member 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).

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.

# 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 (not to exceed maximum years for computing service retirement)

-either benefit above, less-

50% of primary Social Security Disability benefit

A member has 15 years of credited service and is 41 years old at the time of retirement for Ordinary Disability. The member is eligible for primary Social Security Disability benefits and has a final average salary of \$84,000. The member begins collecting at the time of retirement. ODR is calculated as:

The greater of:33 1/3 % of FAS (0.33333 x 84000) = \$28,000

-or-

2% FAS per years of credited service (0.02 x 84000) x 15 = \$25,200 -less-

50% of Primary Social Security Disability benefits\*
(0.500 x 21972) = 10,986

This member will receive an annual pension benefit of \$17,014 and is entitled to full escalation each year after retirement.

\*Example based on set of compensation assumptions

# 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.

#### The Accident Disability Retirement benefit is calculated as:

50% of FAS

-less-

50% of the primary Social Security Disability benefits.

A member has 15 years of credited service and is 41 years old at the time of retirement for accidental disability. The member is not eligible for Social Security Disability benefits, and has a final average salary of \$84,000. The member is collecting benefits immediately upon retirement. The ADR calculation is as follows:

50% of FAS

 $(0.50 \times 84000) = $42,000$ 

This member will receive an annual pension benefit of \$42,000 and is entitled to full escalation each year after retirement.

At age 62, their pension benefit is reduced as follows:

Reduce by 50% of the Primary Social Security disability benefit\*

 $(0.50 \times 8988) = $4,494$ 

\*Example based on set of compensation assumption

#### **Escalation**

Service, vesting and disability retirement benefits, as well as survivor benefits, may be subject to annual escalation.

#### **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 would have completed 25 years of service.
- <u>Disability Pensions:</u> 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.

If a member first begins receiving benefits on the same date as the full escalation date, the Full Escalation will be calculated as a 3% increase of current annual pension, or the Cost-of-Living Index increase of current annual pension, whichever is less.

#### **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.

A member who **retires with 22 years of service** and chooses to collect the pension at the time of retirement will receive no escalation during retirement.



A member who **retires for Service with 24 years** of service and chooses to collect the pension at the time of retirement will receive reduced annual escalation as follows:

The lesser of 3% or COLA

-less-

12 months x 1/36th = 12/36 = 1/3

The annual Escalation will be 2/3 of 3% or COLA (whichever is less).



A member who retires with 25 years of service will receive full escalation.

# 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. The pension benefit would then be calculated as follows:

2% x FAS x 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 of collecting the benefit.

A member chooses to vest with 10 years of service, a final average salary of \$82,000 and payability of the retirement allowance at what would have been the 23rd year of service:

Deferred Pension Benefit:

 $0.02 \times 82000 \times 10 = $16,400$ 

-less-

50% of the Primary Social Security Benefit at age 62

Annual Escalation:

Deferred Payment to 24 months prior to full escalation = 12/36 = 1/3

The annual Escalation will be 1/3 of 3% or COLA (whichever is less)

A member who chooses to retire early with 20 years of service, a final average salary of \$84,000 and payability of the retirement benefits at what would have been the member's 24th year of service:

Deferred Pension Benefit:

 $0.02 \times 84000 \times 20 = $33,600$ 

-less-

50% of the Primary Social Security Benefit at age 62

Annual Escalation:

Deferred Payment to 12 months prior to full escalation = 24/36 = 2/3

The annual Escalation will be 2/3 of 3% or COLA (whichever is less)

# 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.

A member who retires with 24 years of service, a final average salary of \$91,000 and chooses to collect the pension at what would have been the 25th year of service:

Normal Service Retirement Benefit:

 $0.50 \times 91000 = $45,500$ 

-less-

50% of the Primary Social Security Benefit at age 62

Annual Escalation:

Deferred benefit until full escalation date = no reduction

The annual Escalation will be 3% or COLA (whichever is less)

# 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 for 2011 and every year thereafter is \$12,000. <u>Vested members and members who retire for</u>

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 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.

#### **Options**

A member may elect to receive a smaller 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 one—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 two—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 three—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 four—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 five—Joint and Survivor with "Pop-up": Upon the member's death, a retirement allowance in an amount equal to either 50% or 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 between July 1, 2009 and March 31, 2012 have to complete a Chapter 646 to be considered Tier 3 instead of Tier 3 Revised. A Chapter 552 buyback would not move a member from the Tier 3 Revised Plan to Tier 3.

#### 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

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 with 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:

- A surviving spouse who has not renounced survivorship rights in a separation agreement, until remarriage; or
- 2. Surviving children until age 25; or
- Dependent parents; or
- 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:

Police Officers	Patrolmen's Benevolent Association (PBA)	212-349-7560
Sergeants	Sergeants' Benevolent Association (SBA)	212-431-6555
Detectives	Detectives' Endowment Association (DEA)	212-587-1000
Lieutenants	Lieutenants' Benevolent Association (LBA)	212-964-7500
Captains & above	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 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. 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	233 Broadway	Suite 1801	212-964-7500
CEA	233 Broadway	Suite 1801	212-791-8292

#### 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

Comprehensive Annual Financial Report

A Pension Trust Fund of the City of NewYork



# Financial Section Part II

fiscal year ended

June 30, 2017

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Marks Paneth LLP 685 Third Avenue New York, NY 10017 P 212.503.8800 F 212.370.3759 markspaneth.com



#### INDEPENDENT AUDITORS' REPORT

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

#### Report on the Combining Financial Statements

We have audited the accompanying combining statements of fiduciary net position of the New York City Police Pension Fund, New York City Police Officers' Variable Supplements Fund, and New York City Police Superior Officers' Variable Supplements Fund, which collectively comprise the New York City Police Pension Funds (the "Funds"), a fiduciary fund of the City of New York, as of June 30, 2017 and 2016, and the related combining statements of changes in fiduciary net position for the years then ended, and the related notes to the combining financial statements, which collectively comprise the Funds' basic combining financial statements as listed in the table of contents.

#### Management's Responsibility for the Combining Financial Statements

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

#### Auditors' Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combining financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the combining financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Funds' 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 Funds' internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the combining financial statements.

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

#### Opinions

In our opinion, the combining financial statements referred to above present fairly, in all material respects, the combining fiduciary net position of the Funds as of June 30, 2017 and 2016, and the changes in combining fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.



#### Other Matters

Required Supplementary Information

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

Other Supplementary Information

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

The Additional Supplementary Information (Schedules of Investment Expenses and Administrative Expenses) is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic combining financial statements. Such information has been subjected to the auditing procedures, applied in the audit of the basic combining financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic combining financial statements or to the basic combining financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion the Additional Supplementary Information is fairly stated, in all material respects, in relation to the 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 audits of the basic combining financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

October 27, 2017

(except for the Other Supplementary Information, as to which the date is December 21, 2017)

Marks Paneth Uf



This narrative discussion and analysis of the New York City Police Pension Funds ("POLICE" or the "Funds"), provides an overview of the Funds combining financial activities for the Fiscal Years ended June 30, 2017 and 2016. 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 Funds administer: the New York City Police Pension Fund, Tiers 1, 2, and 3, 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 assets by
  the Funds that is applicable to a future reporting period (deferred outflow of resources), present
  obligations to sacrifice resources that the Funds have little or no discretion to avoid (liabilities),
  and acquisition of net assets by the Funds that is applicable to a future reporting period (deferred
  inflow of resources) with the difference between assets/deferred outflow of resources and
  liabilities/deferred inflow of resources being reported as net position. Investments are shown at
  fair 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 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 \$3.9 billion, or 11% to \$39.2 billion in Fiscal Year 2017 compared to Fiscal Year 2016, and increased by \$153.4 million, or .44% to \$35.3 billion in Fiscal Year 2016 compared to Fiscal Year 2015. The Funds net position restricted for benefits increased in Fiscal Years 2017 and 2016 due to an increase in assets and the continued growth of the national economy.

#### Changes in Fiduciary Net Position Years Ended June 30, 2017, 2016 and 2015 (In thousands)

(iii diodsanos)		2017		2016	2015		
Additions:		2011		2010		2010	
Member contributions	S	276,301	S	249,921	S	241,102	
Employer contributions		2,293,840		2,393,940		2,309,619	
Net investment income		4,286,894		403,534		1,098,220	
Litigation income		8,057		2,970		1,042	
Net receipts from other retirement systems	_	2,450		3,786	_	3,574	
Total additions	5	6,867,542	5	3,054,151	s	3,653,557	
Deductions:		3		90	100		
Benefit payments and withdrawals		2,984,833		2,882,223		2,749,775	
Administrative expenses	_	18,917	_	18,478		17,903	
Total deductions		3,003,750		2,900,701		2,767,678	
Net increase in net position		3,863,792		153,450		885,879	
Net position restricted for benefits							
Beginning of year	_	35,311,979		35,158,529	_	34,272,650	
End of year	\$	39,175,771	\$	35,311,979	\$	35,158,529	

During Fiscal Year 2017, member contributions increased by 11% to \$276.3 million as compared to Fiscal Year 2016 contributions of \$249.9 million. This change was due to members increasing their deductions. During Fiscal Year 2016, member contributions increased by 3.6% to \$249.9 million as compared to the Fiscal Year 2015 contributions of \$241.1 million. In accordance with the pension plan requirements, certain members, under certain conditions, may elect to increase their deductions.

Employer contributions in Fiscal Year 2017 were \$2.29 billion, a decrease of 4.2% from Fiscal Year 2016 contributions of \$2.39 billion primarily due to a net actuarial gain. In Fiscal Year 2016, the contributions of \$2.39 billion represented an increase of 3.7% from Fiscal Year 2015 contributions of \$2.31 billion.

Benefit payments and withdrawals were \$2.98 billion, \$2.88 billion, and \$2.75 billion for the Fiscal Years ended June 30, 2017, 2016 and 2015, 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 2017, 2016, 2015 the administrative expenses were \$18.9 million; \$18.5 million; and in \$17.9 million, respectively. The fiscal year increases are primarily due to contractual salary obligations.

#### FIDUCIARY NET POSITION

In Fiscal Year 2017, the Funds experienced an 11% increase in the combined net position restricted for benefits, due to an increase in assets, compared to Fiscal Year 2016, when a .44% increase from Fiscal Year 2015 was noted.

#### Fiduciary Net Position June 30, 2017, 2016 and 2015 (In thousands)

	2017	2016	2015		
Cash	\$ 110,372	\$ 118,867	\$ 52,320		
Receivables	1,050,629	989,308	840,998		
Investments — at fair value	39,413,442	35,677,344	36,224,220		
Collateral from securities lending	3,916,225	3,078,231	2,792,751		
Other assets	17,667	16,104	14,879		
Total assets	44,508,335	39,879,854	39,925,168		
Accounts payable and other liabilities	1,416,339	1,489,644	1,973,888		
Securities lending	3,916,225	3,078,231	2,792,751		
Total liabilities	5,332,564	4,567,875	4,766,639		
Net position restricted for benefits	\$39,175,771	\$35,311,979	\$35,158,529		

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.

#### INVESTMENT SUMMARY

Investment Summary June 30, 2017 (In thousands)

Investments — At fair value:	QP	P	PSO	VSF	P	OVSF	C	ombined
Short-term investments:								
Comercial Paper	\$ 24	6,623	5	-	S		S	246,623
Short-term investment fund	21	8,581		-		8,551		227,132
Discount Notes		82	4,	755		-		4,755
Debt securities:								
U.S. Government and Agencies	4,05	4,628		252		15		4,054,643
Corporate other	3,64	7,570				-		3,647,570
Promissory Notes		27		300				*
Equity securities	6,51	8,200				2		0,518,200
Alternative investments	7,20	9,973		•		7.5		7,209,973
Collective trust funds:								
International equity	6,55	2,823	73,	.055		404,825		7,030,703
Domestic equity	6,78	5,844	79	630		444,732		7,310,208
Mortgage debt security	30	8,817						308,817
Treasury inflation protected securities	1,59	2,909		1		2		1,592,909
Fixed income	73	1,787	77,	417		452,707		1,261,911
Collateral from securities lending	3,85	3,421	9	,556		53,248		3,916,225
Total Investments	\$41,72	1,176	\$244	413	\$1.	364,078	\$4	3,329,667

#### INVESTMENT SUMMARY

Investment Summary June 30, 2016

(In thousands)

Investments — At fair value:		QPP		PSOVSF		POVSF		Combined	
Short-term investments:									
U.S. treasury bills and agencies	\$ 2	93,310	\$	258	\$	4,551	S	298,119	
Commercial paper		75,098		1,903		10,803		87,804	
Short-term investment fund	4	64,188		2,045		5,710		471,943	
Debt securities:									
U.S. government and agency	4,1	48,786		71,705		185,812		4,406,303	
Corporate other	2,7	21,403		48,075		138,700		2,908,178	
Equity securities	6,1	80,793						6,180,793	
Alternative investments	6,3	82,258				27.5		6,382,258	
Collective trust funds:									
International equity	5,4	02,281	- 1	14,821		338,978		5,856,080	
Domestic equity	5,8	03,115	2	10,014		612,597		6,625,726	
Mortgage debt security	3	02,440						302,440	
Treasury inflation protected securities	1,5	03,457		2				1,503,457	
Fixed income	6	56,243		2		127		658,243	
Collateral from securities lending	2,9	45,709		35,508		97,014		3,078,231	
Total investments	\$36,8	79,081	54	84,329	\$1.	392,165	\$3	8,755,575	

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 gained 18.51% and 2.14% in Fiscal Years 2017 and 2016, respectively. Also in 2017, the European, Australian, and Far East International Index gained 20.45%, but lost 10.24% in 2016. In Fiscal Year 2017, the Emerging International Market gained 23.75%, while in Fiscal Year 2016 it gained 12.05%. The returns of the Funds have been consistent with the broad market trend. For the three-year period ended June 30, 2017, the overall rate of return on investments was a gain of 8.19 %, for the five-year period the overall rate of return was a gain of 9.83%, and for the ten-year period there was a gain of 5.66%.

Assets are invested long-term for the benefit of the Funds participants and their beneficiaries. All investments are managed by registered investments advisors, pursuant to applicable laws and to guidelines issued by The Comptroller of the City of New York. Collectively, the investments utilize fifty-three domestic equity managers, twenty-six international equity managers, seventeen hedge fund managers, sixty-four private real estate managers, one real estate equity manager, seven infrastructure managers, one hundred sixty-seven private equity investments managers, and fifty-six fixed income managers.

Assets are allocated in accordance with policy adopted periodically by the Funds Boards 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 market 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 Acting Chief Accountant, New York City Police Pension Fund, 233 Broadway, 25th Floor, New York, NY 10279.

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# NEW YORK CITY POLICE PENSION FUNDS COMBINING STATEMENTS OF FIDUCIARY NET POSITION JUNE 30, 2017 (In thousands)

	QPP	P80V8F	POV8F	Eliminations	TOTAL Funds
ASSETS:					
Cash	\$ 107,908	\$ 584	\$ 1,880	1	\$ 110,372
Receivables					
Investment securities sold	694,085	17,802	100,709	*	812,596
Member loans (Note 6)	234,570			2	234,670
Transferrable earnings due from/to QPP to/from					
Variable Supplements Funds for FY 14,15, & 17	326,195	1,679,802	1,038,637	(3.044,634)	
Accrued interest and dividends	3,238	26	199	<del></del>	3,463
Total receivables	1,258,088	1,697,630	1,139,545	(3,044,634)	1,050,629
INVESTMENTS — At thir value (Notes 2 and 3):					
Short-term investments:					
Commercial paper	246,623	5.00	9 9	100	246,623
Short-term investment fund	218,581		8.551		227,132
Discount notes		4.755			4,755
Debt securities:		104(44)			Controlle
U.S. government and agency	4.054.628		15		4,054,643
Corporate and other	3,647,570				3,647,570
Equity securities	6,518,200	0.	9		6,518,200
Alternative investments	7,209,973	11.0			7,209,973
Collective trust funds:					
Fixed Income	731,787	77,417	452,707	¥	1,261,911
Domestic equity	6,785,844	79.630	444,732		7,310,208
International equity	6,552,823	73,055	404,825		7,030,703
Mortgage debt security	306,817			*	308,817
Treasury inflation protected securities	1,592,909				1,592,909
Collateral from securities lending	3,853,421	9.556	53,248		3,916,225
Total investments	41,721,176	244,413	1,364,078		43,329,667
OTHER ASSETS	17,667	:			17,667
Total assets	43,104,839	1,942,627	2,505,503	(3,044,634)	44,508,335
LIABILITIES:					
Accounts payable	468,980	64	290		469,334
Payable for investment securities purchased	556,363	17,795	100,608		674,766
Accrued benefits payable Transferable earnings due from/to QPP to/from.	84,111	112,389	75,739		272,230
Variable Supplementa Funda for FY 14,15 & 17	2.718.439	75,444	250.751	(3.044,634)	
Securities lending (Note 2)	3.853,421	9,656	53.248	(minor)	3,916,225
A CONTROL TO SERVICE OF CONTROL O	Anna Caraca	00000000			aja rojaza
Total liabilities	7,681,314	215,248	480,636	(3,044,634)	5,332,564
NET POSITION RESTRICTED FOR BENEFITS:					
Benefits to be provided by QPP	35,423,525		3 8		35,423,525
Benefits to be provided by VSF		1,727,379	2,024,867		3,752,246
Total net position restricted for benefits	\$ 35,423,525	\$ 1,727,379	\$ 2,024,867	5 .	\$ 39,175,771

# NEW YORK CITY POLICE PENSION FUNDS COMBINING STATEMENTS OF FIDUCIARY NET POSITION JUNE 30, 2016

(In thousands)

	(mr u	iousarius	-				_	
		QPP	P8OV8	F	POV8F	Eliminations		TOTAL Funds
ASSETS:								
Cash	3	116,153	\$ 86	3	\$ 1.851	5 -	5	118.86
Receivables:								
Investment securities sold		575.823	26.49	3	65.948	- 2		668.22
Member loans (Note 6)		251.861		-	-	-		251.86
Transferrable earnings due from/to QPP to/from								
Variable Supplements Funds FY 14 and 15		326,195	260.00	0	330.000	(916, 195)		
Accrued Interest and dividends	_	66.102	80	4	2.317		_	69.22
Total receivables		1.219.981	287.25	7	398.265	(916.195)	<u></u>	989.30
INVESTMENTS — At fair value (Notes 2 and 3):								
Short-term Investments:								
Commercial paper		75.098	1.90		10.803	92		87.80
Short-term Investment fund		454,188	2.04	_	5.710	-		471.94
U.S. treasury bills and agencies		293.310	2.04	7.7	4.551			298.11
Discount notes			25	•	4.201			250.11
Debt securities:		2.0			10.7	5.02		
U.S. government and agency		4.148.786	71.70	an a	185,812			4,405,30
Corporate and other		2.721.403	48.07	750	136,700	-		2.906.17
Eguity securities		6.180.793	40.01	7	130.700	1 8		6.180.79
Alternative investments		6.382.258						6.382.25
Collective trust funds:		D.304.430						0.302.20
Fixed income		656.243			3.2	92		656.24
Domestic equity		5.803.115	210.01	4	612.597			6.625.72
International equity		5.402.281	114.82	1	338.978	1 1		5.856.08
Mortgage debt security		302,440						302.44
Treasury Inflation protected securities		1.503.457		-				1.503.45
Collateral from securities lending	_	2.945.709	35.50	8	97.014		_	3.078.23
Total Investments	2	6.879.081	484.32	9	1.392.165			38.755.57
OTHER ASSETS	_	16.104		3			_	16.10
Total assets	2	8.231.319	772.44	9	1,792,281	(916.195)		39.879.85
LIABILITIES:								
Accounts payable		260.836	6.27	3	12.289	12		279.39
Payable for Investment securities purchased		837.047	19.76		48.023			904.83
Accrued benefits payable		115,117	113.70	9	76,586			305.41
Transferrable earnings due from/to QPP to/from								
Variable Supplements Funds FY 14 and 15		590.000	75.44	4	250.751	(916, 195)		
Securities lending (Note 2)	_	2.945,709	35.50	8	97.014		_	3.078.23
Total liabilities	_	4.748.709	250.69	8	484.663	(916.195)	<u></u>	4.567.87
NET POSITION RESTRICTED FOR BENEFITS:								
Benefits to be provided by QPP		3.482.610		-			19	33.482.610
Benefits to be provided by VSF	0.5		521.75	1	1.307,618	. 9	93	1.829.36
Total net position restricted for benefits	9.7	3.482.610	\$ 521.75	-	\$1,307,618	5 -	5	35.311.97
rotal fiet position restricted for denerits	4.2	w. 40£.01U	9.261.75		+ 1.207.018	-	4	25.211.37

# NEW YORK CITY POLICE PENSION FUNDS COMBINING STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED JUNE 30, 2017 (In thousands)

/	unou samu.	-,						
	QPP	P	8OV 8F		POV8F	Eliminations		TOTAL Funds
\$	276,301	\$		5	-	\$ .	3	276,301
	2,293,840	-		-			-	2,293,840
<u> </u>	2,570,141	. <del></del>		95	-	<del></del>		2,570,141
	400,562		1,878		7,892	-		410,332
	485,237		6,129		24,359			515,725
į,	3,418,739	_	32,326	E	134,327		-	3,585,394
	4,304,538		40,335		166,578	2		4,511,451
	(245,288)		(145)		(561)		-	(245,994
8.	4,059,250	_	40,190	8.0-	166,017		-	4,265,457
	22,034		216		792	-		23,042
W	(1,537)	<u> </u>	(14)	\ <u>_</u>	(54)		<u></u>	(1.605
<u></u>	20,497	_	202	_	738			21,437
	4,079,747		40,392		166,755			4,286,894
	2,450							2,450
	4				,			17000
	25.562	. 9	419.802		738,000	(2.183.364)		-
	7,931	-	52	) <del>-</del>	74			8,057
·	6,685,831		1,460,246	-	904,829	(2,183,364)	-	6,867,542
	2,571,999		254,618		158,216			2,984,833
					29,364	(2,183,364)		
Ö.	18,917	9				<del></del>	÷	18,917
<u> </u>	4,744,916	-	254,618	-	187,580	(2,183,364)	-	3,003,750
	1,940,915	3	1,205,628	ē	717,249	12		3,863,792
(*)	33,482,610	34	521,751	1	1,307,618		<u>.</u>	35,311,979
5	35,423,525	\$	1,727,379	\$	2,024,867	\$ -	3	39,175,771
		\$ 276,301 2,293,840 2,570,141 400,562 485,237 3,418,739 4,304,538 (245,288) 4,069,250 22,034 (1,537) 20,497 4,079,747 2,450 25,562 7,931 6,685,831 2,571,999 2,154,000 18,917	\$ 276,301 \$ 2,293,840	QPP         P80V8F           \$ 276,301         \$ -2,293,840           2,570,141         -           400,562         1,878           485,237         6,129           3,418,739         32,326           4,304,538         40,335           (245,288)         (145)           4,059,250         40,190           22,034         216           (1,537)         (14)           20,497         202           4,079,747         40,392           2,450         -           25,562         1,419,802           7,931         52           6,885,831         1,460,246           2,571,999         254,618           2,154,000         -           18,917         -           4,744,916         254,618           1,940,915         1,205,628           33,482,610         521,751	QPP         P80V8F           \$ 276,301         \$ 5           2,293,840         \$ 6,129           2,570,141         \$ 32,328           400,562         1,878           485,237         6,129           3,418,739         32,328           4,304,538         40,335           (245,288)         (145)           4,059,250         40,190           22,034         216           (1,537)         (14)           20,497         202           4,079,747         40,392           2,450         \$ 7,931           52         1,419,802           7,931         52           6,885,831         1,460,246           2,571,999         254,616           2,154,000         \$ 18,917           4,744,916         254,618           1,940,915         1,205,628           33,482,610         521,751	QPP         P80V8F         P0V8F           8         276,301         8         5         -           2,570,141         -         -         -           400,562         1,878         7,892         24,359           485,237         6,129         24,359         33,4327           4,304,538         40,335         166,578         (245,288)         (145)         (561)           4,059,250         40,190         166,017         -         -           22,034         216         792         -         -           (1,537)         (14)         (54)         -         -           20,497         202         738         -         -         -           2,450         -	QPP         P80V8F         POV8F         Eliminations           \$ 276,301         \$ \$ \$ \$ \$ \$         \$ \$           2,570,141	GPP         P80V8F         POV8F         Eliminations           5         276,301         \$         \$         \$         \$         3           2,570,141         -         -         -         -         -         -           400,562         1,878         7,892         -         <

# NEW YORK CITY POLICE PENSION FUNDS COMBINING STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED JUNE 30, 2016

(In thousands)

	(iii tiiousa	inusj			
	QPP	PSOVSF	POVSF	Eliminations	TOTAL Funds
ADDITIONS					
Contributions:					
Member contributions	\$ 249,921	s -	8 -	\$ -	\$ 249,921
Employer contributions	2,393,940		<del></del>		2,393,940
Total contributions	2,643,861				2,643,861
Investment income (Note 2):					
Interest income	416,038		11,930	1.6	433,009
Dividend income	449,480		25,507	3.7	484,994
Net appreciation in fair value of investments	(85,518	(122,997)	(170,921)		(379,436)
Total investment income	780,000	(107,949)	(133,484)	1.4	538,567
Less investment expenses	156,155	179	437		156,771
Net income	623,845	(108,128)	(133,921)		381,796
Securities lending transactions:					
Securities lending income	21,896		967		23,249
Securities lending fees	(1,423	(25)	(63)		(1,511)
Net securities lending income	20,473	361	904		21,738
Net investment income	644,318	(107,767)	(133,017)	12	403,534
Net receipts from other retirement systems	3,786		-		3,786
Reimbursement of benefit payments from QPP Transferrable earnings to QPP from Variable	8		2	1.5	
Supplements Funds FY 14 and 15	326,196		2	(326, 195)	
Litigation income	2,693	130	147		2,970
(2007) (72400)	0.000.000	1400 000	1400 0001	dame agent	
Total additions	3,620,853	(107,637)	(132,870)	(326,195)	3,054,151
DEDUCTIONS:					
Benefit payments and withdrawals (Note 1) Amounts transferred to Variable Supplements Funds	2,475,738	249,790	156,695		2,882,223
Transferrable earnings from QPP to Variable					
Supplements Funds FY 14 and 15		75,444	250,751	(326,195)	au uni
Administrative expenses	18,478				18,478
Total deductions	2,494,216	325,234	407,446	(326,195)	2,900,701
NET INCREASE IN NET POSITION	1,126,637	(432,871)	(540,316)	100	153,450
NET POSITION RESTRICTED FOR BENEFITS					
Beginning of year	32,355,973	954,522	1,847,934		35,158,529
End of year	\$ 33,482,610	\$ 521,751	\$ 1,307,618	\$ -	\$ 35,311,979

#### 1. PLAN DESCRIPTION

The City of New York ("City") maintains a number of pension 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 Fund ("POLICE" or "Funds"), 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 are 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, and 3, 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, a 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).

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, 2015 and 2014, the dates of the QPP's most recent completed actuarial valuations, the QPP's membership consisted of:

2015	2014
48,703	48,212
546	572
1,484	1,369
34,435	34,402
85,168	84,555
	48,703 546 1,484 34,435

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

At June 30, 2016 and 2015, the dates of the VSFs' most recent actuarial valuations, the PSOVSF and POVSF membership consisted of:

	PSOV	SF	POVS	F
	2016	2015	2016	2015
Retirees currently receiving payments	18, 357	18,029	12,418	12,367
Active members**	12, 276	12,273	23,685	22,162
Total	30,633	30,302	36,103	34,529

<sup>\*\*</sup> 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, and Tier 6 (Tier 3 Revised). Membership is mandatory for uniformed employees of the New York City Police Department.

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 the or she is entitled to is increased by the actuarial value of any Excess of Contributions or reduced by any Deficiency of Contributions. The collective value of Required Amount, Actual Balance, and outstanding member loans, as of June 30, 2017, is as follows:

	TIER 1	TIER 2	TIER 3		Total
Required Amounts	\$	\$ 1,253,510,673	\$ 92,994,324	S	1,346,504,997
Account Balances	\$ 629,690	\$ 2,943,485,398	\$ 93,375,776	S	3,037,490,862
Outstanding Loans	\$ 14.095	\$ 227.580.298	\$ -	S	227.594.393

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

Cost of Living Adjustments ("COLA") are automatically payable to members who are either: (1) at least age 62 and have been retired for at least 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 6 or Tier 3 Revised.

For Tier 3/Tier 3 Revised 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 a Non-Enhanced member who has at least 5 years
  of service and is in receipt of Social Security Disability Benefits. An ODR benefit is 1/3 of Final
  Average Salary or 2% of Final Average Salary for each year of credited service, whichever is
  greater and does not exceed 50% of Final Average Salary. The ODR retirement allowance for
  Enhanced Members is described on page 44.
- An ADR retirement allowance is payable to a Non-Enhanced member who was disabled as the
  result of a line-of-duty accident not attributable to his own willful negligence. An ADR pension is
  50% of a member's Final Average Salary. The ADR retirement allowance for Enhanced
  Members is described on page 44.

All of the above 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.

#### **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 proreted. 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.

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.

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

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

Investment Valuation — Investments are reported at fair value. Securities purchased pursuant to agreements to resell are carried at the contract price, exclusive of interest, at which the securities will be resold. Fair value is defined as the quoted market value on the last trading day of the period,

except for the Short-Term Investment Fund ("STIF") (a money market fund), International Investment funds ("IIF") and Alternative Investment funds ("ALTINVF"). The IIF are private funds of publicly traded securities which are managed by various investment managers on behalf of the Funds. Fair value is determined by POLICE management based on information provided by the various investment managers. The investment managers determine fair value using the last available quoted price for each security owned adjusted by any contributions to or withdrawals from the fund during the period. The ALTINVF are investments for which exchange quotations are not readily available and are valued at estimated fair value as determined in good faith by the General Partner ("GP"). These investments are initially valued at cost with subsequent adjustments that reflect third party transactions, financial operating results and other factors deemed relevant by the GP. Fair value is determined by POLICE management based on information provided by the various GPs after review by an independent consultant and the custodian bank for the Funds.

Purchases and sales of securities are reflected on the trade date. Dividend income is recorded on the ex-dividend date. Interest income is recorded as earned on 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, 2017 and 2016, management believes that the Funds had no credit risk exposure to borrowers because the amounts the Funds owed the borrowers equaled or exceeded the amounts the borrowers owed the Funds. The contracts with the Funds' Custodian require the Securities Lending 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 90 days. 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, 2017 and 2016 was \$3.8 billion and \$2.9 billion, respectively for the QPP, \$9.6 million and \$35.5 million respectively for the PSOVSF, and \$53.2 million and \$97 million, respectively for the POVSF. Cash collateral received related to securities lending as of June 30, 2017 and 2016 was \$3.9 billion and \$2.9 billion, respectively for the QPP, \$9.6 million and \$35.5 million, respectively for the PSOVSF, and \$53.2 million and \$97.0 million, respectively for the POVSF.

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

## 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 asset allocation targeted for the Funds in Fiscal Years 2017 and 2016 included securities in the following categories:

	2017	2016
U.S. Equity	34.9 %	35.7 %
Core U.S. Fixed	15.9	17.1
EAFE Markets	10.3	9.5
Private Equities	6.2	6.9
Emerging Market	6.6	5.9
Enhanced Yield Bonds	4.7	4.0
Real Assets	4.4	4.9
Infrastructure	0.4	0.0
Hedge Funds	5.4	3.9
REITS	0.3	0.6
TIPS	4.2	4.5
Opportunistic Fixed	2.7	2.8
Cash	0.7	1.0
Bank loans	1.6	1.7
ETI	1.0	1.1
Convertible Bonds	0.7	0.4
Total	100.0 %	100.0 %

Concentrations — None of the Funds have any investments in any one entity that represent 5% or more of their fiduciary net position.

Credit Risk — Portfolios, other than U.S. Government and related portfolios, have credit rating limitations. Investment Grade portfolios are limited to mostly ratings of BBB and above except that they are also permitted a 10% maximum exposure to BB & B rated securities. While non-investment grade managers primarily invest in BB & B rated securities, they can also invest up to 7% of their portfolio in securities rated CCC. Non-rated securities are considered to be non-investment grade. The quality ratings of the Funds' investments, by percentage of the rated portfolio, as described by nationally recognized statistical rating organizations, at June 30, 2017 and 2016, are as follows:

				M	oody's Qua	lity Rating	5			
Investment Type *							& 200	Short	Not	
June 30, 2017	AAA	AA	A	BBB	BB	В	Below	term	Rated	Total
U.S. Government	37.69 %	0.08 %	0.08 %	0.17 %	0.00%	0.00 %	0.00 %	0.00 %	12.00 %	50.02 %
Corporate bonds	0.54	0.81	4.62	12.98	9.51	9.79	2.20	-	4.57	45.00
Yankee bonds	100	ės:	8.7	<b>*</b> 2		200	*	25	200	25
Short-term:										
Commercial paper	50						+		3.05	3.05
Pooled funds	26			2					1.93	1.93
U.S. Treasuries/Agencies		<u>.</u> .	<u></u>				<u>.</u> .	<u> </u>	<u> </u>	
Percent of										
related portfolio	38.23 %	1.89 %	4.70 %	13.13 %	9.51 %	9.79 %	2.20 %	0.00 %	21.55 %	100.00 %
					foody's Qua	ality Ratin	gs			
Investment Type*	37						CCC &	Short	Not	
June 30, 2016	AAA	AA	A	BBB	BB	В	Below	term	Rated	Total
U.S. Government	13,16 %	0.19 %	0.20 %	0.38 %	0.05 %	0.00 9	0.00 %	0.00 %	25.83 %	39.79 %
Corporate bonds	1.20	1.78	8.43	19.62	8.91	6.72	2.82		4.24	53.52
Yankee bonds									+6	
Short-term:										
Commercial paper	28					-	85		1.08	1.08
Pooled funds	×	0000		5.4	*	106	*5	196	4.89	4.89
U.S. Tressuries/Agencies		•		•	<u>·</u>	•	_		0.72	0.72
Percent of										
related portfolio	14.38 %	1.97 %	8.63 %	19.98 %	8.98 %	6.72 9	2.62 %	0.00 %	38.78 %	100.00 %

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

Custodial Credit Risk — Deposits are exposed to custodial credit risk if they are uninsured and uncollateralized. Custodial credit risk, is the risk that in the event of a failure of the counterparty, 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 uninsured, 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 and collateralized by securities held by a financial institution separate from the Funds' depository financial institution.

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Interest Rate Risk — Interest rate risk is the risk that the fair value of investments could be adversely affected by the change in interest rates. Curation limits are used to control the portfolios exposure to interest rate changes. In the investment grade core fixed income portfolios duration is limited to a range of one year shorter than the benchmark duration to 0.89 years longer than the duration of the benchmark indices. Duration range is a measure of the overall portfolio, while statements of the stated maturity reflect the specific maturities of the individual securities held. The Funds have no formal risk policy. The lengths of investment maturities (in years) of the Funds' investments, as shown by the percent of the rated portfolio, at June 30, 2017 and 2016, are as follows:

Years	to	Ma	tu	rity

Years to Maturity		Inve	stment Maturiti	es (in years)	
Investment Type	Fair	Less Than	One to Five	Six to Ten	More Than
June 30, 2017	Value	One Year	Years	Years	Ten Years
U.S. Government	50.02 %	(0.17)%	9.91 %	10.22 %	30.06 %
Corporate bonds	45.00	1.30	12.87	21.37	9.46
Short term:					
Commercial paper	3.05	3.05	75	2	727
Pooled fund	1.93	1.93	23		
U.S. Treasuries/Agencies			×		× .
Discount Notes	7.00				- 100
Percent of rated portfolio	100.00 %	6.11 %	22.78 %	31.59 %	39.52 %
Years to Maturity		Inve	estment Maturiti	es (in years	
Investment Type	Fair	Less Than	One to Five	Six to Ten	More Than
June 30, 2016	Value	One Year	Years	Years	Ten Years
U.S. Government	39.80 %	0.56 %	3.71 %	7.09 %	28.44 %
Corporate bonds	53.51	1.30	16.60	21.73	13.88
Short term:					
Commercial paper	1.08	1.08	0.00	80700	0.570
Pooled fund	4.89	4.89	-		
U.S. Treasuries/Agencies			2		
Discount Notes	0.72	0.72			
Percent of rated portfolio	100.00 %	8.55 %	20.31%	28.82 %	42.32 %

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 have proven to be good diversifiers in a total portfolio context; therefore, the Funds have numerous managers that invest globally. In general, currency exposure is viewed as a benefit for its diversification reasons and not as an inherent risk within the portfolio. The Funds have no formal risk policy. In addition, the Funds have investments in foreign stocks and/or bonds denominated in foreign currencies. Foreign currency exposures of the Funds' investments as of June 30, 2017 and 2018, are as follows:

Trade Currency (In Thousands of U.S. dollars)	June 30, 2017 Fair Value	June 30, 2016 Fair Value
Euro Currency	\$ 1,381,966	\$ 1,142,122
Japanese Yen	826,415	743, 161
British Pnd Sterling	693,998	648,041
Hong Kong Dollar	741,411	555,495
South Korean Won	423,255	328,725
Swiss Franc	358,538	340,232
Talwan New Dollar	335,233	238,143
Indian Rupee	275,421	212,471
Australian Dollar	153,866	150,525
Brazilian Real	145,161	126,458
South African Rand	162,324	138,347
Swedish Krona	119,909	92,594
Malaysian Ringgit	63,485	60,366
Mexican Peso (NEW)	83,942	69,887
Singapore Dollar	57,510	52,156
Thal Baht	80,469	59,242
Canadian Dolar	151,605	48,048
Indonesian Ruplah	69,321	54,854
Danish Krone	99,561	70,343
Pollsh Zloty	42,720	32,349
Chilean Peso	25,768	20,832
Norwegian Krone	37,196	28,215
Philippines Peso	34,836	31,809
Turkish Lira	54,646	37,709
Hungarian Forint	8,824	6,509
Colombian Peso	12,690	9,853
Egyptian Pound	5,481	6,068
Czech Koruna	6,134	5,208
Qatar Riai Kuwait Dinar	15,249 7,662	14,618 5,304
UAE Dirham	14,888	12,710
Israeli Shekel	15,583	10,872
Pakistan Rupee	7,256	4,655
Moroccan Dirham	2,673	2,579
PeruMan Nuevo Sol	1,641	1,594
Renminbi Yuan	103	699
Botswana Pula	1.208	1,281
Croatla Kuna	2,635	2,579
Jordanian Dinar	2.735	2,102
Kenyan Shilling	3,371	2,113
Mauritius Rupee	2.809	2.228
New Zealand Dollar	7,519	6,520
Nigerian Naira	1.481	1,446
Omani Riai	2.509	2.349
Romanian Leu	3,259	2,536
Russian Rubie	1,662	1,659
Ghana Cedi	692	557
Tunisian Dinar	1,120	898

Securities Lending Transactions: Credit Risk — The quality ratings of investments held as collateral for Securities Lending by the Funds at June 30, 2017 and 2018, are as follows:

investment Type and Pair Value of Secunities Lending Tremections										ower.								
(in Thousands)	AAA+	-	AA+ &	_				- 51	2" Qualif	y Hat	RRR+ 7	155+	-	CO	1 10	_	N-4	_
June 30, 2017	tiela		AA+ &		A4-	A	•	A	A-		Dalow Delow	Belo		Bel			Not lated	lotal
Sovemment						1			1		١.							ş .
Corporate bonds			7				2	* E	*		:	•		•		*	100	S
Cartoni					- 0		- 33			8	- 3		*		13		10	- 9
Short-ferm													-					
Repurchase Agreements				200							- 2							- 8
layerse Repurchase Agreements		•			429,907	4.00	2.858	773,602	935	non	30,000						862,650	3,623,777
Certificate of deposits					422,907	1,000	2.00.00	110,000	9.80	une.	20/00/		٥				964,500	3/804/11
Commercial paper		8					- 63			3	- 3		×				31	3
Money Market Funds					- 3		- 8			8								0
Back notes					- 0		- 0	- 10		8	- 3		Ů		10		117	- 6
U.S. Teasury		G.		Œ.			- 80			å	- 0		٠				- 15	- 8
		. 4					14.5								7.0			
U.S. agency		1		8	7		3								10			
Time diposit		*		82		95											- 87	200 000
Cash or Cash Equivalent					14	30	0,308										1750	390,306
Payable Receivable		(*)			3		*			8	- 13				100		821	821
Uninvented	95	140		-			4		_	-	_	_	-	_	19		1,319	1,319
Total	1	123	1	3	429,997	\$ 1.48	3.166	\$ 773,902	\$ 635.	000	\$ 30,000	1		i	10	1	664,790	\$ 3,916,226
	(0)	7	7	55		(F)			523		1776		3		=		16.68 %	
	*	5	. 1		10.97 %	97	EV %	19.75%	13.6	8%	0.77 %		*		7.	_	10.00 %	100,00 %
Percent of securities landing porticle Investment Type and Pair Value of Securities Landing Transactions (in Thousands)		×	. 1	_	10.97 %	27	ST %	-12 ×		Vie	20 - 20	+	*	•	7.		10.90 %	100.00%
nvestment Type and her Value of Securities Lending Tremactions	AAA		AA+ G	_	10.97 %	27	87 %.	-12 ×	136 P Quali	Vie	20 - 20	555+	V				Not.	100.00%
meatment type and her Value of Securities Landing Transactions in Thousands)	AAA**	· a.	1.0	_	10.97 %		ST-S	-12 ×		Vie	anilin.	90			: AS	_		lotal
meedment type and her Velue of Securities Lending Tremections in Thousends) ture 38, 2016		· a.	AA+ &	-			ST-S	-12 ×		Vie	RAR+ ?	55+		co	: AS	1	Not	
mediment type and her Velue 4 Securities Lending Tremactions in Thomsends) une 38, 2016 Communit	tielo	· a.	AA+ &	in the	**			Si A	e' Quale	Vie	tinge BBB+ & Below	SS+ Selo		CO	: AS		Not bried	lotal
nvestment Type and her Value  f Securities Lending Transactions in Thousands)  bere 38, 2016  Societies Londing  Societies Lond	tielo	· a.	AA+ &	in the	**			Si A	e' Quale	Vie	tinge BBB+ & Below	SS+ Selo		CO	: AS		Not bried	lotal
meedment type and her Velue it Securities Lending Transactions in Thousands ture 38, 2016 Somment Coponie bords	tielo	· a.	AA+ &	in the	**			Si A	e' Quale	Vie	tinge BBB+ & Below	SS+ Selo		CO	: AS		Not tuted	lotal
nveolment type and her Velue it Securities Lending Trensactions in Thousands) ture 38, 2016 Societient Corposite bonds farfass Rod form	tielo	· a.	AA+ &	in the	**			Si A	e' Quale	Vie	tinge BBB+ & Below	SS+ Selo		CO	: AS		Not tuted	lotal
nveolment type and their Value of Securities Lending Trensactions in Thousands)  ture 38, 2016  Society and Societ	tielo	· a.	AA+ &		**			\$	e' Quale	Vie	tinge BBB+ & Below	SS+ Selo		CO	: AS		Not tuted	lotal
nvestment type and her Value of Securities Lending Tremections in Thousands)  Soverment Coponie bords Anthon Bouthern Reguerhee Agreements	tielo	· a.	AA+3 AA+3		*			\$	e' Quale	Vie	BBB+ & Below	SS+ Selo		CO	: AS		Not Authorid	lotal S -
nvestment type and her Value of Securities Lending Tremections in Thousands)  Soverment Corporals bonds Port-form Rost-form Ro	tielo	· a.	AA+3		136,599		7.203	\$	e' Quale	Vie	BHH+ & BHH+ & BHIGH	SS+ Selo	*	CO	C SE		Not behed	total
meadment Type and her Value & Securities Lending Trensactions in Thousends bone 39, 2016  Soverment Corporate bonds fantase Southern lequities Agreements Certificate of deposits Commission Certificate of deposits Commission	twic	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	AA+3		136,599		7.203	\$	e' Quale	Vie	BHH+ & BHH+ & BHIGH	SS+ Selo	*	CO	C SE		Not **Sete d	total
investment Type and her Velue of Securities Lending Transactions in Thousands  Southern 39, 2016  Southinest Corporate bonds  Fortices: Routeen Agreements  Routees Agreements  Community Opports  Community Departments  Community Departments  Community Department  Money Market Funds	tielo	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	AA+3		136,599		7.203	\$	e' Quale	Vie	Biller & Beller & Beller & Beller & Beller & Beller	SS+ Selo		CO	C SC		Not beted	lotal \$ 2,674,366
investment type and her Velue of Securities Lending Tremactions in Thousands for Lending Tremactions in Thousands for Lending Comment Corporate bonds for deem Rost-feem Repurchase Agreements Commental paper Money Market Funds Bank native	twic	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	AA+3		136,599		7.203	\$	e' Quale	Vie	Biller & Beller & Beller & Beller & Beller & Beller	SS+ Selo		CO	C SC		Not **Sete d	1 otal 5 - 2.674.356
revolution of type and their Value of Securities Lending Transactions in Thousands to Thousands Comment Corporate bonds Indiana Post-from Legundees Agreements Continues of Reportants Continues Continues of Reportants Continues Money Market Funds Bank notice U.S. Treasury	twic	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	AA+3		136,599		7.203	\$	e' Quale	Vie	HISTORY  BUILTY & Deligner  \$	SS+ Selo	*	CO	C ME		Not beted	lotal \$ 2,674,366
meetiment Type and their Value  et Securities Lending Transactions in Thousands  format  Comment  Comment  Comment  India  Portners  Repurches Agreements  Certificate  Comment of deposits  Comment of deposits  Comment of paper  Maney Market Funds  Bank natins  U.S. Tousany  U.S. Tousany  U.S. agency	twic	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	AA+3		136,599		77.203	\$	e' Quale	Vie	Biddle & Below	SS+ Selo		CO	C SC		Not beted	lotal \$ 2,674,366
Investment Type and Pair Value  2 Securities Lending Transactions in Thousands  Social Securities  Social Se	twic	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	AA+3		136,599		77.203	\$	e' Quale	Vie	Biddle & Below	SS+ Selo		CO	C SC		Not beted	2,674,356 88,790 8,000
investment Type and her Value  & Securities Lending Transactions in Thousands  Society 12, 2016  Socie	twic	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	AA+3		136,599		77.203	\$	e' Quale	Vie	Biddle & Below	SS+ Selo		CO	C SC		Not Oathed - 564.653	2,674,356 88,790 8,009
investment Type and her Value of Securities Lending Transactions in Thousands Southers Corporate bonds Annias Southers Repurchase Agreements Corporate bonds Corporate bonds Corporate bonds Corporate of deposits U.S. Todalary U.S. agency Thus deposit Coats Payastral Receivable	twic	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	AA+3		136,599		77.203	\$	e' Quale	Vie	Biddle & Below	SS+ Selo		CO	C SC		Not beted	2,674,356 88,790 8,000
Investment Type and her Value of Securities Lending Transactions (in Thousands)  June 38, 2016  Government Corporals bonds Various Short-feen Reverse Reprenents Reverse Repurchase Agreements Continues of deposits Conversed paper Money Market Funds Baris noise U.S. Transary U.S. agency Time deposit	twic	790	AA+3		136,599	47	77,203	\$	A. S	y Hat	Biddle & Below	SS+ Selo		CO	C SC		Not (bahad 564.653 8.638	1 otal \$ 2.674.366 88,790 8.009  904.167

Interest Rate Risk — The lengths of investment maturities (in years) of the collateral for Securities Lending held by the Funds at June 30, 2017 and 2016, are as follows:

Investment Type										
(In Thousands)			Inv	ve stm	ent Matu	ıritles (I	n years	)		
	Fal	r	Less T	han	One to	o Five	81x to	Ten	More	Than
June 30, 2017	Valu	10	One Y	ear	Ye	are	Ye	are	Ten '	Years
U.S. government	8		8						8	
Corporate bonds		171		377		370		.20		0.5
Yankee bonds										
Short-term:										
Repurchase agreements		-				1.0				3
Reverse repurchase agreements	3,522	,777	3,523	,777						
Certificate of deposits		-				11.				
Commercial paper										
Money Market Funds										
Bank Notes		-						+		
U.S. Treasury		223		27		100		1071		
U.S. Agencies		2								
Time Deposit		*				((**)		(24.0)		
Cash or Cash Equivalent	390	308,	390	,308						
Uninvested	20.00	140	2	,140						· •
Total	\$ 3,916	,225	\$ 3,916	,225	8	-	8	-	8	-
Percent of securities lending portfolio	100	00 %	100.	00 %		96		96	_	- %
	910		4.00				111		111	
towards and Toward										
			Į.			14a /1		v.		
	E-1				ont Matu				More	Then
(In thousands)	Fai Valu	The same	Less T	han	One t	urities (I o Five ars	81x t	) o Ten		Than
(In thousands) June 30, 2018	200	The same	Less T	han	One to	o Five	81x t	o Ten	Ten '	
(In thousands) June 30, 2018 U.S. government	200	The same	Less T	han	One t	o Five	81x t	Ten ars		
(In thousands) June 30, 2018 U.S. government Corporate bonds	200	The same	Less T	han	One to	o Five	81x t	o Ten	Ten '	
(In thousands) June 30, 2018 U.S. government Corporate bonds Yankee bonds	200	The same	Less T	han	One to	o Five	81x t	Ten ars	Ten '	Years - -
(In thousands) June 30, 2018 U.S. government Corporate bonds Yankee bonds Short-term:	200	The same	Less T	han	One to	o Five	81x t	Ten ars	Ten '	Years - -
(In thousands) June 30, 2018 U.S. government Corporate bonds Yankee bonds Short-term: Repurchase agreements	Valu S		Less Ti One Y	han 'ear - -	One to	o Five	81x t	Ten ars	Ten '	Years - -
(In thousands) June 30, 2018 U.S. government Corporate bonds Yankee bonds Short-term: Repurchase agreements Reverse repurchase agreements	200		Less T	han 'ear - -	One to	o Five	81x t	Ten ars	Ten '	Years - -
(In thousands)  June 30, 2018  U.S. government Corporate bonds Yankee bonds Short-term: Repurchase agreements Reverse repurchase agreements Certificate of deposits	Valu S		Less Ti One Y	han 'ear - -	One to	o Five	81x t	Ten ars	Ten '	Years - -
(In thousands)  June 30, 2018  U.S. government Corporate bonds Yankee bonds Short-term: Repurchase agreements Reverse repurchase agreements Certificate of deposits Commercial paper	Valu \$ 2,674	1,356	Less Ti One You	han ear	One to	o Five	81x t	Ten ars	Ten '	Years - -
(In thousands)  June 30, 2018  U.S. government Corporate bonds Yankee bonds Short-term: Repurchase agreements Reverse repurchase agreements Certificate of deposits Commercial paper Money Market Funds	Valu \$ 2,674	1,356	Less T' One Y' \$ 2,674	han 'ear - - -,356 -	One to	o Five	81x t	Ten ars	Ten '	Years - -
(In thousands)  June 30, 2018  U.S. government Corporate bonds Yankee bonds Short-term: Repurchase agreements Reverse repurchase agreements Certificate of deposits Commercial paper Money Market Funds Bank Notes	Valu \$ 2,674	1,356	Less T' One Y' \$ 2,674	han ear	One to	o Five	81x t	Ten ars	Ten '	Years - -
(In thousands) June 30, 2018 U.S. government Corporate bonds Yankee bonds Short-term: Repurchase agreements Reverse repurchase agreements Certificate of deposits Commercial paper Money Market Funds Bank Notes U.S. Treasury	Valu \$ 2,674	1,356	Less T' One Y' \$ 2,674	han 'ear - - -,356 -	One to	o Five	81x t	Ten ars	Ten '	Years - -
(In thousands) June 30, 2018 U.S. government Corporate bonds Yankee bonds Short-term: Repurchase agreements Reverse repurchase agreements Certificate of deposits Commercial paper Money Market Funds Bank Notes U.S. Treasury U.S. Agencies	Valu \$ 2,674	1,356	Less T' One Y' \$ 2,674	han 'ear - - -,356 -	One to	o Five	81x t	Ten ars	Ten '	Years
(In thousands) June 30, 2018 U.S. government Corporate bonds Yankee bonds Short-term: Repurchase agreements Reverse repurchase agreements Certificate of deposits Commercial paper Money Market Funds Bank Notes U.S. Treasury U.S. Agencies Time Deposit	Valu 8 2,674 88	1,356 3,790 3,039	2,674	,356 ,790	One to	o Five	81x t	Ten ars	Ten '	Years - -
(In thousands) June 30, 2018 U.S. government Corporate bonds Yankee bonds Short-term: Repurchase agreements Reverse repurchase agreements Certificate of deposits Commercial paper Money Market Funds Bank Notes U.S. Treasury U.S. Agencies Time Deposit Cash	Value 8 2,674 88 8	3,790 3,790 3,039	2,674	,356 ,790 ,039	One to	o Five	81x t	Ten ars	Ten '	Years
June 30, 2018 U.S. government Corporate bonds Yankee bonds Short-term: Repurchase agreements Reverse repurchase agreements Certificate of deposits Commercial paper Money Market Funds Bank Notes U.S. Treasury U.S. Agencies Time Deposit Cash Uninvested	2,674 88 88 88	3,790 3,790 3,039	2,674 88 2,674	,356 ,790 ,039	One to	o Five ars	Bix to	o Ten arg	Ten '	Years
(In thousands) June 30, 2018 U.S. government Corporate bonds Yankee bonds Short-term: Repurchase agreements Reverse repurchase agreements Certificate of deposits Commercial paper Money Market Funds Bank Notes U.S. Treasury U.S. Agencies Time Deposit Cash	2,674 88 83 304 3 3,078	3,790 3,790 3,039	2,674 38 304 2 5 3,078	,356 ,790 ,039	One to	o Five arg	81x t	Ten ars	Ten '	Years

Rate of Return — For the years ended June 30, 2017 and 2016, the annual money-weighted rate of return on investments, net of investment expense, for the Funds were as follows:

	2017	2016
QPP	13.19 %	1.18 %
PSOVSF	12.85 %	(1.06)%
POVSF	13.80 %	(0.33)%

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

The 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, 2017 and June 30, 2016:

GA	SB	72	Di	scl	050	re

(In thousands)		20	17	
	Level	Level	Level	
	One	Two	Three	Total
INVESTMENTS — At fair value				
Short-term investments:				
Commercial paper	s -	\$ 246,623	\$ -	\$ 246,623
Short-term investment fund		227,132	-	227,132
U.S. treasury bills		4,755	40	4,755
Debt securities:				
U.S. government and agency		4,054,642	20	4,054,642
Corporate and other		3,553,382	94,189	3,647,571
Equity securities	6,517,400		800	6,518,200
Alternative investments			5,177,709	5,177,709
Mutual funds - international equity	0.00	*	***	
Collective trust funds:				
International equity	6,993,980	35,514	1,209	7,030,703
Fixed income		649,616	612,295	1,261,911
Domestic equity	7,310,206	•	•8	7,310,206
Mortgage debt security		55,363	253,454	308,817
Treasury inflation protected securities		1,592,909	*5	1,592,909
Collateral from securities lending		3,916,225		3,916,225
Total investments at fair value	\$20,821,586	\$14,336,161	\$6,139,656	41,297,403
Alternative investments valued at net asset value				2,032,264
Total investments				\$43,329,667

GASB 72 Disclosure						
(In thousands)	Level	Level 20	2016			
	One	Two	Level Three	Total		
	One	140	imee	Total		
INVESTMENTS — At fair value						
Short-term investments:						
Commercial paper	\$ -	\$ 87,804	5 -	\$ 87,804		
Short-term investment fund		471,943		471,943		
U.S. treasury bills		298,119	32	298,119		
Debt securities:						
U.S. government and agency		4,298,339	107,964	4,406,303		
Corporate and other		2,906,178		2,906,178		
Equity securities	6,180,793	*		6,180,793		
Alternative investments		*	4,859,262	4,859,262		
Collective trust funds:						
International equity	5,748,930	107,150		5,856,080		
Fixed income	3,866	103,503	548,874	656,243		
Domestic equity	6,624,356	1,370		6,625,726		
Mortgage debt security		56,392	246,048	302,440		
Treasury inflation protected securities		1,503,457		1,503,457		
Collateral from securities lending		3,078,231		3,078,231		
Total investments at fair value	\$18,557,945	\$12,912,488	\$5,762,148	37,232,579		
Alternative investments valued at net asset value				1,522,996		
Total investments				\$38,755,575		

## **Equity and Fixed Income Securities**

Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets issued by pricing vendors for these securities. Debt and equity securities classified in Level 2 of the fair value hierarchy are valued using prices determined by the use of matrix pricing techniques maintained by the various pricing vendors for these securities. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Debt and equity securities classified in Level 3 are securities whose stated market price is unobservable by the market place, many of these securities are priced by the issuers or industry groups for these securities. Fair value is defined as the quoted market value on the last trading day of the period. These prices are obtained from various pricing sources by our custodian bank. Debt and equity securities held in Collective Trust Funds are held in those funds on behalf of the pension system and there is no restriction on the use and or liquidation of those assets for the exclusive benefit of the funds participants.

#### Alternative Investments

Alternative investments include Private Equity, Real Estate, Opportunistic Fixed Income and Infrastructure Investments. These are investments for which exchange quotations are not readily available and are valued at estimated fair value, as determined in good faith by the General Partner (GP). These investments are initially valued at cost with subsequent adjustments that reflect third party transactions, financial operating results and other factors deemed relevant by the GP. The assets in our alternative investment program are classified as Level 3 assets. A more detailed explanation of the Level 3 valuation methodologies follows:

Investments in non-public equity securities are valued by the GP using one or more valuation methodologies outlined in ASC 820, depending upon the availability of data required by each methodology. In some cases, the GP may use multiple approaches to estimate a valuation range. For the immediate time period following a transaction, the determination of fair value for equity securities, in which no liquid trading market exists, can generally be approximated based on the transaction price (absent any significant developments). Thereafter, or in the interim, if significant developments relating to such portfolio company or industry occur which may suggest a material change in value, the GP should value each investment by applying generally accepted valuation methods including; (1) the market approach (such as market transaction and comparable public company multiples, which are based on a measurement of the company's historical and projected financial performance with typical metrics including enterprise value/latest 12 months EBITDA or projected fiscal year EBITDA) or (2) the income or discounted cash flow approach.

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

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

In accordance with the scope of paragraphs 820-10-15-4, alternative investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient in paragraph 820-10-35-59 have not been classified in the fair value hierarchy. The fair value quantities presented in the table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the entity's financial statements.

Certain alternative investments have additional future commitments. Others have redemption notice requirements and redemption restrictions. Management does not believe these commitments, notice requirements, and redemption restrictions have a material effect on the fair value of the portfolio of investments.

#### 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 Accumulated Benefit Obligation ("ABO") for each VSF. Excess earnings are defined as the amount by which earnings on equity investments of the QPP exceed what 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 2017, the excess earnings of the QPP, inclusive of prior years' cumulative deficiencies, are estimated to be equal to \$3,044 million. After application of the ABO Gate, a liability and transfer of \$738 million to POVSF and a liability and transfer of \$1,416 million to PSOVSF have been reported by the QPP as of and for the year ended June 30, 2017, respectively.

For Fiscal Year 2016, the excess earnings of the QPP, inclusive of prior years' cumulative deficiencies, were estimated to be equal to \$0 and, therefore, no transfer of assets was required from the QPP to the VSFs.

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 ABO, 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. The ABO is calculated as the actuarial present value of credited projected benefits, prorated on service and is intended to help users assess the funded status of the 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 ABO as calculated by the Funds' Chief Actuary of the Office of the Actuary (the "Actuary") with the net position restricted for benefits for the POVSF and the PSOVSF as calculated by the Actuary as of June 30, 2016 and June 30, 2015, follows:

	Р	OVSF	PSC	OVSF
	2016	2015	2016	2015
		(in m	illions)	
Accumulated benefit obligation for:				
Retirees currently receiving benefits	\$ 1,475.9	\$ 1,473.4	\$ 2,232.9	\$ 2,203.6
Active members	522.5	321.0	1,180.8	1,146.7
Total accumulated benefit obligation $^{2,3}$	1,998.4	1,994.4	3,413.7	3,350.3
Net position held in trust for benefits <sup>4</sup>	1,307.6	1,347.9	521.8	954.6
Unfunded accumulated benefit obligation	\$ 690.8	\$ 146.5	\$ 2,891.9	\$ 2,395.7

- Based on actuarial assumptions adopted by the Board of Trustees of the QPP during Fiscal Year 2012 with revisions adopted during Fiscal Year 2016.
- The June 30, 2016 and the June 30, 2015 ABOs for POVSF decreased by approximately \$28.1 million and \$26.8 million, respectively, and the June 30, 2016 and the June 30, 2016 ABOs for PSOVSF decreased by approximately \$39.7 million and \$39.2 million, respectively, compared to those projected prior to the enactment of Chapters 119/95, 390/98 and 125/00.
- These total ABOs have been reduced by accrued benefits payable. This basis of reporting the total ABO is consistent with that used to report net position restricted for benefits in these financial statements, but may differ from the bases used for other purposes.
- See Note 2 for valuation of investments in the calculation of net position restricted for benefits.

For purposes of the June 30, 2016 and the June 30, 2015 actuarial valuations of the VSFs, Chapter 125/00 has been taken into account in the determination of the unfunded ABO 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 represent the recommendations of the Actuary that were used in the actuarial calculations to determine the preceding ABOs as of June 30, 2016 and June 30, 2015, respectively:

	June 30, 2016	June 30, 2015
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 2016.	Tables adopted by the Board of Trustees during Fiscal Year 2016.
Active service: withdrawal, death, disability	Tables adopted by the Board of Trustees during Fiscal Year 2012.	Tables adopted by the Board of Trustees during Fiscal Year 2012.
Service retirement	Tables adopted by the Board of Trustees during Fiscal Year 2012.	Tables adopted by the Board of Trustees during Fiscal Year 2012.
Percentage of all active POLICE members estimated to retire for service with 20 or more years of service as Police Officers	50%	50%
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.

Developed assuming a long-term Consumer Price Inflation assumption of 2.5% per year.

Net of Investment Expenses.

#### 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, 2017, based on an actuarial valuation as of June 30, 2015 was \$2,293.8 million and the Statutory Contribution for the year ended June 30, 2016, based on an actuarial valuation as of June 30, 2014 was \$2,393.9 million. The Statutory Contributions for Fiscal Years 2017 and 2016 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.

## 6. NET PENSION LIABILITY

The components of the net pension liability of the Employer at June 30, 2017 and 2016 for the Funds were as follows:

			(in tho	usan	ds)		
June 30, 2017		QPP	POVSF		PSOVSF		TOTAL
Total pension liability* Fiduciary net position**	\$	46,662,909 35,423,525	\$ 2,023,917 2,100,606	\$	3,666,420 1,839,768	\$	52,353,246 39,363,899
Employers' net pension liability	\$	11,239,384	\$ (76,689)	\$	1,826,652	\$	12,989,347
Fiduciary net position as a percentage of the total pension liability		75.91 %	103.79 %		50.18 %	5).	75.19 %
			(in tho	usan	ds)		
June 30, 2016		QPP	POVSF		PSOVSF		TOTAL
Total pension liability* Fiduciary net position**	\$	45,507,890 33,482,610	\$ 2,008,699 1,384,204	\$	3,624,157 635,460	\$	51,140,746 35,502,274
Employers' net pension liability	s	12,025,280	\$ 624,495	\$	2,988,697	\$	15,638,472
Fiduciary net position as a percentage of the total pension liability		73.58 %	68.91 %	2/	17.53 %		69.42 %

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

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

#### Actuarial Methods and Assumptions

The total pension liability as of June 30, 2017 and 2016 were determined by actuarial valuations as of June 30, 2015 and June 30, 2014, 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 were developed from an experience study of the QPP and the predecessor QPP's pensioners. The mortality tables for beneficiaries were also developed from an experience review.

Pursuant to Section 96 of the New York City Charter, a study of the actuarial assumptions used to value liabilities of the Funds is conducted every two years.

The obligations of the QPP to the POVSF and the PSOVSF are recognized through the Liability Valuation Method. Under this method the actuarial present value ("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 buildingblook 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:

The first of the second	Target Asset	Long-Term Expected Real
Asset Class	Allocation	Rate of Return
U.S. Public Markets Equities	31.00%	5.70%
International Public Markets Equities	9.00%	6.10%
Emerging Public Markets Equities	6.00%	7.60%
Private Market Equities	7.00%	8.10%
Fixed Income (Core, TIPS, High Yield, Opportunistic, Convertibles)	31.00%	3.00%
Alternatives (Real Assets, Hedge Funds)	16.00%	4.70%
Total	100.00%	

## 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, 2016, 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)	1% Decrease	Discount Rate	1	% Increase
Net Pension Liability — June 30, 2017	(6.0%)	(7.0%)		(8.0%)
		(In Thousands)		
QPP	\$ 16,438,219	\$ 11,239,384	ş	6,920,705
POVSF	122,178	(76,689)		(246,749)
PSOVSF	2,227,108	1,826,652		1,493,942
Total	\$ 18,787,503	\$ 12,989,347	S	8,167,898

## 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 2017 and 2016, is \$234.6 million and \$251.8 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 2017 and 2016.

#### 8. RELATED PARTIES

Pursuant to statue 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 \$3,936,370 and \$4,585,439 in Fiscal Years 2017 and 2016, respectively.

## 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 2017, total non-investment expenses attributable to the QPP were approximately \$27.1 million, of which \$18.9 million were paid from the assets of the QPP and \$8.2 million were paid by The City on behalf of the QPP. In Fiscal Year 2016, total non-investment expenses attributable to the QPP were approximately \$23.1 million, of which \$18.5 million were paid from the assets of the QPP and \$4.6 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 \$245 million in 2017 and \$156 million in 2016.

In July 2010, the QPP 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:

Fiscal Years Ending June 30,	Amount
2018	2,051,154
2019	2,051,154
2020	2,051,154
2021	2,216,116
2022 to 2025	8,878,968
2026	2,439,692
2027 to 2030	9,778,104
2031	52,570

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

Fiscal Years Ending June 30,	Amount
2018	355,780
2019	361,422
2020	362,645
2021	370,675
2022	372,032
2023	381,275
2024	382,017
2025	14 782

## 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 2017 and 2016, 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.

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.

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

Chapter 18 of the Laws of 2012 ("Chapter 18/12") placed certain limitations on the Tier 3 and Tier 4 benefits available to participants hired on and after April 1, 2012 in most New York State Public Employee Retirement Systems, including POLICE, and is generally referred to as Tier 6 (referred to by POLICE as Tier 3 Revised).

Chapter 3 of the Laws of 2013 ("Chapter 3/13") implemented changes in the actuarial procedures for determining Employer Contributions beginning Fiscal Year 2012. In particular, Chapter 3/13 continued the One-Year Lag Methodology ("OYLM"), employed the Entry Age Actuarial Cost Method ("EAACM"), an Actuarial Interest Rate ("AIR") assumption of 7.0% per annum, net of investment expenses and defined the amortization of Unfunded Actuarial Accrued Liabilities ("UAAL"). Also included in Chapter 3/13 is the requirement that POLICE transfers assets to the POVSF and PSOVSF whenever the assets of these VSFs are insufficient to pay benefits.

Chapter 55 of the Laws of 2013, while largely a budget bill, amends the retirement earnings limitations of Police Pension Fund retirees. This amendment allows a retired Police Pension Fund member to be employed after retirement, without earnings limitations, as a School Resource Officer.

Chapter 489 of the Laws of 2013 extended the Notice of Participation filling deadline to September 11, 2014 for vested members to file a sworn statement indicating participation in the Rescue, Recovery, and Clean-up Operations. This law also now allows vested members to apply for a WTC related Accident Disability Retirement prior to reaching their 20th anniversary of allowable police service.

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

Chapter 41 of the Laws of 2016 was enacted on May 31, 2016. This amendment removes the specified periods of time, medal requirements, and theaters of operation in which military service would had to have been rendered for a service purchase pursuant to New York State Retirement and Social Security Law ("RSSL") § 1000. Accordingly, for a member to be eligible to purchase service credit pursuant to RSSL § 1000 for pre-membership military service, the member need only have been honorably discharged from the military; all other requirements of RSSL § 1000 remain the same. This law is not retroactive and does not permit retired members to purchase service credit.

Chapter 326 of the Laws of 2016 was enacted on September 11, 2016, which extends the deadline to file a Notice of Participation in the World Trade Center Rescue, Recovery, and Clean-up Operations to September 11, 2018. Proper filing of a Notice of Participation is a requirement for a member to be eligible for a World Trade Center disability or death benefit.

Chapter 59 of the Laws of 2017 ("Chapter 59/17") amended the Accidental Disability Retirement and Ordinary Disability Retirement benefits for Tier 3 and Tier 3 Revised members with dates of membership prior to April 1, 2017 who elect to participate in the Enhanced Disability Benefits. Tier 3 Revised members with dates of membership April 1, 2017 and later are mandated into the Enhanced Disability Benefits. Members electing or mandated into this benefit will pay an extra 1% of wages.

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

## 1. Member Contributions

- Tier 3 Enhanced Members contribute 3% of pensionable earnings PLUS an additional
  contribution rate to help fund the enhanced disability benefit. Currently, the additional
  contribution rate is 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%.
- Taxability
  - Base Member Contributions
    - Pre-tax
  - Increased Member Contributions for Enhanced Disability Provisions
    - Pre-tax for members appointed April 1, 2017 and later (i.e., the date new members are mandated into the Plan).
    - Post-tax for those who were eligible to elect the Enhanced Disability Plan provisions and elected such provisions.

## 2. Accidental Disability Retirement (ADR)

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

# 3. Ordinary Disability Retirement (ODR)

- . The ODR benefit for Tier3 Enhanced members is the greater of:
  - 9 33 1/3% of FAS5 or
  - FAS5 multiplied by years of credited service (not greater than 22 years)

## 4. Escalation

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

## 5. Social Security Offset

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

## 6. Final Average Salary

Tier 3 Enhanced Members have a FAS5 calculation.

#### NEW YORK CITY POLICE PENSION FUNDS NOTES TO COMBINING FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

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

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

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

#### 1. Eligibility for ADR

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

#### 2. Safeguards

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

#### Litigation

A settlement agreement reached between the City of New York and the United States Attorney's Office in Goodman, et al. v. City of New York, et al. became effective on March 17, 2014. This case was filed by the United States Attorney's Office for the Southern District of New York pursuant to the Uniformed Services Employment and Reemployment Rights Act of 1994, 38 U.S.C. §§ 4301–35 ("USERRA"). The plaintiffs were a class of retired New York City Police Department ("NYPD") uniformed members of the service who performed active military service, while employed by the NYPD, on or after September 11, 2001. 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."

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 in the Goodman case, the QPP 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.

#### NEW YORK CITY POLICE PENSION FUNDS NOTES TO COMBINING FINANCIAL STATEMENTS FOR THE YEARS ENDED JUNE 30, 2017 AND 2016

The QPP is required by the Settlement to recalculate the pensionable earnings and retirement allowances for all class members. Active members who went on military leaves between September 11, 2001 and the effective date of the Settlement may voluntary request a recalculation of their pensionable earnings. The QPP is required to compute pensionable earnings for all military leaves completed after the effective date in accordance with the Settlement.

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SCHEDULE 1

# 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*	<u>. 8</u>	POVSF		PSOVSF	_	TOTAL
Total pension liability: Service cost Interest Changes of benefit terms	\$	1,221,506 3,138,263	\$	52,848 137,697	\$	46,062 248,372	5	1,320,416 3,524,332
Differences between expected and actual experience Changes of assumptions Benefit payments and withdrawals		(632,751) - (2,571,999)		(16,264) (159,063)		3,767 - (255,938)		(645,248)
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	Ξ	2,023,917		3,666,420	Ξ	52,353,246
Plan fiduciary net position: Employer contributions Member contributions Net investment income Benefit payments and withdrawals Administrative expenses Other Net change in plan fiduciary net position	-	2.293,840 276,301 4.079,747 (2.571,999) (18,917) 10,381 4.089,353	_	166,755 (159,063) 74	_	40,392 (255,938) 52 (215,494)	_	2,293,840 276,301 4,286,894 (2,987,000) (18,917) 10,507
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		635,480		35,502,274
Plan fiduciary net position — ending (b) **	-	35,423,525	Ξ	2,100,606		1,839,768	Ξ	39,363,899
Employer's net pension liability — ending (a)-(b) Plan fiduciary net position as a percentage of the total pension liability	\$	11,239,384 75,91%	\$	(76,689) 103,79%	3	1,826,652 50,18%	\$	12,989,347 75,19%
Covered-employee payroll	S	3,509,985	_	n/a	_	n/a	\$	3,509,985
Employer's net pension liability as a percentage of covered-employee payroll	_	320.21%	_	n/a	_	n/a	_	370.07%

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

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

#### 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)

	1	niou sunios j	_					
June 30, 2016	_	QPP*	_	POVSF	1	PSOVSF	_	TOTAL
Total pension liability: Service cost Interest Changes of benefit terms Differences between expected and actual experience Changes of assumptions Benefit payments and withdrawals	S	1,241,707 3,059,499 216,334 709,886 (2,475,738)	\$	53,625 136,591 - 13,273 32,650 (155,754)	\$	45,283 245,309 3,854 52,144 (246,959)	\$	1,340,615 3,441,399 233,461 794,680 (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)	5	45,507,890	Ξ	2,008,699	Ξ	3.624,157	_	51,140,746
Plan fiduciary net position: Employer contributions Member contributions Net investment income Benefit payments and withdrawals Administrative expenses Other Net change in plan fiduciary net		2,393,940 249,921 644,318 (2,475,738) (18,478) 6,479	_	(133,017) (155,754)	_	(107,787) (248,959)	_	2,393,940 249,921 403,534 (2,878,451) (18,478) 6,756
position Accrued Transfers from POLICE to POVSF and PSOVSF Plan fiduciary net position — beginning		800,442 326,195 32,355,973		(288,624) (250,751) 1,923,579		(354,596) (75,444) 1,065,500		157,222
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	5	624,495	\$	2,988,697	5	15,638,472
Plan fiduciary net position as a percentage of							_	
the total pension liability		73.58%	_	68.91%		17.53%	_	69.42%
Covered-employee payroll	\$	3,540,326		n/a		n/a	\$	3,540,326
Employer's net pension liability as a percentage of covered-employee payroll		339.67%	_	n/a	_	n/a	_	441.72%

<sup>&</sup>quot;Such amounts represent the preiminary Funds' Educary net position and may differ from the final Funds' fiduciary net position.

<sup>\*\*</sup> Includes liabilities from Special Accidental death benefits pursuant to Section 205-F of the General Municipal Law.

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)

June 30, 2015	_	QPP*		POVSF	_	PSOVSF	_	TOTAL
Total pension liability: Service cost Interest Changes of benefit terms Differences between expected and actual	\$	1,227,570 2,875,649	\$	54,502 131,185	\$	43,736 238,391	\$	1,325,808 3,245,225
experience Changes of assumptions Benefit payments and withdrawals		(213,409)		(13,154)		11,145 - (234,967)		(215,418)
Net change in total pension liability		1,529,326	1.0	21,200	45	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)	Ξ	42,756,202		1,928,314		3,524,526		48,209,042
Plan fiduciary net position: Employer contributions Member contributions Net investment income Benefit payments and withdrawals Administrative expenses Reimbursement of Ben. Payments to PSOVSF		2,309,619 241,102 1,018,506 (2,360,484) (17,903)		61,019 (151,333)		18,895 (234,967)		2,309,619 241,102 1,098,220 (2,746,784) (17,903)
from QPP		(313)				313		
Other  Net change in plan fiduciary net position  Accrued Transfers from POLICE to POVSF	_	1,195,081	_	(90,289)	-	(215,922)	_	4,616 888,870
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) Plan fiduciary net position as a percentage of	\$	10,400,229	\$	4,735	\$	2,459,026	\$	12,863,990
the total pension liability	_	75.68%		99.75%		30.23%		73.32%
Covered-employee payroll	3	3,512,778	80	n/a	0.	n/a	\$	3,512,778
Employer's net pension liability as a percentage of covered-employee payroll	_	296.07%	_	n/a	_	n/a	_	386.21%

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

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

#### 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)

June 30, 2014	_	QPP*	_	POVSF	_	PSOVSF	_	TOTAL
Total pension liability: Service cost Interest Changes of benefit terms Differences between expected and actual experience Changes of assumptions Benefit payments and withdrawals	\$	1,206,036 2,753,264 (2,305,609)	\$	52,629 129,659 - (147,153)	\$	43,088 234,394 (229,461)	\$	1,301,753 3,117,317 - (2,682,223)
Net change in total pension liability		1,653,691	97	35,135	0.	48,021		1,736,847
Total pension liability — beginning		39,259,678		1,871,979		3,418,199		44,549,856
Total pension liability — ending (a)		40,913,369		1,907,114	_	3,466,220		46,286,703
Plan fiduciary net position: Employer contributions Member contributions Net investment income Benefit payments and withdrawals Administrative expenses Reimbursement of Ben. Payments to PSOVSF from QPP		2,320,910 228,783 5,071,530 (2,305,609) (17,450) (231,024)		78,054 (147,153)		(101) (229,461) 		2,320,910 228,783 5,147,483 (2,682,223) (17,450)
Other	_	6,811		80	_	20	_	6,911
Net change in plan fiduciary net position Accrued Transfers from POLICE to POVSF		5,073,951		(71,019)		1,482		5,004,414
and PSOVSF		(2,310,000)		1,290,000		1,020,000		
Plan fiduciary net position — beginning		28,986,941		464,887		(60)		29,451,768
Plan fiduciary net position — ending (b)		31,750,892	200	1,683,868	203 200	1,021,422	88	34,456,182
Employer's net pension liability — ending (ai-(b) Plan fiduciary net position as a percentage cf	\$	9,162,477	\$	223,248	\$	2,444,798	\$	11,830,521
the total pension liability		77.61%		88.29%	_	29.47%		74.44%
Covered-employee payroll	\$	3,420,312		n/a	0.7	n/a	\$	3,420,312
Employer's net pension liability as a percentage of covered-employee payroll	-	267.88%		n/a	_	n/a	_	345.89%

<sup>\*</sup>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.

SCHEDULE 2

# NEW YORK CITY POLICE PENSION FUNDS REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF EMPLOYER CONTRIBUTIONS (In thousands)

		2017		2016	2015		2014	n	2013	_	2012		2011	_	2010		2009		2008	
Actuarially determined contribution	\$	2,293,841	8	2,393,940	\$ 2,319,619	\$	2,320,910	Ş	2,424,690	\$	2,385,731	8	2,183,633	\$	1,980,996	\$	1,932,150	\$	1,797,82	4
Contributions in relation to the actuarially		0.000.041		0.000.010	A 515 F14		0.403.644		0.101.004		0.005.704		0.100.000		1 000 000				4 747 44	a.
determined contribution		2,293,841		2,393,940	2,319,619		2,320,910	_	2,424,690	_	2,385,731		2,183,633	_	1,980,996	_	1,932,150	_	1,797,82	4
Contribution deficiency (excess)	\$		1		\$	Ş		Ş	-	\$	-	Ş		\$		1	-	1	)	-
Covered-employee payroll	Ş	3,519,985	Ş	3,541,326	\$ 3,512,778	\$	3,420,312	Ş	3,459,889	\$	3,448,784	Ş	3,252,729	\$	3,097,484	\$	2,946,698	Ş	2,797,42	9
Contributions as a percentage of																				
covered-employee payroll		65.352%		67.619%	65.749%		67.857%		70.080%		69.176%		64.058%		63.955%		65.570%		64.267	b

# NEW YORK CITY POLICE PENSION FUNDS REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF EMPLOYER CONTRIBUTIONS (In thousands)

Notes to Schedule:

The above actuaristly determined contributions were developed using a One-Year Lap Methodology, under which the actuarial valuation determines the employer contribution for the second following fiscal year (e.g., Fiscal Year 2016 contributions were determined using an actuarial valuation as of June 30, 2014). The methods and assumptions used to determine the actuarially determined contributions are as follows:

Valuation Dates	June 30, 2015	June 30, 2014	June 30, 2013	June 30, 2012	June 30, 2011	June 30, 2010	June 30, 2009- June 30, 2006
Actuarial cost method	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Entry Age	Frozen Initial Liability <sup>1</sup>
Amortization method for Unfunded Actuarial Accrued Liabilities	K						
Initial Unfunded	Increasing Dollar	Increasing Dollar	Increasing Dollar	Increasing Dollar	Increasing Dollar	Increasing Dollar	NAT
Post-2010 Unfundeds	Level Dollar	Level Dollar	Level Dollar	Level Dollar	Level Doller	Level Dollar	NA <sup>2</sup>
Remaining amortization period:							
Initial Unfunded	17 years (closed)	16 years (dosed)	19 years (closed)	20 years (closed)	21 years (closed)	22 years (closed)	NA <sup>2</sup>
2011 Aduerial Gein Loss	11 years (closed)	12 years (closed)	13 years (closed)	14 years (closed)	15 years (closed)	NA.	NA <sup>2</sup>
2012 Actuarial Gain/Loss	12 years (closed)	13 years (dosed)	14 years (closed)	15 years (closed)	NA.	NA.	NA <sup>2</sup>
2013 Actuarial Gain\Loss	13 years (closed)	14 years (closed)	15 years (closed)	NA	NA.	NA.	NA <sup>2</sup>
2014 Aduarial Gain/Loss	14 years (closed)	15 years (closed)	NA	NA.	NA.	NA.	NA <sup>2</sup>
2015 Actuarial Gain/Loss	15 years (closed)	NA.	NA	NA	NA	NA.	NA <sup>2</sup>
Actuarial Asset Valuation (AAV) Method	Modified slavyear moving average of market values with a "Market Value Resitat" as of June 30, 2010. The June 30, 2010 AAV is defined to recognize Fiscal Year 2011 imestment performance. <sup>4</sup>	Modified sleyear moving average of market values with a "Narket Value Restart" as of June 30, 2011. The June 30, 2010 AW/is defined to recognize Riscal Year 2011 investment performance.	Modified six-year moving average of market values with a "Morket. Value Restart" as of June 30, 2011. The June 30, 2010 AAV is defined to recognize Fiscal Year 2011 investment performance."	Modified slayear moving overage of market values with a "Merket Value Restart" as of June 30, 2011. The June 30, 2010 AAV is defined to recognize "Psical Year 2011 insestment performance."	Modified slavyear moving average of market values with a "Market Value Restart" as of June 30, 2011. The June 30, 2010 AAV is defined to recognize Histoal Year 2011 intestment performance. <sup>4</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 Riscal Year 2011 investment performance. <sup>4</sup>	Middled style ar moving everlage of market values with "Market Value Restart" as of June 30, 1999.
Actuarial assumptions:							
Assumed rate of return	7.0% per annum, net of investment expenses. <sup>3</sup>	7.0% per annum, net of investment expenses 1	7.0% perantum, net of investment expenses <sup>3</sup>	7.0% per annum, net of investment expenses <sup>3</sup>	7.0% per annum, net of investment expenses. <sup>3</sup>	7.0% per annum, net of investment expenses <sup>3</sup>	8.0% per annum, gross of investment expenses <sup>2</sup>
Post-retirement mortality							
	Tables adopted by Board of Trustees during Riscal 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 Piscal Year 2012	Tables adopted by Board of Trustees during Fiscal Year 2012	Tables adopted by Beard of Trustees during Fiscal Year 2006
Active service: withdrawal, death,							
disability, service, refrement	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	Tables adopted by Board of Trustees during Fiscal Year 2006*
Salary increases	In general, ment and promotion increases plus assumed General Wage Increases of 3.0% per year. <sup>1</sup>	In general, ment and promotion I increases plus assumed General Wage Increases of 3.0% per year. <sup>3</sup>	In general, merit and promotion increases plus assumed General Wage increases of 3.0% per year. <sup>3</sup>	In general, ment and promotion increases plus assumed General Wage Increases of 3.0% per year. <sup>3</sup>	In general, morit and promotion increases plus assumed General Wage Increases of 3.0% per year. <sup>3</sup>	In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per year. <sup>3</sup>	In general, ment and promotion increases plus assumed General Wage Increases of 3.0% per year. <sup>3</sup>
Cost-off_king Adjustments <sup>2</sup>							1.3% per annum <sup>3</sup>
	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.	1.5% per annum for Auto COLA 2.5% per annum for Escalation.	1.5% perantum for Arto COLA. 2.5% perantum for Escalation.	1.5% per annum for Auto COLA 2.5% per annum for Escalation.	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.	1.5% per annum for Auto COLA. 2.5% per annum for Escalation.	

produced using the Aggregate Actuarial Cost Method.

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.

Developed using a long-term Consumer Price Inflation assumption of 2.5% per year.

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

SCHEDULE 3

# 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 four fiscal years:

Fiscal Year Ended	QPP	PSOVSF	POVSF
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	17.693%	16.163%	19.444%

**Total Fees** 

# **NYC Police Pension Fund**

# **Investment Expenses**

# Year Ended June 30, 2017

Po	lice	6/3	0	17
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**Asset Under Management** 

		(\$MMs)	
U.S. Equities	0. 40		
	Small Cap		
	Small Cap Growth	450.07	4 004 000
	Brown AM	158.97	1,391,608
	Total Small Cap Growth	\$158.97	\$1,391,608
	Small Cap Value		
	Ceredex	130.06	655,136
	Dalton Greiner	141.85	800,040
	Lord Abbett	0.00	0.00
	Total Small Cap Value	\$271.91	\$1,455,176
	Small Cap Core		
	DFA	143.30	467,606
	Total Small Cap Core	\$143.30	\$467,606
	Fundamental Index Small Cap		
	RAFI Enhanced Small Co.	138.09	258,387
	Total Small Cap Active	\$712.27	\$3,572,777
	Blackrock R2000 Growth	181.16	6,927
	Blackrock R2000 Value	57.39	4,101
	Total Small Cap Passive	\$238.55	\$11,028
	Total Small Cap	\$950.82	\$3,583,804
	Small Mid Cap		
	Security Global Investors SMIDV	0.01	0.00
	Total Small Mid Cap	\$0.01	\$0.00
	Mid Con		
	Mid Cap Value		
	Mid Cap Value	274.05	1 600 160
	Iridian Asset MCV  Total Mid Cap Value	271.95 <b>\$271.95</b>	1,602,169 <b>\$1,602,169</b>
	Total Mila Cap Value	Ψ271.33	ψ1,002,103
	Mid Cap Core		
	Wellington Mgmt MCC	267.27	828,150
	Total Mid Cap Core	\$267.27	\$828,150
	Mid Cap Active		
	Systematic Financial Mgmnt MCV	0.00	0.00
	Times Square Capital MCG	0.00	0.00
	Total Mid Cap Active	\$0.00	\$0.00
	•	•	•

# **NYC Police Pension Fund**

#### **Investment Expenses**

# Year Ended June 30, 2017

Police 6/3	U	/1	1
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Asset Under Management	Asset Under Management	Total Fees
	(\$MMs)	
State Street GA S&P 400	0.12	5,346
Total Mid Cap Passive	\$0.12	\$5,346
Total Mid Cap	\$539.34	\$2,435,665
Russell 1000		
Russell 1000 Fundamental		
RAFI Enhanced Large Co.	1,153.17	1,324,139
VTL S&P 500	156.25	154,652
Total Russell 1000 Fundamental	\$1,309.42	\$1,478,791
Total Russell 1000 Active	\$1,309.42	\$1,478,791
Russell 1000 Growth Passive		
Blackrock R1000 Growth	3,284.66	119,225
Total Growth Passive	\$3,284.66	\$119,225
Blackrock R1000 Value	3,262.64	122,775
Total Russell 1000 Value Passive	\$6,547.30	\$242,001
Total Russell 1000	\$7,856.72	\$1,720,791
Emerging Managers		
Attucks	0.00	259,171
Capital Prospects	0.00	304,400
F.I.S. Fund Mgmt	0.00	322,714
LEGATO Fund Mgmt	62.04	59,558
P.I.M. Fund Mgmt	0.00	327,450
Total Emerging Managers	\$62.04	\$1,273,293
EQ Transition		
Domestic Equity Transition	0.00	0.00
Total EQ Transition	\$0.00	\$0.00
Objects Objects Objects Adv. Days all 2000	0.004.04	000 007
State Street Global Adv Russell 3000	3,894.34	262,337
Blackrock (MLQA) R3000  Total Passive Equities	0.00 <b>\$3,894.34</b>	0.00 <b>\$262,337</b>
TOTAL U.S. EQUITIES	\$13,303.27	\$9,275,891

Passive Russell 3000

**Total Fees** 

#### **NYC Police Pension Fund**

# **Investment Expenses**

# Year Ended June 30, 2017

Police	6/3	30/	1	7
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**Asset Under Management** 

		Accet Chaci management	101411 000
		(\$MMs)	
EAFE Markets Equities Active			
	Growth		
	Baillie Gifford	598.43	1,279,316
	Fidelity MTA-Closed	0.04	0.00
	Martin Currie-MTA	0.01	0.00
	Walter Scott EAFE Large Cap MTA	639.05	1,851,300
	Total EAFE Growth	\$1,237.53	\$3,130,617
	Value		
	Acadian	0.00	0.00
	Alliance Bernstein	0.03	0.00
	Causeway EAFE Large Cap MTA	528.19	1,600,284
	Mondrian (POL) / (Delaware)	0.11	0.00
	Sprucegrove (New)	643.98	1,236,426
	Total EAFE Value	\$1,172.31	\$2,836,710
	Progreessive International		
	Oeschle	0.01	0.00
	Total Progressive International	\$0.01	\$0.00
	Core		
	Capital Guardian	0.02	0.00
	Philadelphia MTA-Closed	0.01	0.00
	Thornburg MTA	0.30	0.00
	Total EAFE Core	\$0.33	\$0.00
	Transition		
	Bailie Gifford EAFE Residual Assets	0.00	0.00
	Rebal Transition	0.45	0.00
	Rowe-Price Fleming	0.00	0.00
	Total EAFE Transitions	\$0.45	\$0.00
	Small Cap		
	Acadian EAFE Small Cap MTA	245.06	837,622
	Pyramis EAFE Small Cap MTA	235.20	1,574,371
	Total EAFE Small Cap	\$480.26	\$2,411,993
	Total EAFE Active	\$2,890.89	\$8,379,319
Passive			
	Barclays Global - IBT	0.00	0.00
	SSGA MTA	608.96	60,630
	SSGA MSCI EAFE Small Cap	107.39	42,918
	Total EAFE Active	\$716.35	\$103,549
		150	

#### **NYC Police Pension Fund**

# **Investment Expenses**

# Year Ended June 30, 2017

	Asset Under Management	Total Fees
	(\$MMs)	
Total EAFE Markets Equities	\$3,607.24	\$8,482,868
Global Fixed Income		
LM Capital	36.08	53,604
Total Global Fixed Income	\$36.08	\$53,604
NON-U.S. Environmental Managers		
Generation GE	162.96	1,709,365
Total NON-U.S. Environmental Managers	\$162.96	\$1,709,365
Governance of Owners	0.01	0.00
Investec	0.00	0.00
Total NON-U.S. Activist/Environmental	\$3,770.21	\$10,245,836
Emerging Markets		
Acadian	374.44	1,140,793
Baillie Gifford	364.73	1,682,846
DFA	345.01	1,369,235
Parametric	362.33	1,595,623
Total Active Emerging Markets	\$1,446.51	\$5,788,497
Blackrock	1,059.61	558,193
Total Passive Emerging Markets	\$1,059.61	\$558,193
Total Emerging Markets	\$2,506.12	\$6,346,690
Algert EAFE SC	3.65	2,492
Ativo EAFE	10.13	6,913
Aubrey EM	5.95	4,080
Change Global EM	10.00	6,949
Denali Eafe	12.59	8,537
Dundas EAFE	12.48	8,548
Metis EAFE	7.20	4,915
Osmosis EAFE	10.05	6,863
Total International FIS	\$72.05	\$49,298
Blackcrane International	18.36	22,710
Henry James International	19.24	23,923
Herndon International	18.26	22,544
Redwood EAFE	18.10	22,353
Total International Leading Edge	\$73.96	\$91,530

#### **NYC Police Pension Fund**

# **Investment Expenses**

# Year Ended June 30, 2017

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	Asset Under Management (\$MMs)	Total Fees
REITS		
SSGA REIT TOTAL INTERNATIONAL EQUITIES	130.96 <b>\$6,422.34</b>	184,253 <b>\$16,917,607</b>
Hedge Funds		
Altimeter Capital	45.12	510,144
Blue Trend Fd	0.00	0.00
Brevan Howard	43.03	1,260,374
Brevan Howard OPP	98.93	519,543
Caspian Select CF	165.73	1,715,353
CCP Quant Fd	34.55	791,127
D.E. Shaw	220.97	5,011,723
Fir Tree Val Fd	129.77	1,286,564
Gotham Asset Management	37.35	427,403
GSA Capital Partners LLP	109.25	91,496
Key Square LP	125.69	0.00
Luxor Capital	155.37	1,425,451
Permal Accounts w/o City Plan	154.66	693,535
Perry Capital	7.27	212,231
Pharo Gaia Fd Ltd	158.77	8,794,807
Pharo Macro Fd Ltd	168.48	8,321,568
Quest Partners	95.13	0.00
Smithwood Advisors	6.16	0.00
SRS Investment Management	117.54	1,474,438
Standard General	43.49	1,164,385
Turiya Fund LP	117.68	1,985,991
TOTAL HEDGE FUNDS	\$2,034.94	\$35,686,134
TOTAL PUBLIC MARKETS FEES	\$21,760.55	\$61,879,633
Private Equity Investments		
ACOF V	1.83	412,903
ACON Equity Partners III LP	1.96	45,325
Aisling Capital II, LP	0.66	3,020
Aisling Capital III, L.P.	4.05	367,532
Altaris Health Partners III, L.P.	1.71	113,232
American Securities Partners VI, L.P.	57.13	291,931
American Securities Partners VII	13.20	986,530
Ampersand 2011 L.P.	14.33	415,655
Apax Partners IX Apollo Investment Fund V, L.P.	0.08 0.70	1,059,425
Apollo Investment Fund VI, L.P.  Apollo Investment Fund VI, L.P.	13.82	16,403 31,007
Apollo Investment Fund VII, L.P.	13.11	385,328
Apollo Investment Fund VIII	68.04	1,800,211

#### **NYC Police Pension Fund**

# **Investment Expenses**

# Year Ended June 30, 2017

	Asset Under Management	Total Fees
	(\$MMs)	
Apollo IX	0.00	0.00
Ardian Secondary VI	38.95	575,023
Ares Corp. Opportunities Fund I, L.P.	2.48	10,538
Ares Corp. Opportunities Fund II, L.P.	1.38	202,561
Ares Corp. Opportunities Fund III, L.P.	19.77	883,646
Ares Corp. Opportunities Fund IV, L.P.	48.04	1,928,351
Arlington Capital Partners II, L.P.	3.82	3,388
Arsenal Capital Partners II	4.21	1,057,062
ASF VI Co-Invest	13.32	149,529
ASF VII	5.91	549,631
ASF VII Side Car	0.25	0.00
Atlantic Equity Partners IV, L.P.	10.84	264,384
Aurora Equity Partners III, L.P.	0.81	1,096
Avista Capital Partners, L.P	6.90	-3,780
Avista Capital Partners II, L.P	16.70	2,540,257
AXA Secondary Fund V B L.P.	38.09	479,094
BC European Capital IX	60.90	584,626
BC Partners X - SC	1.60	7,748
BDCM Opportunity Fund III, L.P.	22.41	0.00
Blackstone Capital Partners IV, L.P.	5.30	977,241
Blackstone Capital Partners V, L.P.	4.60	1,815,529
Blackstone Capital Partners VI, L.P.	31.30	1,030,820
Blackstone Mezzanine Partners II L.P.	0.15	6,708
Blue Wolf Capital Fund II, L.P.	12.32	40,598
Bridgepoint Europe III	0.00	2,663
Bridgepoint Europe IV	6.24	75,891
Bridgepoint Europe V	12.65	492,935
Bridgepoint Europe V SC	2.87	10,565
Capital Partners PE Income Fund, L.P.	4.58	17,262
Capital Partners PE Income Fund II, L.P.	1.57	31,087
Carlyle Acosta	3.42	431
Carlyle Partners III, L.P.	0.00	0.00
Carlyle Partners IV, L.P.	1.40	301,560
Carlyle Partners V, L.P.	15.49	1,761,916
Carlyle Partners VI, L.P.	39.20	850,743
Carpenter Community BancFund-A, L.P.	12.08	172,112
Catterton Partners VI, L.P.	13.39	196,296
CCMP Capital Investors II, L.P.	3.56	666,175
Celtic Pharmaeutical Holdings, P.C.	6.07	0.00
Centerbridge Cap III	3.67	310,661
-		
Coller International Partners IV, L.P.	0.55	91,769
Coller International Partners V, L.P.	1.57	67,894

# NYC Police Pension Fund Investment Expenses Year Ended June 30, 2017

	Asset Under Management	Total Fees
	(\$MMs)	
ComVest Investment Partners III, L.P.	1.97	211,304
ComVest Investment Partners IV, L.P.	20.45	498,806
Constellation Venture Capital III, L.P.	5.31	128,343
Corals 2007 Intl Momentum Fund, L.P.	1.05	20,549
Crestview Partners II, L.P.	21.26	210,034
Crestview Partners, III L.P.	13.71	656,294
Crestview III, SC	10.31	67,219
CS Emerging Manager Co-Inv, L.P.	0.00	8,849
CS Emerging Manager Fund, L.P.	44.84	556,495
CVC Capital Partners VI	53.04	1,376,604
CVC Capital Partners VII	0.00	0.00
CVC European Equity Partners III, L.P.	0.66	5,855
CVC European Equity Partners V, L.P.	13.77	1,470,098
Cypress Merchant Banking Partners	0.08	0.00
EQT VI, L.P.	48.97	510,264
EQT VII	30.34	1,262,653
Erasmus New York City Growth Fund IA	1.54	0.00
Euro Choice II Delaware) L.P.	1.16	0.00
Euro Choice II L.P.	5.96	
Euro Choice IV L.P.	15.24	161,248
		149,190
Falconhead Capital Partners II, L.P.	4.74	0.00
FdG Capital Partners, L.P.	6.38	394,737
FDG Partners Capital Fund II, L.P.	2.14	0.00
FDG Partners Capital Fund III, L.P.	5.96	64,045
FirstMark IV, L.P.	41.15	104,230
First Reserve Fund XI, L.P.	2.18	29,206
First Reserve Fund XII, L.P.	5.96	111,070
FS Equity Partners V, L.P.	1.17	9,035
FS Equity Partners VI, L.P.	22.05	90,824
FTVentures III, L.P.	6.35	72,379
FTV IV, LP	6.09	99,944
FTV V, LP	0.34	118,125
GF Capital Private Equity Fund, L.P. GI Partners Fund II	7.07 0.69	54,927 28,112
GI Partners Fund III	7.67	278,967
Gleacher Mezzazine Fund II, L.P.	0.00	0.00
Green Equity Investors VI	56.36	2,903,016
Green Equity Investors VII	4.63	0.00
Grey Mountain Partners Fund III, LP	0.91	36,222
GSO Capital Opportunities Fund, L.P.	0.59	210,626
GSC Recovery, III L.P.	0.01	0.00
Highland Consumer Fund I	4.54	0.00

# NYC Police Pension Fund Investment Expenses Year Ended June 30, 2017

	Asset Under Management	Total Fees
	(\$MMs)	
ICV Partners III   D	2.02	100 E16
ICV Partners III, L.P. Incline Equity Partners III, L.P.	3.93 1.17	128,516
	6.68	394,231
Intermedia Partners VII, L.P.	17.83	615,383
JP Morgan Fleming, L.P. Landmark Equity Partners XI, L.P.	1.67	534,801 30,835
• •	2.71	
Landmark Equity Partners XIII  Landmark Equity Partners XIV, L.P.	10.07	34,278 283,690
Landmark Equity Partners XV	24.10	870,992
Landmark NYC Fund I	11.02	15,092
	0.05	
Lee Equity Partners, L.P. Levine Leichtman Capital Deep Value	0.00	73,324 8,462
Levine Leichtman Capital Deep Value  Levine Leichtman Capital Partners IV LP	2.72	
•	8.11	326,029
Lexington Capital Partners VII, L.P.	21.30	120,447 1,289,204
Lexington Capital Partners VIII, L.P.	0.36	
Lincolnshire Equity Fund II, L.P.		0.00
Lincolnshire Equity Fund III, L.P.	5.66	116,391
Lincolnshire Equity Fund IV, L.P.	6.51	31,557
Markstone Capital Partners, L.P.	0.06	0.00
Medica III Investments (Intl) L.P.	3.34	91,854
MidOcean Partners III, L.P.	27.79	3,701,913
Milestone Partners III, LP	2.76	84,685
Mill City Capital II	0.93	85,401
Montreux Equity Partners IV L.P.	8.78	214,350
NB Co-Investment Partners LP	6.06	116,354
NB Strategic Co - Invest II, LP	50.98	1,424,803
New Mainstream Capital II	1.69	62,867
New Mountain Partners I, L.P.	0.00	26,982
New Mountain Partners II, L.P.	0.14	503
New Mountain Partners III, L.P.	24.68	1,028,172
NGN BioMed Opportunity II, L.P.	5.93	115,282
NorthBound Emerging Manager Custom Fd LP	12.64	392,191
Olympus Capital Asia III	13.15	123,552
Olympus Growth Fund VI, L.P.	22.64	1,773,101
Onex Partners III LP	8.28	1,014,553
Paladin Homeland Security Fund L.P.	0.84	121,536
Paladin III, L.P.	31.45	562,272
Palladium Equity Partners III, L.P.	14.66	634,886
Palladium Equity Partners IV	25.58	805,554
Patriot Partners II	2.78	113,854
PCG Clean Energy Tech Fund East, L.P.	11.31	24,600
Pegasus Partners IV, L.P.	5.28	251,777
Pegasus Partners V, L.P.	22.35	259,184

#### **NYC Police Pension Fund**

#### **Investment Expenses**

# Year Ended June 30, 2017

	Asset Under Management	Total Fees
	(\$MMs)	
Permira IV	3.21	1,681,786
Perseus Partners VII, L.P.	0.16	0.00
Pine Brook Capital Partners	8.35	201,112
Platinum Equity Capital Partners III, LP	36.47	2,593,079
Platinum IV	6.22	255,657
Platinum IV SC	0.00	0.00
Prism Venture Partners V, L.P. Psilos Group Partners III, L.P.	2.09 9.22	122,134 46,920
Quadrangle Capital Partners II, L.P.	0.00	19,111
Quaker BioVentures II, L.P.	6.16	144,192
Raine Partners II	2.83	135,386
Relativity Fund, L.P.	2.42	0.00
Riverstone/Carlyle Glbl Engy-Pwr Fd IV LP	8.12	61,689
RRE Ventures IV, L.P.	18.83	139,952
Scale Venture Partners III, LP	9.32	92,641
SCP Private Equity Partners II, L.P.	3.74	79,920
SCP Vitalife Partners II, L.P.	8.57	457,744
Siris Partners III	6.96	243,006
Snow Phipps Group, L.P.	5.54	135,059
Snow Phipps II, L.P.	17.23	338,823
Solera Partners, L.P.	1.59	18,562
Stellex Capital Management LP	2.38	141,328
Summit Partners Growth Equity VIII-A	77.11	3,704,255
Terra Firma Capital Partners III, L.P.	6.14	34,586
The Fourth Cinven Fund	1.43	21,663
Thomas, McNerney & Partners II, L.P.	3.29	233,311
Trident V, L.P.	43.08	478,321
Trilantic Capital Partners III, L.P.	0.42	7,999
Trilantic Capital Partners IV L.P.	10.19	131,652
Trilantic Capital Partners V L.P.	33.00	885,497
US Power Fund II	15.31	160,162
US Power Fund III, L.P.	10.93	178,248
Valor Equity III	2.65	73,080
Vista Equity Partners Fund III, L.P.	8.65	75,628
Vista Equity Partners Fund IV, L.P.	65.55	902,645
Vista Equity Partners Fund, V L.P.	83.19	2,403,751
Vista Equity Partners Fund, VI L.P.	35.14	957,196
Vista Foundation Fund II, L.P.	5.18	107,971
VSS Communications Partners IV, L.P.	0.95	4,808
Warburg Pincus Private Equity XI, LP	81.57	492,215
Warburg Pincus Private Equity XII, LP	29.34	1,415,961
WCAS XII	12.10	685,849

#### **NYC Police Pension Fund**

#### **Investment Expenses**

#### Year Ended June 30, 2017

		1 01100 0/00/17	
		Asset Under Management	Total Fees
		(\$MMs)	
	Webster Capital III	2.73	96,615
	Wellspring Capital Partners V, L.P.	10.97	3,473,933
	Welsh, Carson, Anderson & Stowe XI, L.P.	15.49	86,928
	Yucaipa American Alliance Fund I, L.P.	7.12	873
	Yucaipa American Alliance Fund II, LP	53.41	380,018
	Yucaipa Corporate Initiatives Fund II LP	8.47	46,436
TOTAL DRIVATE	EQUITY INVESTMENTS	\$2,356.43	\$77,832,491
TOTAL PRIVATE	EQUIT INVESTMENTS	\$2,330.43	φ <i>11</i> ,032,431
REAL ASSETS Private Real Estate			
	AG Realty Fd VII (Global)	2.41	247,848
	Almanac Re Sec VI	21.30	404,415
	Almanac Re Sec VII	19.22	626,334
	Almanac Re Sec VII- Side Car	5.62	18,327
	American Value Partners I, L.P.	2.92	72,259
	Apollo Europe III	4.87	98,714
	Apollo Real Estate FD V	2.10	26,475
	ARA Asia Dragon Fd (Global)	0.40	0.00
	ARS VI-SIDECAR	6.20	0.00
	Artemis Co-Investment	12.46	79,293
	Avanath Aff Housing II	4.12	66,529
	Blackstone Real Estate Ptnrs EU III	21.62	586,731
	Blackstone Real Estate Ptnrs EU IV	88.86	1,610,604
	Blackstone Real Estate Ptnrs IV	2.50	0.00
	Blackstone Real Estate Ptnrs VI	9.98	2,294,687
	Blackstone Real Estate Ptnrs VII	86.50	2,753,588
	Blackstone Real Estate VIII	45.66	1,684,887
	Brookfield Strategic RE Ptnrs	67.42	595,190
	Brookfield Property Group	60.02	338,880
	Canyon Johnson Urban Fd I	0.00	0.00
	Canyon Johnson Urban Fd II	0.06	0.00
	Canyon Johnson Urban Fd III	0.10	57,755
	Carlyle R.P. Fd V	6.59	121,037
	Carlyle Realty VI	17.80	1,257,812
	Carlyle Realty Fund VII	40.60	948,266
	Colony Investors VIII	1.71	36,100
	Colony Realty Ptnrs II	3.78	916,900
	DivCo West Fd III	16.29	1,640,675
	DivCo West Fd IV	26.94	4,044,625
	Divco Fund V Advisor, LLC	6.21	713,331
	DRA Advisors LLC - G&I Fund IX	6.42	138,831
	DRA Advisors LLC - G&I Fund Co-Inv	0.00	0.00
	DIVA AUVISOIS LEG - GOI I UIIU GO-IIIV	0.00	0.00

# NYC Police Pension Fund Investment Expenses Year Ended June 30, 2017

	Asset Under Management	Total Fees
	(\$MMs)	
Emmes Asset Mgmt Co	39.92	323,673
Exeter Fund II L.P.	6.62	43,808
Exeter Value Fnd IV	0.00	0.00
Fidelity RE Growth Fd III	0.49	28,908
H/2 Spec Opportunity Fd II	14.76	272,934
H/2 Spec Opportunity Fd III	39.12	379,815
H/2 SO MANAGER IV, LP	5.38	335,500
Heitman America RE Trust	54.93	166,459
Hudson Separate Account (NYC Asset Investor #3 LLC)	23.35	263,712
Jamestown Premier Fund	25.23	338,771
JPM Strategic Prop Fd	115.32	925,687
JPM Special Sit Fd	19.63	310,345
KTR Ind Fd III	0.05	1,670
Lasalle US Property Fd	69.38	338,301
Lion Industrial Trust	40.00	182,319
Lone Star RE Fd III	45.77	1,496,185
Met Life Core Property	47.52	258,905
Metro Workforce Housing Fd	0.48	82,635
OCM Real Estate Opportunities Fd III	0.21	0.00
Pramerica VI LP	7.88	388,370
PRISA	28.11	229,736
PRISA II	83.42	1,837,942
PRISA III	81.02	1,135,083
Prologis Targeted US Logistics FD	14.26	73,661
PW Real Estate Fund III LP	10.40	393,004
RFM NYCRS SANDY LLC (NYC		
Asset Investors #2 LLC)	75.29	2,830,817
RREEF Amer. II	28.30	264,016
RREEF Amer. III	0.10	2,576
Silverpeak Legacy Ptnrs III	3.32	81,181
Stockbridge Real Estate Fund III	14.49	134,702
Taconic NYC Investmt Fd	2.89	144,653
The City Investment FD	0.14	55,227
Thor Urban Property Fd II	10.44	166,312
Tristan Euro Property INV	7.97	465,993
UBS Trumbull Property Fd	105.76	822,548
USAA Eagle RE Fund	36.05	194,604
Walton St REF VI	13.28	181,660
Westbrook RE X CO-INV	3.67	346,299
Westbrook RE Fund VII	3.56	49,091
Westbrook RE Fund VIII	6.92	2,167,411
Westbrook Real Estate Fund X	0.01	0.00
TOTAL PRIVATE REAL ESTATE	\$1,676.12	\$39,094,606

# NYC Police Pension Fund Investment Expenses Year Ended June 30, 2017

Pc	olice	6/3	n/	17

	Folice 0/30/17	
	Asset Under Management	Total Fees
	(\$MMs)	
	(wiiii3)	
Infrastructure		
ACTIS Energy IV	0.81	519,750
ASF VII (Ardian Investment UK Ltd)	0.00	0.00
Axium Can Country Fund	0.00	0.00
Axium US Country Fund	0.00	0.00
Brookfield Infr Fd II	52.31	629,157
EIG Credit Management	0.00	0.00
EIG Credit Management-Coinvest	0.00	0.00
EQT Infrastructure III	0.00	150,167
First Reserve EIF II	9.73	367,620
Global Infrastructure Partners III	12.01	1,240,805
IFM GL Infrastructure	66.23	652,397
Infrastructure-BIF III	10.98	667,297
	\$152.07	\$4,227,194
TOTAL INFRASTRUCTURE	¥102.01	Ų 1,221,101
		*****
TOTAL REAL ASSETS	\$1,828.19	\$43,321,800
TOTAL EQUITY - PUBLIC & PRIVATE	\$26,076.13	\$121,154,741
Fixed Income Structured		
Program		
Government Treas/		
Agency Sector		
Blackrock	372.62	126,262
Fischer Francis	244.97	290,567
State Street	644.18	205,436
SSGA 1-3 Treasury Index	506.16	44,626
SSGA Int Gov Bond Index	342.04	11,895
Total Sector	\$2,109.97	\$678,786
Long Duration		
Treasury		
SSGA Long Duration Treasury	988.81	12,391
Total Sector	\$988.81	\$12,391
Mortgage Sector		
Blackrock	843.90	310,749
Goldman Sachs	0.01	214,938
Neuberger Berman	98.84	124,560
Wellington	(0.01)	121,937
Total Sector	\$942.74	\$772,184
Blackrock	215.31	222,777

#### **NYC Police Pension Fund**

#### **Investment Expenses**

# Year Ended June 30, 2017

	Asset Under Management	Total Fees
	(\$MMs)	
Prudential-Credit	440.25	382,289
Prudential Privest	88.23	0.00
Pyramis	201.49	310,553
T. Rowe Price	147.18	972,265
Taplin Canada	757.96	145,353
Total Sector	\$1,850.42	\$2,033,237
Total Structured Plus LM Capital	\$5,891.94	\$3,496,599
Global Fixed In-		
come		
GIA	37.23	89,684
Total Global Fixed Income	\$37.23	\$89,684
Progressive Fixed Emerging Managers		
PIM-Ambassador	0.00	0.00
PIM-GIA	0.00	15
Hillswick	7.68	25,986
Integrity	6.84	23,077
New Century Advisors-Core Plus	20.49	68,940
Pugh Capital Mgmt-core	23.76	79,875
Ramirez Asset	19.50	65,424
Total Progress Fixed Emerging Mana	g-	
ers	\$78.27	\$263,317
Active TIPS Man-		
agers		
Blackrock	398.37	208,845
PIMCO TIPS MTA	0.00	0.00
Total Active TIPS Managers	\$398.37	\$208,845
Passive TIPS Man-		
agers		
State Street	1,194.54	55,614
Total Passive TIPS Managers	\$1,194.54	\$55,614
Total TIPS Managers	\$1,592.91	\$264,459
Alternative Investment (Opportunistic) - Fixed Income		
Angelo Gordon Ptnrs LP	91.60	993,397
Apollo Prtnrshp LP	145.99	834,033
Ares Centre Street	97.30	1,106,116
Ave Euro Special Situations Fd	0.00	35,995
Ave Special Situations Fd V	0.23	51,496
Ave Special Situations Fd VI	9.03	80,538

# **NYC Police Pension Fund**

# **Investment Expenses**

# Year Ended June 30, 2017

		Asset Under Management (\$MMs)	Total Fees
		(46)	
	Lone Star Fd VIII	28.43	1,397,409
	Marathon Centre Street Partnership, L.P.	179.99	2,622,243
	Oak Hill Ptnrs LP	108.22	813,464
	Oaktree Opp Fd IX LP	62.08	1,086,787
	Torchlight Debt Oppy Fund III, LLC	5.12	924,089
	Torchlight Debt Opp V	17.73	536,527
	Total Alternative Investment		
	(Opportunistic) - Fixed Income	\$1,043.19	\$13,502,863
Enhanced Yield			
	Fort Washington	143.81	285,338
	High Yield Transition - Closed	0.02	0.00
	Loomis Sayles	270.13	739,543
	Neuberger Berman-High Yield	285.56	993,952
	Oaktree	209.01	787,313
	Stone Harbor	187.27	657,571
	Shenkman	109.70	363,080
	T. Rowe Price - Credit	576.23	1,153,623
	Total Enhanced Yield	\$1,781.73	\$4,980,419
Bank Loan			
	Babson BL	241.61	793,325
	Credit Suisse BL	251.46	546,387
	Guggenheim BL	124.36	481,481
	Total Bank Loans	\$617.43	\$1,821,193
Convertible Bond	e		
CONTENDIC BONG	Advent	120.44	572,403
	Victory	125.96	335,220
	Total Convertible Bonds	\$246.40	\$907,623
Internal Management ETI Investments			
	ACCESS RBC	55.41	128,349
	AFL-CIO HOUSING INV TRUST	156.84	622,171
	BOA-PPAR	6.39	0.00
	BOA-PPAR 2013	5.98	0.00
	CCD-PPAR	3.17	0.00
	CCD-PPAR 2013	2.44	0.00
	CFSB-PPAR (GNMA)	1.29	0.00
	CPC-Facility	3.79	0.00
	CPC-PPAR 2013	45.72	0.00
	JPMC - PPAR	18.96	0.00

# **NYC Police Pension Fund**

#### **Investment Expenses**

# Year Ended June 30, 2017

Pol	lice	6/3	n/·	17

		1 01100 0100111	
		Asset Under Management	Total Fees
		(\$MMs)	
		(ψινινίο)	
LIIF-PF	PAR	1.50	0.00
LIIF-PF	PAR 2013	6.06	0.00
	I-PPAR	0.85	0.00
	I-PPAR 2013	0.07	0.00
NHS-P		0.36	0.00
	ed Investment	63.35	0.00
	Fargo-PPAR MTA 2013 (FNMA)	0.00	0.00
Total E	ETI Investments	\$372.18	\$750,520
Short-	Term .	247	0.00
	nternal Management	\$618.82	\$750,520
Total i	internal Management	\$616.62	\$730,320
TOTAL FIXED INCOME		\$11,944.00	\$26,130,280
Other			
Securit	ty Lending	23.00	
	Mellon CD	0.00	
Total (	otner	\$23.00	
TOTAL INVESTMENT MAN	AGER EXPENSES	\$38,043.13	\$209,111,050
Legal			
	astle & Nicholson		47,171
	tney LLP		13,554
-	, Pepper PLLC		68,989
			10
Fosier,	, Pepper PLLC		10
Herrick	Feinstein LLP and Rivera Coon LLP		209
	n, Lewis & Bockius		115,381
	Peabody LLP		22,130
Filisbu	ry Winthrop Shaw Pittman LLP		61,552
Reinha	art Boerner Van Deuren EQTY VII		54,581
Sadis 8	& Goldberg LLP		27,149
	d & Kissel LLP		22,761
Total L			\$433,489
Total	-ogui		<del>4400,400</del>
Consultants			
Aksia l	10		289,152
	and Partners LTD		
			78,629
	and Young LLp		1,998
	Vaterhouse Coopers Tawain		3,560
	one Groupg LP		885,000
	end Holdings LLC		245,356
	re Associates		545,400
Total (	Consultants		\$2,049,095

# NYC Police Pension Fund Investment Expenses Year Ended June 30, 2017

Police 6/30/17

Asset Under Management Total Fees

(\$MMs)

Total Police FY 2017 \$211,593,633

Operating Expenses/Misc Exp 33,694,746

Total Investment Expenses, incurred by the Fund \$245,288,379

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#### **POLICE PENSION FUND**

#### Schedule of Administrative Expenses (A)

#### Fiscal Year Ended June 30, 2017

Salaries and Fringe Benefits Paid to Plan Personnel

\$13,609,407

Professional Services:

Administration	481,901
Trading and Investments	3,380,775
Management Division	48,521
Legal	545,824

Total Professional Services 4,457,021

Communication and General Services:

Printing and Computer Services	10,600
Heating, Light & Telephone, Postage and General	14.573

Total Communication and General Services 25,173

Miscellaneous Expenses:

FISA	1,798,076
OPA	138,995
Office Management and Budget	222,075
Pension Overhead Expenses	5,307,741

Total Miscellaneous Expenses 7,466,887

Total Administrative Expenses \*\$25,558,488

\*This amount represents expenses incurred by the Fund and also by other City agencies. \$18,917,148 was incurred and paid by NYCPPF, with the balance incurred by other city agencies and paid by the City of New York, on behalf of the Fund.

#### **NEW YORK CITY**

#### **POLICE PENSION FUND**

#### Schedule of Administrative Expenses (B)

#### Fiscal Year Ended June 30, 2017

Salaries Paid to Plan Personnel \$11,015,332

Fringe Benefits Paid to Plan Personnel 2,594,075

13,609,407

Supplies and Materials 455,059

**Equipment and Furniture** 615,329

Office Services 4,099,807

Maintenance and Repairs 125,597

Contracts 11,949

Total Overhead Expenses 5,307,741

Total Administrative Expenses \$18,917,148

In addition \$ 3,936,370 of expenses were incurred and paid by the City of New York on behalf of the fund.

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# New York City Police Pension Fund

Comprehensive Annual Financial Report

A Pension Trust Fund of the City of NewYork



# Investment Section Part III

fiscal year ended

June 30, 2017

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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.

- 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.
- 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 2017 included securities from the following categories: U.S. Equities 34.97%, U.S. Core Plus five 15.89%, International Equities 10.29%, Emerging Markets 6.59%, Enhanced yield 4.68%, Private Real Estate And Equities 10.6%,Hedge Funds 5.35% & Others 11.63%.

#### Results

Fiscal Year 2017 was a good year for the securities industry and for the Police Pension Fund. The Consolidated Performance report prepared for the Fund through June 30, 2017 showed the following portfolio returns: the Russell 3000 Index gained 18.51%. The Europe, Australia and Far East International Index gained 20.45%, with Emerging markets gaining 23.75%. For the fiscal year just ended, Police Pension Fund Total Investments increased from \$38,755,575 thousand to \$43,329,667 thousand. Total assets increased from \$39,879,854 thousand to \$44,508,335 thousand, with net investment income increasing from \$403,534 thousand to \$4,286,894 thousand. The total portfolio of the Police Pension Fund investments returned 13.42%, compared to the policy benchmark of 12.82%.

# New York City Police Pension Fund June 30, 2017

#### The following are Consultants and Advisors for the various investment types:

U.S. Equities Emerging Managers Legato

Active LEG-ALTRAVUE SCV
Small Cap LEG-BOWLING SCV
Small Cap Growth LEG-BRIDGE CITY SCG

Brown AM LEG-DEAN SCV

LEG-ESSEX SCG

Small Cap Value LEG-PACIFIC SCG

Ceredex

Dalton Greiner Passive Russell 3000
State Street

Small Cap Core
DFA International Equities

Fundamental Index Small Cap

RAFI Enhanced Small Co.

Baillie Gifford

Walter Scott EAFE Large Cap MTA

Blackrock R2000 Growth Value

**Small Cap Passive** 

Russell 1000

Russell 1000 Value Passive

Blackrock R2000 Value Causeway EAFE Large Cap MTA

Mid Cap Value Sprucegrove (New)

Iridian Asset MCV

Mid Cap Core Acadian EAFE Small Cap MTA

Wellington Mgmt MCC Pyramis EAFE Small Cap MTA

Small Cap

Mid Cap Passive Passive

State Street GA S&P 400 SSGA EAFE Small Cap

SSGA

NON-U.S. Environmental Managers

Russell 1000 Fundamental Generation GE

RAFI Enhanced Large Co.

VTL S&P 500 Emerging Markets

Acadian

Russell 1000 Growth Passive Baillie Gifford

Blackrock R1000 Growth DFA

Parametric

Blackrock R1000 Value Blackrock Account

# New York City Police Pension Fund June 30, 2017

#### The following are Consultants and Advisors for the various investment types:

FIS	
	FIS-ALGERT EAFE SC
	FIS-ATIVO EAFE

FIS-AUBREY EM FIS-CHANGE GLOBAL EM

FIS-DENALI EAFE
FIS-DUNDAS EAFE
FIS-METIS EAFE
FIS-OSMOSIS EAFE

#### Leading Edge

LEI-BLACKCRANE INTL LEI-HENRY JAMES INTL LEI-HERNDON INTL LEI-REDWOOD EAFE

#### **Hedge Funds**

Total Permal Hedge Fund of Funds

Direct Hedge Funds Altimeter Capital Brevan Howard Brevan Howard AH Caspian Select CF CCP Quant Fd D.E. Shaw Fir Tree Val Fd

Gotham Asset Management GSA Capital Partners LP KEY SQUARE GROUP LP

Luxor Capital
Perry Capital
Pharo Gaia Fd Ltd
Pharo Macro Fd Ltd
QUEST PARTNERS LLC
Smithwood Advisors

SRS Investment Management

Standard General Turiya Fund LP

#### **Real Estate Equity Securities**

SSGA REIT

#### **Private Equity Investments**

ACON Equity Partners III LP

ACOF V

Aisling Capital III, L.P.

Altaris Health Partners III, L.P.

American Securities Partners VI, L.P.

American Securities Partners VII, L.P.

Ampersand 2011 L.P.

Aisling Capital II, LP

Apax IX

Apollo Investment Fund V, L.P.

Apollo Investment Fund VI, L.P.

Apollo Investment Fund VII, L.P.

Apollo Investment Fund VIII

Ardian Capital

Ares Corporate Opportunities Fund I, L.P. Ares Corporate Opportunities Fund II, L.P. Ares Corporate Opportunities Fund III, L.P. Ares Corporate Opportunities Fund IV, L.P.

ASF VI Co-Invest

ASF VII

ASF VII Side Car

Atlantic Equity Partners IV, L.P. Arsenal Capital Partners II Aurora Equity Partners III, L.P. Avista Capital Partners, L.P. Avista Capital Partners II, L.P AXA Secondary Fund V B L.P. BC European Capital IX

Arlington Capital Partners II, L.P.

BC Prtnr X - SC

BDCM Opportunity Fund III, L.P.
Blackstone Capital Partners IV, L.P.
Blackstone Capital Partners V, L.P.
Blackstone Capital Partners VI, L.P.
Blackstone Mezzanine Partners II L.P.
Blue Wolf Capital Fund II, L.P.

Bridgepoint Europe IV

Bridgepoint Europe V
Bridgepoint Europe V SC

#### New York City Police Pension Fund June 30, 2017

#### The following are Consultants and Advisors for the various investment types:

Capital Partners PE Income Fund, L.P. FTV V Capital
Capital Partners PE Income Fund II, L.P. GEI VII

Carlyle Acosta GF Capital Private Equity Fund, L.P.

Carlyle Partners IV, L.P.

GI Partners Fund II

Carlyle Partners V, L.P.

GI Partners Fund III

Carlyle Partners VI, L.P.

Green Equity Investors VI

Carpenter Community BancFund-A, L.P. Grey Mountain Partners Fund III, LP

Catterton Partners VI, L.P. GSC Recovery III, L.P.

CCMP Capital Investors II, L.P. GSO Capital Opportunities Fund, L.P.

Celtic Pharmaceutical Holdings, L.P. Highland Consumer Fund I

Centerbridge Cap III ICV Partners III, L.P.

Coller International Partners IV, L.P. Incline Equity Partners III, L.P.
Coller International Partners V, L.P. Intermedia Partners VII, L.P.
ComVest Investment Partners III, L.P. JP Morgan Fleming, L.P.

ComVest Investment Partners IV, L.P.

Landmark Equity Partners XI, L.P.

Constellation Venture Capital III, L.P.

Landmark Equity Partners XIII

Corals 2007 Intl Momentum Fund, L.P.

Landmark Equity Partners XIV, L.P.

Crestview Partners II, L.P.

Crestview Partners III, L.P.

Landmark Equity Partners XV

Landmark NYC Fund I

Crestview III SC

Lee Equity Partners, L.P.

CS Emerging Manager Fund, L.P.

Levine Leichtman Capital Partners IV LP

CVC Capital Partners VI Lexington Capital Partners VII, L.P.

CVC European Equity Partners III, L.P.

Lexington Capital Partners VIII, L.P.

CVC European Equity Partners V, L.P.

Cypress Merchant Banking Partners II, L.P.

Lincolnshire Equity Fund II, L.P.

Lincolnshire Equity Fund III, L.P.

EQT VI, L.P. Lincolnshire Equity Fund IV, L.P. EQT VII, L.P. Euro Choice II (Delaware) L.P.

Erasmus New York City Growth Fund IA Euro Choice III L.P.
Falconhead Capital Partners II, L.P. Euro Choice IV L.P.

FdG Capital Partners, L.P.

FdG Capital Partners II LP

Markstone Capital Partners, L.P.

Medica III Investments (Intl) L.P.

Fenway Partners Capital Fund III, L.P. MidOcean Partners III, L.P. FirstMark IV, L.P. Milestone Partners III, LP

First Reserve Fund XI, L.P.

Mill City Capital II

First Reserve Fund XII, L.P.

Montreux Equity Partners IV L.P.

The Fourth Cinven Fund

NB Strategic Co - Invest II, LP

FS Equity Partners V, L.P.

NB Co-Investment Partners LP

FS Equity Partners VI, L.P. NorthBound Emerging Manager Custom Fd LP

FTV entures III, L.P. New MainStream Capital II
FTV IV, LP New Mountain Partners II, L.P.

#### New York City Police Pension Fund June 30. 2017

US Power Fund II, L.P.

AG Realty Fd VII

Canyon Johnson Urban Fd II

#### The following are Consultants and Advisors for the various investment types:

New Mountain Partners III, L.P.

NGN BioMed Opportunity II, L.P.

US Power Fund III, L.P.

Olympus Capital Asia III Valor Equity III
Olympus Growth Fund VI, L.P. Vista Equity Partners Fund III, L.P.

Onex Partners III LP Vista Equity Partners Fund IV, L.P.

Paladin Homeland Security Fund L.P. Vista Equity Partners Fund V, L.P.

Paladin III, L.P.

Vista Equity Partners Fund VI, L.P.

Palladium Equity Partners III, L.P.

Vista Foundation Fund II, L.P.

Palladium Equity Partners IV VSS Communications Partners IV, L.P.

Patriot Partners II WCAS XII

PCG Clean Energy Tech Fund East, L.P.

Warburg Pincus Private Equity XI, LP

Pegasus Partners IV, L.P.

Warburg Pincus Private Equity XII, LP

Pegasus Partners IV, L.P. Warburg Pincus Private Equity XII, LP
Pegasus Partners V, L.P. Webster Capital III

Permira IV Wellspring Capital Partners V, L.P.

Perseus Partners VII, L.P.

Welsh, Carson, Anderson & Stowe XI, L.P.

Pine Brook Capital Partners

Yucaipa American Alliance Fund I, L.P.

Platinum Equity Capital Partners III, LP

Yucaipa American Alliance Fund II, LP

Platinum IV Yucaipa Corporate Initiatives Fund II LP

Prism Venture Partners V, L.P.
Psilos Group Partners III, L.P.
Private Real Estate

Raine Partners II Almanac Re Sec VI
Relativity Fund, L.P. Almanac Re Sec VII

Quaker BioVentures II, L.P.

Trilantic Capital Partners V L.P.

Riverstone/Carlyle Global Energy & Power Fund IV, L.P.

ALMANAC VII SIDECAR

RRE Ventures IV, L.P.

Scale Venture Partners III, LP

Apollo Europe III

Apollo Europe III

SCP Private Equity Partners II, L.P.

Apollo Real Estate Fd V

SCP Vitalife Partners II, L.P.

ARA Asia Dragon Fd

Siris Partners III

ARS VI-SIDECAR

Siris Partners III ARS VI-SIDECAR
Snow Phipps Group, L.P. Artemis Co-Investment
Snow Phipps II, L.P. Avanth Aff Housing II

Solera Partners, L.P.

Stellex Capital Management LP

Summit Partners Growth Equity VIII-A

Blackstone Real Estate Ptnrs EU III

Blackstone Real Estate Ptnrs EU IV

Blackstone Real Estate Ptnrs IV

Terra Firma Capital Partners III, L.P.

Blackstone Real Estate Ptnrs VI
Thomas, McNerney & Partners II, L.P.

Blackstone Real Estate Ptnrs VII
Trident V, L.P.

Blackstone Real Estate Ptnrs VIII

Trilantic Capital Partners III, L.P.

Brookfield Strategic RE Ptnrs

Trilantic Capital Partners IV L.P.

Brookfield Property Group

### New York City Police Pension Fund June 30, 2017

### The following are Consultants and Advisors for the various investment types:

Canyon Johnson Urban Fd III The City Investment Fd

Carlyle R.P. Fd V Thor Urban Property Fd II
Carlyle Realty VI Tristan European Property Inv
Carlyle Realty VII UBS Trumbull Property Fd
Colony Investors VIII USAA Eagle Real Estate Fund

Colony Realty Ptnrs II Walton St RE Fd VI
DivCo West Fd III Westbrook RE Fd VII
DivCo West Fd IV Westbrook RE Fd VIII
DivcoWest Fund V, LP Westbrook RE X CO-INV

DRA G&I Fund IX, LLC

Emmes Asset Mgmt Co Infrastructure

Exeter Fund II LP

ACTIS ENERGY IV

Fidelity RE Growth Fd III

H/2 Spec Opportunity Fd II

First Reserve EIF II

H/2 Spec Opportunity Fd III Global Infrastructure MGMT LLC

H/2 SO MANAGER IV, LP IFM GL Infrastructure
Heitman America Fd Infrastructure-BIF III

Hudson Separate Account

 Jamestown Premier Fund
 Fixed Income Structured Program

 JPM Strategic Prop Fd
 Government Treas/Agency Sector

JPM Special Sit Fd Blackrock

KTR Ind Fd III Fischer Francis

Lasalle LIS Property Ed

Lasalle US Property Fd SSgA Int Gov Bond Index
LION INDUSTRIAL TRUST SSGA 1-3 Treasury Index
Lone Star RE Fd III State Street

Lone Star RE Fd III State Street

Met Life Core Property

Metro Workforce Housing Fd

Long Duration Treasury

OCM Real Estate Opportunities Fd III SSGA Long Duration Treasury - Passive PRAMERICA VI LP

PRISA II Blackrock
PRISA III Neuberger Berma

PRISA III Neuberger Berman
Prologis Targeted US Logistics Fd

PW Real Estate Fund III LP

Investment Grade Credit Sector

RFM NYCRS Sandy LLC

Blackrock

RREEF Amer. II Prudential
RREEF Amer. III Prudential Privest

Silverpeak RE Ptnrs Fd III Pyramis
Stockbridge Real Estate Fd Taplin Canida
Taconic NY Inv Fd T. Rowe Price

### **New York City Police Pension Fund** June 30, 2017

### The following are Consultants and Advisors for the various investment types:

Core Fixed Income - Developing Managers Oaktree

LM CAPITAL -MTA Stone Harbor

GIA

Loomis Sayles

Shenkman Core Fixed Income - Emerging Managers

Hillswick T. Rowe Price

Integrity

New Century Advisors -Core Plus

**Bank Loans** Ramirez Asset Mgmt

Babson BL Pugh Capital Mgmt -Core

Credit Suisse BL

TIPS Guggenheim BL

**Active TIPS Managers** 

Blackrock

**Convertible Bonds** 

**Internal Management** 

CCD-PPAR 2013

Advent **Passive TIPS Managers** 

State Street Victory

**Opportunisitc Fixed Income Strategies** 

Ave Special Situations Fd V

Access RBC Ave Special Situations Fd VI

AFL-CIO Housing Inv Trust Brightwood Capital Advisors Fund III

Brightwood Capital Advisors Fund IV **CPC** Facility

Fortress Ptnrs LP **BOA-PPAR** 

Lone Star Fd VIII BOA-PPAR 2013

Oaktree Opp Fd IX LP CFSB-PPAR

Torchlight Investors

Torchlight Debt Opp V CCD-PPAR Angelo Gordon Ptnrs LP

Apollo Prtnrshp LP CPC-PPAR 2013

Ares Center Street

JPMC-PPAR Contrarian C A LLC

LIIF-PPAR Goldentree OD MTA

Marathon Centre Street Partnership, L.P. LIFF-PPAR 2013

Oak Hill Ptnrs LP NCBCI-PPAR

NCB-CI PPAR 2013 **High Yield** 

NHS-PPAR Fort Washington

Neuberger Berman CPC-PPAR





	Market Value (SMM)	% of Total	3 Month		8	2016	2015	2014	2013	2012	3 Year	S Veer	10 Year	E	Inception Date
SYSTEM RETURN SUMMARY															
POLICE-TOTAL PORTFOLIO - GROSS     POLICE - ESTIMATED INVESTMENT FEES	38,043	100.00	3.01	13.42 (0.23)	7.88	9.09	0.47	7.60	16.66	13.01	6.19	9.63	5.66	8.63	07/01/1987
EST MANAGEMENT FEES - PUBLIC MARKET (ACCRUAL) EST MANAGEMENT FEES - ALTERNATIVE MARKETS (CASH) EST INCENTIVE FEES EST INCENTIVE FEES EST FEE OFFSETS	ASH)		(0.03) (0.02)	(0.10) (0.13)	(0.05)	(0.11) (0.12)	(0.13) (0.10)	(0.14) (0.12)			(0.12) (0.11)				
POLICE-TOTAL PORTFOLIO - NET MGR POLICE POLICY BENCHMARK EXCESS RETURN			2.96 3.26 (0.31)	13.19 12.82 0.37	7.77 7.80 (0.03)	8.86 9.23 (0.37)	0.23 0.41 (0.18)	7.34 8.16 (0.81)	16.04	13.64 (0.63)	5.96 6.31 (0.35)	9.62	5.93 (0.27)		
EQUITY RETURN DETAIL															
ESTIMATED INCELUDES PE & RA) - GROSS ESTIMATED INCELUDENTE RES ESTI MANAGEMENT FEES EST INCENTIVE FEES EST OTHER FEES EST FEE OFFSETS	26,076	5.55	3.76 (0.06) (0.06)	18.26 (0.28) (0.28)	10.03 (0.13)	10.57 (0.27) (0.27)	0.67 (0.29) (0.29)	8.27 (0.30) (0.30)	24.57	15.84	7.54 (0.28)	12.33	5.54	7.87	04/01/2004
POLICE-TOTAL EQUITY (INCL PE & RA) - NET MGR			3.70	17.98	9.90	10.30	0.38	7.96			7.26				
ESTIMATED INVESTMENT FEES ESTIMATED INVESTMENT FEES	13,303	34.97	(0.02)	18.34 (0.08)	8.36 (0.04)	(0.10)	(0.12)	(0.13)	34.93	16.78	8.58 (0.11)	14.60	7.20	11.08	12/01/1984
POLICE TO TAL DOMESTIC EQUITY-NET MICK EXCESS RETURN			3.02	18.51	8.93	12.74	0.48	12.56	33.55	16.42	9.10	14.58	7.26 (0.05)	11.16 (0.08)	
POLICE-TOTAL SMALL CAP ACTIVE - GROSS ESTIMATED INVESTMENT FEES POLICE-TOTAL SMALL CAP ACTIVE - NET MGR	712	1.87	1.63	21.47	3.88 0.28 3.60	23.82 (0.70)	(2.65)	3.34 (0.63)	43.40	16.99	8.01 (0.63) 7.38	15.07	7.98	- 1	04/01/2004
TOSSELL 2000 (DALT) EXCESS RETURN			(0.97)	(3.78)	(1.39)	1.81	1.17	(2.18)	4.58	0.64	0.02	1.37	1.06	0.57	
POLICE-TOTAL SMALL CAP PASSIVE - GROSS ESTIMATED INVESTMENT FEES POLICE-TOTAL SMALL CAP PASSIVE - NET MGR FUSSELL 2000 (DALY) EXCESS RETURN	239	9.63	2.70 (0.00) 2.70 2.46 0.24	24.26 (0.00) 24.26 24.60 (0.34)	6.02 (0.00) 6.02 4.99	18.57 (0.01) 18.57 21.31 (2.74)	(3.56) (0.00) (3.57) (4.41) 0.85	5.01 (0.00) 5.01 4.89			7.27 (0.00) 7.26 7.36 (0.10)			9.14	10/01/2013

New York City Police Pension Fund, Subchapter Two Performance Overview as of June 30, 2017





Inception Date 10/01/2013 04/01/2004 04/01/2004 12/01/1984 05/01/2017 12.18 (0.83) 8.38 (0.07) 0.65 (0.12) 0.53 1.35 (0.82) 11.28 8.89 8.30 0.12 Ē (0.44) 7.29 (0.02) 7.26 10 Year 7.23 7.27 7.33 (0.04) 1.24 15.98 14.63 14.62 14.58 5 Year 9.26 9.21 9.13 9.12 9.10 0.02 7.33 3 Year 16.42 (0.93) 16.42 (0.06) 15.50 20.86 3.58 16.35 2012 41.42 33.11 33.55 2013 10.98 (0.25) 10.73 13.24 (2.51) 13.13 13.24 (0.11) 12.61 (0.01) 12.60 12.56 2014 (1.87) (0.15) (2.01) 0.92 0.73 (0.00) 0.73 (0.19) 0.50 2015 14.77 (0.10) 14.66 12.05 2.61 12.26 (0.00) 12.26 12.05 0.20 2016 4.72 (0.10) 4.62 9.27 9.18 (0.00) 9.17 8.88 8.88 8.88 8.93 8 13.99 (0.13) 13.85 17.97 (0.00) 17.96 18.49 (0.01) 18.48 18.51 (0.03) Ę 3 Month 0.94 (0.03) 3.03 3.01 % of Total 1.42 3.44 17.21 10.24 0.16 6,547 3,894 539 1,309 얺 Market Value (\$MM) POLICE-TOTAL RUSSELL 1000 PASSIVE - GROSS
ESTIMATED INVESTIMENT FEES
POLICE-TOTAL RUSSELL 1000 PASSIVE - NET MGR
RUSSELL 1000 (DALY)
EXCESS RETURN POLICE-TOTAL RUSSELL 1000 ACTIVE - GROSS
ESTIMATED INVESTIMENT FEES
POLICE-TOTAL RUSSELL 1000 ACTIVE - NET MGR
RUSSELL 1000 (JALY)
EXCESS RETURN POLICE-TOTAL FUND OF FUNDS - GROSS
ESTIMATED INVESTMENT FEES
POLICE-TOTAL FUND OF FUNDS - NET MGR
EXCESS RETURN POLICE-TOTAL MID CAP ACTIVE - GROSS
ESTIMATED INVESTMENT FEES
POLICE-TOTAL MID CAP ACTIVE - NET MGR
ENUSELL MIDCAP (DAILY)
EXCESS RETURN POLICE-TOTAL RUSSELL 3000 - GROSS
ESTIMATED INVESTIMENT FEES
POLICE-TOTAL RUSSELL 3000 - NET MGR
RUSSELL 3000 (DALY)
EXCESS RETURN g 28 8 8 108

New York City Police Pension Fund, Subchapter Two Performance Overview as of June 30, 2017





		Market Value (\$MM)	% of Total	3 Month	P.	8	2016	2015	2014	2013	2012	3 Year	5 Year	10 Year	E	Inception Date
	EQUITY RETURN DETAIL															
5	POLICE-TOTAL INTERNATIONAL - GROSS ESTIMATED INVESTMENT FEES EST MANAGEMENT FEES EST OTHER FEES EST OTHER FEES EST OTHER FEES EST OTHER FEES	6,422	16.88	6.48 (0.08) (0.08)	24.44 (0.35)	(0.17)	6.32 (0.30) (0.30)	(5.91) (0.28) (0.28)	(3.05)	14.06	16.48	(0.30)	8.18	1.50	19.9	11/01/1990
	POLICE-TOTAL INTERNATIONAL - NET MGR MSCI AC WORLD EX US (NET) EXCESS RETURN			6.39 5.78 0.61	24.09 20.45 3.64	17.31 14.10 3.21	6.62 4.50 2.13	(6.19) (5.66) (0.53)	(3.36)	15.29	16.83	2.60 0.80 1.80	7.22	1.13		
5	POLICE-TOTAL DEVELOPED GROWTH ACTIVE - GROSS ESTIMATED INVESTIMENT FEES POLICE-TOTAL DEVELOPED GROWTH ACTIVE - NET MGR MSCI EAFE GROWTH EXCESS RETURN	1,238	3.25	8.67 (0.07) 8.60 7.52 1.08	23.30 (0.33) 22.97 15.70	19.41 (0.16) 19.25 16.68 2.57	3.35 (0.29) 3.05 (3.04) 6.10	(1.35) (0.28) (1.63) 4.09 (5.72)	(5.21) (0.27) (5.48) (4.43) (1.05)	25.26	16.86	4.34 (0.29) 4.04 2.81	10.60 9.19 1.42	3.43	5.85	04/01/2004
94	POLICE-TOTAL DEVELOPED VALUE ACTIVE - GROSS ESTIMATED INVESTIMENT FEES POLICE-TOTAL DEVELOPED VALUE ACTIVE - NET MGR MSGI EAFE VALUE NET (DALY) EXCESS RETURN	1,172	90.0	3.92 (0.06) 3.86 4.78 (0.92)	23.24 (0.33) 22.91 25.01 (2.09)	12.38 (0.14) 12.24 11.12	6.42 (0.30) 6.12 5.02 1.10	(6.01) (0.26) (6.28) (5.68) (0.59)	(4.08) (5.39) (4.131)	28.90 22.95 5.95	9.46 17.69 (8.23)	0.96 (0.28) 0.69 (0.59)	8.84 8.12 0.72	0.39 (0.08) 0.47	5.62 5.02 0.60	04/01/2004
5	POLICE-TOTAL DEVELOPED SMALL CAP ACTIVE - GROSS ESTIMATED INVESTMENT FEES POLICE-TOTAL DEVELOPED SMALL CAP ACTIVE - NET MGR S&P EPAC SMALL CAP USD NET EXCESS RETURN	480	1.26	8.89 (0.12) 8.77 8.65 0.12	24.57 (0.58) 23.99 22.97 1.02	18.65 (0.27) 18.38 17.38	3.16 (0.51) 2.65 1.34 1.32	10.89 (0.55) 10.34 8.58 1.76	(4.79) (0.48) (5.26) (3.43)			6.68 (0.52) 6.16 5.52 0.64			9.01	05/01/2013
9	POLICE-TOTAL DEVELOPED SMALL CAP PASSIVE - GROSS ESTIMATED INVESTIMENT FEES POLICE-TOTAL DEVELOPED SMALL CAP PASSIVE - NET MGR MSCI EAFE SMALL CAP NET (DAILY) EXCESS RETURN	107	0.28	8.17 (0.03) 8.14 8.10 0.04	23.41 (0.05) 23.36 23.18 0.18	16.82 (0.04) 16.78 16.72 0.06	2.79 (0.02) 2.77 2.18 0.59	9.88 (0.02) 9.86 9.59 0.27				6.02 (0.03) 6.00 5.60			7.50 (0.03) 7.47 7.05 0.41	02/01/2014
470	POLICE-TOTAL DEVELOPED LARGE CAP PASSIVE - GROSS ESTIMATED INVESTMENT FEES POLICE-TOTAL DEVELOPED LARGE CAP PASSIVE - NET MGR NYC CUSTOM WARLD EX US INDEX EXCESS RETURN	609	1.60	5.81 0.00 5.81 5.63 0.18	19.44 (0.01) 19.43 19.14 0.29	13.06 (0.00) 13.05 12.74 0.31	1.31 (0.02) 1.30 1.00	(0.53) (0.02) (0.54) (0.81)	(4.73) (0.02) (4.75) (4.90) 0.15	23.10 22.78 0.32	17.54	1.09 (0.02) 1.07 0.83	8.74 8.48 0.25		4.84	02/01/2011

New York City Police Pension Fund, Subchapter Two Performance Overview as of June 30, 2017



### Consolidated Performance Report

		Market Value (\$MM)	% of Total	3 Month	Ę	£	2016	2015	2014	2013	2012	3 Year	5 Year	10 Year	Ē	Inception Date
	EQUITY RETURN DETAIL															
182	POLICE-TOTAL NON-U.S. ENVIRONMENTAL - GROSS ESTIMATED INVESTMENT FEES	163	0.43	10.77	31.93	24.48	10.39	7.63	(0.61)	28.87	19.40	15.85	18.71		9.17	09/01/2008
	POLICE-TOTAL NON-U.S. ENVIRONMENTAL - NET MGR MSCI WORLD INDEX			9.98	30.46	23.44	9.79	7.04	4.94	26.68	15.83	15.00	11.38		6.32	
	EXCESS RETURN			5.36	12.27	12.78	2.28	7.91	6.45	2.19	3.58	9.76	7.33		2.86	
192		1,447	3.80	5.64	28.53	20.12	12.03	(14.20)	(0.62)	1.04	15.90	1.99	5.47	2.11	11.6	04/01/2004
	ESTIMATED INVESTMENT FEES POLICE-FMERGING MARKETS ACTIVE - NET MGR			(0.11) 5.53	(0.57)	(0.26) 19.86	(0.52)	(14.62)	(0.49)			(0.48)				
	MSCI EMERGING MARKETS			6.27	23.75	18.43	11.19	(14.92)	(2.19)	(2.60)	18.22	1.07	3.96	191	8.32	
	EXCESS RETURN			(0.74)	4.21	1.43	0.32	0:30	1.08	3.64	(2.32)	0.43	1.51	0.20	0.79	
202	POLICE-EMERGING MARKETS PASSIVE - GROSS	1,060	2.79	6.36	23.89	18.78	11.23	(14.86)	(2.23)	(1.97)	18.27	1.24	4.17		0.21	04/01/2011
	ESTIMATED INVESTMENT FEES			(0.02)	(0.07)	(0.04)	(0.06)	(0.05)	(0.06)			(0.06)				
	POLICE-EMERGING MARKETS PASSIVE - NET MGR			6.34	23.82	18.74	11.17	(14.91)	(2.29)			1.18				
	MSCI EMERGING MARKETS			6.27	23.75	18.43	11.19	(14.92)	(2.19)	(2.60)	18.22	1.07	3.96		0.14	
	EXCESS RETURN			0.08	0.07	0.31	(0.02)	0.00	(0.10)	0.63	0.04	0.11	0.22		0.07	
242		146	0.38												3.47	05/01/2017
	ESTIMATED INVESTMENT FEES														(0.09)	
	POLICE-TOTAL INTERNATIONAL FUND OF FUND - NET MGR														3.38	
	MSCI ACWI EX USA IMI NET														3.51	
	EXCESS RETURN														(0.12)	

New York City Police Pension Fund, Subchapter Two Performance Overview as of June 30, 2017



### Consolidated Performance Report

Through June 30, 2017

		Market Value (\$MM)	% of Total	3 Month	GT/G	GAT6	2016	2015	2014	2013	2012	3 Year	5 Year	10 Year	£	Inception Date
	EQUITY RETURN DETAIL															
230	**************************************	2,033	5.34	1.12	7.79	3.71	3.00	(1.65) 0.73	5.31	4.92	7.85	2.43	4.46		3.29	07/01/2011
	EXCESS RETURN			0.07	0.25	0.44	1.48	(2.39)	0.91	(5.12)	2.03	(0.13)	(0.45)		(0.16)	
240	240 *POLICE-TOTAL DIRECT HEDGE FUNDS - NET MGR	1,878	4.94	1.25	8.15	4.56	2.79	(1.34)	5.71	4.20	8.95	2.69	4.59		4.48	01/01/2012
	HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			1.05	7.54	3.71	1.52	0.73	4.40	10.04	5.82	2.57	4.90		4.73	
	EXCESS RETURN			0.20	1.9.0	0.85	1.28	(2.07)	1.31	(5.84)	3.12	0.12	(0.31)		(0.25)	
230	*** *POLICE-TOTAL PERMAL HEDGE FUNDS - NET MGR	155	0.41	(0.15)	4.13	0.14	4.58	(3.52)	3.12	7.74	5.05	0.51	3.41		2.20	07/01/2011
	HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			1.05	7.54	3.71	1.52	0.73	4.40	10.04	5.82	2.57	4.90		3.45	
	EXCESS RETURN			(1.20)	(3.41)	(3.57)	3.07	(4.25)	(1.28)	(2.30)	(0.77)	(2.05)	(1.49)		(1.25)	

\*Information provided by Alpha Prontier

New York City Police Pension Fund, Subchapter Two Performance Overview as of June 30, 2017





		Market														
		Value (\$MM)	% of Total	3 Month	E.	£	2016	2015	2014	2013	2012	3 Year	5 Year	10 Year	E	Inception Date
	EQUITY RETURN DETAIL															
382	POLICE-TOTAL REAL ESTATE SECURITIES - GROSS ESTIMATED INVESTMENT FEES	131	0.34	2.68	(0.29)	4.87	3.15	0.28	15.89	3.29		3.82	7.69		8.58	06/01/2012
	POLICE-TOTAL REAL ESTATE SECURITIES - NET MGR			2.66	(0.38)	4.82	3.05	0.18	15.77			3.72				
	FTSE EPRA/NAREIT DEVEL. LIQUID			2.64	(0.85)	4.61	2.37	(0.51)	14.98	2.53		3.07	6.91		8.11	
	EXCESS RETURN			0.02	0.47	0.21	0.63	0.68	0.79	0.75		0.65	0.78		0.46	
366	POLICE-TOTAL PRIVATE EQUITY (TIME WEIGHTED)	2,356	6.19	4.58	16.91	9.24	10.01	11.70	14.94	9.65	11.60	12.00	12.05	9.56	12.97	04/01/2004
	NYC R3000 +3% LAGGED			6.51	21.56	11.81	18.37	2.49	21.24	24.53	35.20	13.02	16.43	11.82	12.80	
	EXCESS RETURN			(1.93)	(4.65)	(2.57)	(8.30)	9.21	(6.31)	(14.88)	(23.61)	(1.03)	(4.38)	(2.27)	0.18	
276	275 POLICE-TOTAL PRIVATE REAL ESTATE (TIME WEIGHTED)	1,676	4.41	3.20	11.56	5.95	11.80	16.65	18.00	14.02	14.67	14.32	14.31	4.95	8.23	04/01/2004
	NCREIF NFI-ODCE NET + 100 BP			1.72	7.96	3.55	8.86	15.08	12.56	14.02	10.88	11.42	11.86			
	EXCESS RETURN			1.48	3.60	2.40	2.94	1.57	5.44	(0.01)	3.78	2.90	2.45			
286	POLICE-TOTAL INFRASTRUCTURE (TIME WEIGHTED)	152	0.40	7.46	16.14	9.99	10.51	15.14	20.26			14.00			15.65	12/01/2013
	CPI + 4%			1.00	5.71	2.39	6.18	4.68	4.69			4.38			5.19	
	EXCESS RETURN			6.46	10.43	7.60	4.34	10.46	15.56			9.02			10.47	

New York City Police Pension Fund, Subchapter Two Performance Overview as of June 30, 2017







		Market Value (\$MM)	% of Total	3 Month	979	8	2016	2015	2014	2013	2012	3 Year	5 Year 10	10 Year	- E	Inception Date
	FIXED INCOME RETURN DETAIL															
ñ	POLICE-TOTAL FIXED INCOME - GROSS ESTIMATED INVESTMENT FEES EST MANAGEMENT FEES EST INCENTIVE FEES EST OTHER FEES EST FEE OFFSETS	11,944	31.40	1.36 (0.03) (0.03)	3.18 (0.13) (0.13)	3.01 (0.06) (0.06)	5.66 (0.14) (0.14)	(0.17) (0.12) (0.12)	6.20 (0.14)	0.85	7.97	3.09	3.85	5.73	8.27 0	02/01/1980
	POLICE-TOTAL FIXED INCOME - NET MGR		;	1.33	3.05	2.95	5.52	(0.29)	90.9			2.96	;	;	I	
8	POLICE-TOTAL STRUCTURED FIXED INCOME - GROSS ESTIMATED INVESTMENT FEES POLICE-TOTAL STRUCTURED FIXED INCOME - NET MGR NYC - CORE PLUS FIVE EXCESS RETURN	5,892	15.49	1,77 (0.01) 1,75 1,82 (0.06)	0.18 (0.06) 0.11 (0.21) 0.32	2.83 (0.03) 2.80 2.82 (0.03)	3.50 (0.07) 3.42 3.20 0.23	0.56 (0.07) 0.48 0.41	7.69 (0.09) 7.60 (0.06)	(1.99) (2.79) 0.80	6.57 5.41 1.16	3.02 (0.07) 2.94 2.97 (0.02)	3.06 2.68 0.38	5.48 5.20 0.28	7.70	01/01/1985
in in	POLICE-TOTAL CORE FI- DEVELOPING MGRS - GROSS ESTIMATED INVESTMENT FEES POLICE-TOTAL CORE FI- DEVELOPING MGRS - NET MGR BBG BARC AGG (DLY) EXCESS RETURN	R.	0.19	1.56 (0.04) 1.52 1.45 0.07	(0.20) (0.20) 1.11 (0.31)	2.79 (0.09) 2.70 2.27 0.42	3.88 (0.22) 3.66 2.65 1.02	1.28 (0.20) 1.08 0.55 0.53	5.74 (0.17) 5.57 5.97 (0.39)	(1.20)	6.22	3.17 (0.20) 2.97 2.48 0.49	3.08		5.23 0 4.04 1.19	05/01/2009
#	POLICE-TOTAL CORE FI- EMERGING MGRS - GROSS ESTIMATED INVESTMENT FEES POLICE-TOTAL CORE FI- EMERGING MGRS - NET MGR BBG BARO AGG (DLY) EXCESS RETURN	82	0.21	1.71 (0.29) 1.41 1.45 (0.03)	0.74 (0.34) 0.40 (0.31)	2.70 (0.30) 2.40 2.27 0.12	3.19 (0.22) 2.97 2.65 0.32	1.00 (0.35) 0.65 0.55	6.21 (0.36) 5.85 5.97 (0.12)	(1.58) (2.02) 0.45		2.79 (0.35) 2.44 2.48 (0.04)	2.75 2.21 0.53		2.71 0	06/01/2012
8	POLICE-TOTAL TIPS - GROSS ESTIMATED INVESTMENT FEES POLICE-TOTAL TIPS - NET MGR BBG BARC GBL INF-LK: US TIPS (DLY) EXCESS RETURN	1,593	4.19	(0.35) (0.00) (0.36) (0.40) 0.05	(0.60) (0.02) (0.62) (0.63)	0.91 0.90 0.85 0.05	4.70 (0.02) 4.68 4.68 (0.01)	(1.29) (0.03) (1.32) (1.44) 0.12	3.52 (0.07) 3.45 3.64 (0.19)	(8.61)	7.17 6.98 0.19	0.66 (0.03) 0.63 0.63	0.35	4.38	3.89 0	06/01/2005
4	POLICE-TOTAL HIGH YIELD - GROSS ESTIMATED INVESTMENT FEES ESTIMATED INVESTMENT FEES CITIGROUP BB & B EXCESS RETURN	1,782	89.	2.13 (0.08) 2.06 2.07 (0.02)	(0.36) 11.37 11.47 (0.10)	4.53 (0.16) 4.37 4.40 (0.03)	15.25 (0.39) 14.86 15.48 (0.61)	(3.94) (0.33) (4.26) (4.21) (0.05)	2.80 (0.35) 2.45 2.78 (0.34)	8.14 6.17 1.97	14.45	3.95 (0.35) 3.60 4.07	6.73 6.21 0.52	7.49 6.25 1.25	7.94 1	10/01/1994

New York City Police Pension Fund, Subchapter Two Performance Overview as of June 30, 2017



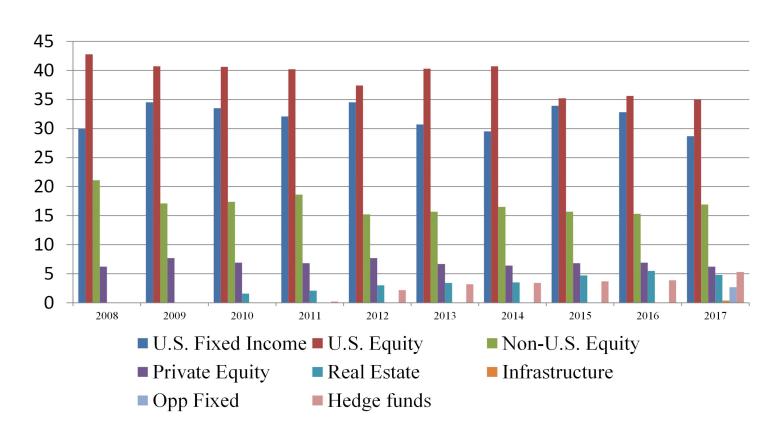
## Consolidated Performance Report

		Market Value (\$MM)	% of Total	3 Month	E.	£	2016	2015	2014	2013	2012	3 Year	5 Year	10 Year	E	Inception Date
	FIXED INCOME RETURN DETAIL															
8		617	1.62	0.89 (0.07) 0.82 0.75	7.03 (0.32) 6.70 7.49	2.05 (0.15) 1.96	8.86 (0.34) 8.52 9.88	1.80 (0.32) 1.49 (0.38)	2.76 (0.32) 2.44 2.06	6.5 45.0 51.5		4.28 (0.32) 3.96 3.49			4.91	12/01/2012
9		246	0.65	3.13	(0.79) 12.65 12.22	(0.07) 7.77 (0.20) 7.57	(1.35) 7.23 (0.43) 6.80	(0.41) (0.41) (0.81)	0.38 (0.45) (0.99)	16.96	11.69	0.47 0.42) 4.94	9.32			07/01/2008
	BOLYMIL ALL CONVERTIBLE EX M AI (UALLY) EXCESS RETURN			0.06	(7.65)	(1.19)	(4.30)	1.34	(0.34)	(8.04)	(2.72)	(0.66)	(2.24)		(1.58)	
22	POLICE-TOTAL OPPORTUNISTIC FIXED INCOME OPPORTUNISTIC FIXED INCOME JPMGHY / CSFB 50/50 BLEND PLUS 300 EXCESS RETURN	1,043 PLUS 300	2.74	0.32 2.16 (1.84)	12.34	4.76 5.00 (0.25)	8.62 17.40 (8.78)	(1.34) 0.63 (1.97)	8.86 4.93 3.93	17.15 9.99 7.16	22.48 16.13 6.35	4.54 7.15 (2.60)	8.98 9.11 (0.13)		8.32 9.41 (1.09)	10/01/2007
8	POLICE-TOTAL TARGETED INVESTMENTS (NO CASH.) POLICE CUSTOM BENCHMARK (NO CASH.) EXCESS RETURN	372	0.98	2.41 1.16 1.25	(0.64) 0.15 (0.78)	2.80 1.63 0.98	2.73 2.38 0.35	4.04 1.40 2.65	8.06 6.11 1.95	2.22 (1.66) 3.87	6.32 3.41 2.92	3.85 2.54 1.31	4.56 2.25 2.31	6.00 4.58 1.42	8.23	12/01/1984
	CASH SUMMARY															
9	POLICE SHORT TERM - GROSS ESTIMATED INVESTMENT FEES POLICE SHORT TERM - NET MGR	247	0.65	0.27	0.72	0.00	0.89	0.00	0.23	0.21	0.40	0.00	0.48	1.17		04/01/1982
404	C/D - FAIL FLOAT EARNINGS	,	0.00													
904	SECURITY LENDING	23	90.0													

New York City Police Pension Fund, Subchapter Two Performance Overview as of June 30, 2017

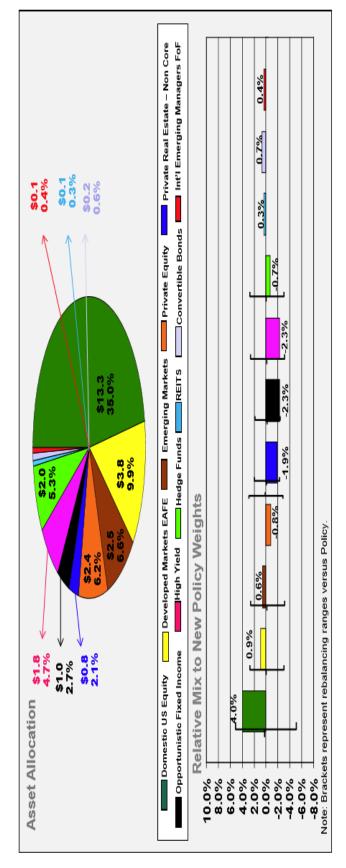
### NYC POLICE PENSION FUND ASSET ALLOCATION

June 30, 2008 – June 30, 2017





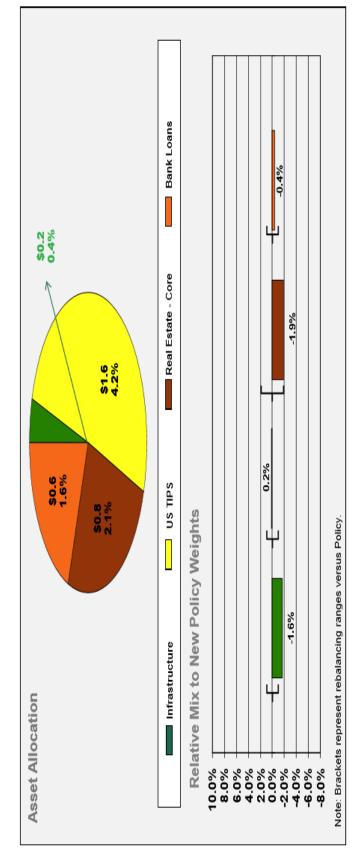
## Portfolio Asset Allocation – Growth:



New York City Police Pension Fund, Subchapter Two Performance Overview as of June 30, 2017



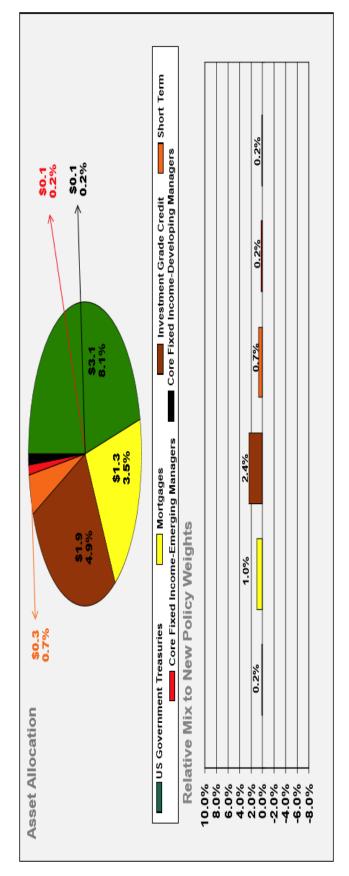
## Portfolio Asset Allocation - Inflation Protection:



New York City Police Pension Fund, Subchapter Two Performance Overview as of June 30, 2017



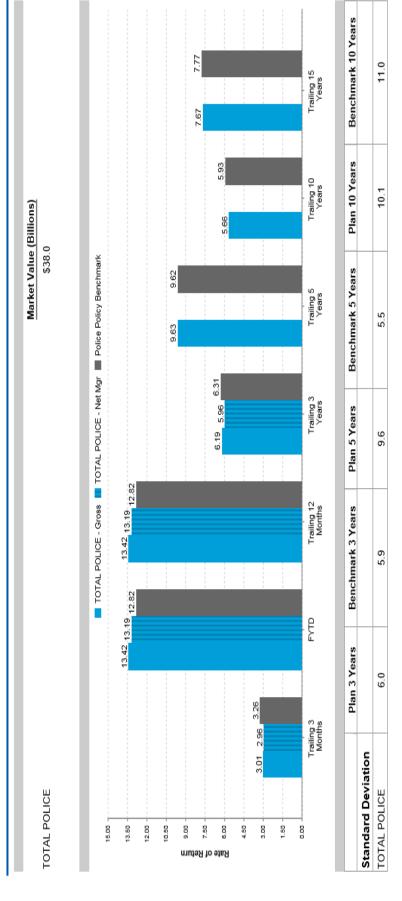
# Portfolio Asset Allocation - Deflation Protection:



New York City Police Pension Fund, Subchapter Two Performance Overview as of June 30, 2017







New York City Police Pension Fund, Subchapter Two Performance Overview as of June 30, 2017

### NEW YORK CITY POLICE PENSION FUND ASSET ALLOCATION SCHEDULE 06/30/2008 TO 06/30/2017

Fiscal Year Ended 6/30	U.S Equity & Mortgages	Int'l Equity	Short term & Fixed	Int'I Fixed	Cash	Total
6/30/2008	50.35%	20.39%	29.13%	-	0.13%	100.00%
6/30/2009	49.46%	17.40%	32.97%	-	0.17%	100.00%
6/30/2010	49.90%	16.26%	33.76%	-	0.07%	100.00%
6/30/2011	50.63%	17.44%	31.89%	-	0.04%	100.00%
6/30/2012	51.90%	15.07%	32.88%	-	0.15%	100.00%
6/30/2013	58.44%	15.58%	25.92%	-	0.06%	100.00%
6/30/2014	59.70%	16.44%	23.71%	-	0.15%	100.00%
6/30/2015	53.96%	16.62%	29.27%	-	0.14%	100.00%
6/30/2016	58.65%	16.36%	24.66%	-	0.33%	100.00%
6/30/2017	58.04%	17.88%	23.80%	-	0.28%	100.00%

Cusip	Security Description	Nominal Interest Rate	Maturity Date	Quantity	Market Value	Book Value	Gain/Loss
'912828X88	US TREASURY N/B	2.38	15-May-27	18,495,000	\$18,612,073	\$18,788,560	\$(176,486)
'92343VDU5	VERIZON COMMUNICATIONS	5.52	16-Mar-37	9,135,000	9,820,033	9,064,660	755,373
'161175BA1	CHARTER COMM OPT LLC/CAP	6.48	23-Oct-45	7,315,000	8,779,536	8,557,608	221,927
'46625HRY8	JPMORGAN CHASE + CO	3.78	1-Feb-28	7,085,000	7,245,262	7,085,000	160,262
'539830BK4	LOCKHEED MARTIN CORP	4.50	15-May-36	6,720,000	7,328,697	6,987,366	341,330
'534187BF5	LINCOLN NATIONAL CORP	3.63	12-Dec-26	5,575,000	5,598,247	5,651,891	( 53,643)
'785592AT3	SABINE PASS LIQUEFACTION	4.20	15-Mar-28	5,570,000	5,627,426	5,537,096	90,330
'49338LAD5	KEYSIGHT TECHNOLOGIES	3.30	30-Oct-19	5,445,000	5,546,277	5,439,663	106,613
'78403DAJ9	SBA TOWER TRUST	3.16	10-Oct-45	4,725,000	4,817,326	4,725,000	92,326
'462613AK6	IPALCO ENTERPRISES INC	3.45	15-Jul-20	4,360,000	4,414,500	4,356,904	57,595
'06051GGF0	BANK OF AMERICA CORP	3.82	20-Jan-28	4,350,000	4,425,516	4,350,000	75,516
'05946KAD3	BANCO BILBAO VIZCAYA ARG	3.00	20-Oct-20	4,320,000	4,402,123	4,300,905	101,217
'120568AW0	BUNGE LTD FINANCE CORP	3.50	24-Nov-20	4,045,000	4,146,974	4,041,521	105,453
'594918BK9	MICROSOFT CORP	4.20	3-Nov-35	4,020,000	4,392,493	4,008,663	383,829
'06051GGC7	BANK OF AMERICA CORP	4.18	25-Nov-27	3,725,000	3,788,660	3,801,474	(12,814)
'970648AF8	WILLIS NORTH AMERICA INC	3.60	15-May-24	3,720,000	3,757,497	3,778,388	(20,891)
'432891AG4	HILTON WORLDWIDE FIN LLC	4.63	1-Apr-25	3,725,000	3,841,406	3,725,000	116,406
'15135UAL3	CENOVUS ENERGY INC	4.25	15-Apr-27	3,710,000	3,534,257	3,709,369	(175,112)
'87938WAT0	TELEFONICA EMISIONES SAU	4.10	8-Mar-27	3,590,000	3,709,008	3,590,000	119,008
'80281LAC9	SANTANDER UK GROUP HLDGS	2.88	16-Oct-20	3,555,000	3,605,765	3,549,418	56,346
'94946TAC0	WELLCARE HEALTH PLANS	5.25	1-Apr-25	3,540,000	3,708,150	3,540,000	168,150
'075887BX6	BECTON DICKINSON AND CO	4.67	6-Jun-47	3,510,000	\$3,648,925	\$3,510,404	\$138,521

Cusip	Security Description	Nominal Interest Rate	Maturity Date	Quantity	Market Value	Book Value	Gain/Loss
	, and the second			C a a a			200 7 200
'38141GWC4	GOLDMAN SACHS GROUP INC	3.00	26-Apr-22	3,490,000	\$3,516,803	\$3,478,832	\$37,971
'651229AS5	NEWELL BRANDS INC	3.90	1-Nov-25	3,340,000	3,458,703	3,375,855	82,848
'38141GWB6	GOLDMAN SACHS GROUP INC	3.85	26-Jan-27	3,300,000	3,357,123	3,360,783	(3,660)
'29717PAR8	ESSEX PORTFOLIO LP	3.63	1-May-27	2,960,000	2,952,688	2,942,920	9,768
'573284AQ9	MARTIN MARIETTA MATERIAL	3.45	1-Jun-27	2,895,000	2,879,917	2,889,152	(9,235)
'11134LAE9	BROADCOM CRP / CAYMN FI	3.63	15-Jan-24	2,495,000	2,552,385	2,492,405	59,979
'785592AS5	SABINE PASS LIQUEFACTION	5.00	15-Mar-27	2,100,000	2,235,387	2,215,500	19,887
'03939CAA1	ARCH CAPITAL FINANCE LLC	4.01	15-Dec-26	2,180,000	2,248,800	2,180,000	68,800
'776743AD8	ROPER TECHNOLOGIES INC	3.80	15-Dec-26	2,140,000	2,198,743	2,139,657	59,085
'00205GAD9	APT PIPELINES LTD	4.25	15-Jul-27	2,090,000	2,139,595	2,075,474.	64,121
'00912XAV6	AIR LEASE CORP	3.63	1-Apr-27	2,075,000	2,075,186	2,038,500.	36,686
'00440EAW7	CHUBB INA HOLDINGS INC	4.35	3-Nov-45	1,980,000	2,171,089	1,975,050	196,039
'02378WAA7	AMER AIRLINE 17 1B PTT	4.95	15-Aug-26	1,935,000	1,993,050	1,935,000	58,050
'161175AY0	CHARTER COMM OPT LLC/CAP	4.91	23-Jul-25	1,805,000	1,949,977	1,808,817	141,160
'49338LAE3	KEYSIGHT TECHNOLOGIES	4.60	6-Apr-27	1,650,000	1,733,275	1,647,904	85,371
'247361ZJ0	DELTA AIR LINES INC	3.63	15-Mar-22	1,605,000	1,647,676	1,604,775	42,901
'904678AB5	UNICREDIT SPA	4.63	12-Apr-27	1,515,000	1,593,795	1,567,934	25,860
'776743AB2	ROPER TECHNOLOGIES INC	3.85	15-Dec-25	1,450,000	1,492,905	1,447,593	45,312
'25746UCT4	DOMINION ENERGY INC	1.50	1-Jul-20	1,410,000	1,417,289	1,411,452	5,837
'22822VAF8	CROWN CASTLE INTL CORP	4.75	15-May-47	1,360,000	1,383,976	1,349,215	34,761
'29278GAC2	ENEL FINANCE INTL NV	4.75	25-May-47	1,230,000	1,265,620	1,228,044	37,576
'05583JAA0	BPCE SA	3.00	22-May-22	1,140,000	\$1,149,918	\$1,132,932	\$16,986

Cusip	Security Description	Nominal Interest Rate	Maturity Date	Quantity	Market Value	Book Value	Gain/Loss
'29250NAN5	ENBRIDGE INC	6.00	15-Jan-77	1,130,000	\$1,186,500	\$1,130,000	\$56,500
'11134LAG4	BROADCOM CRP / CAYMN FI	3.88	15-Jan-27	935,000	960,151	930,867	29,284
'00774MAA3	AERCAP IRELAND CAP/GLOBA	3.50	26-May-22	870,000	892,828	867,181	5,647
'05964НАС9	BANCO SANTANDER SA	3.50	11-Apr-22	800,000	818,784	797,456	21,328
'878091BF3	TEACHERS INSUR + ANNUITY	4.27	15-May-47	705,000	721,715	704,280	17,434
'ACI0H8HN1	AERCAP IRELAND CAP/GLOBA	4.63	1-Jul-22	500,000	535,865	529,141	6,724
'92343VCX0	VERIZON COMMUNICATIONS	4.52	15-Sep-48	52,700	49,859	54,687	(4,828)
'3132QUYD9	FED HM LN PC POOL Q37907	4.00	1-Dec-45	47,527	50,022	50,838	(816)
'3138WFXC5	FNMA POOL AS6074	4.00	1-Oct-45	47,136	49,573	50,464	(891)
'3138W9TS9	FNMA POOL AS0560	4.50	1-Sep-43	46,337	49,809	49,696	112
'962ESQII1	ALLNEX USA, INC.	0.00	13-Sep-23	49,724	49,880	49,475	404
'3138A2BE8	FNMA POOL AH0936	3.50	1-Dec-40	46,183	47,696	49,402	(1,705)
'37254BAA8	GENPACT LUXEMBOURG SARL	3.70	1-Apr-22	49,300	49,920	49,289	631
'750236AR2	RADIAN GROUP INC	5.50	1-Jun-19	47,600	49,980	49,206	773
'912828H37	US TREASURY N/B	0.88	15-Jan-18	48,960	48,883	48,934	50)
'92343VDY7	VERIZON COMMUNICATIONS	4.13	16-Mar-27	46,920	48,458	48,879	(420)
'14314EAE1	CARMAX AUTO OWNER TRUST	1.90	15-Apr-22	49,300	48,778	48,722	55
'3128M7C20	FED HM LN PC POOL G05189	5.00	1-Aug-35	43,857	48,087	48,709	(621)
'31418AM96	FNMA POOL MA1283	3.50	1-Dec-42	47,258	48,721	48,683	37
'72347NAS9	PINNACLE FOODS FIN LLC	0.00	2-Feb-24	48,616	48,840	48,555	284
'3132GDKP6	FED HM LN PC POOL Q00302	4.50	1-Apr-41	45,302	48,687	48,487	200
'31418MFD9	FNMA POOL AD0163	6.00	1-Nov-34	42,087	\$48,151	\$48,190	\$(38)

Cusip	Security Description	Nominal Interest Rate	Maturity Date	Quantity	Market Value	Book Value	Gain/Loss
Cusip	Security Description	Rate	Date	Quantity	TVIAI NCC V AIUC	Dook value	Gam/Loss
'565849AM8	MARATHON OIL CORP	5.20	1-Jun-45	49,300	\$47,267	\$47,909	\$(642)
'617482V92	MORGAN STANLEY	6.38	24-Jul-42	35,700	47,456	47,861	(405)
'126410LK3	CSX TRANSPORTATION INC	9.75	15-Jun-20	37,400	45,092	47,707	(2,615)
'12592XAZ9	COMM MORTGAGE TRUST	2.86	10-Mar-48	45,900	46,792	47,352	(559)
'494550BV7	KINDER MORGAN ENER PART	4.25	1-Sep-24	47,600	49,181	47,317	1,864
'3132GEUJ7	FED HM LN PC POOL Q01485	4.50	1-Jun-41	44,075	47,395	47,311	84
'832696AB4	SMUCKER (J.M.) CO	3.50	15-Oct-21	45,900	47,830	47,288	542
'00206RDG4	AT+T INC	6.38	1-Mar-41	40,800	47,645	46,988	656
'64966HMV9	NEW YORK NY	5.21	1-Oct-31	40,800	47,379	46,964	414
'78466DBA1	SS C TECHNOLOGIES INC	0.00	8-Jul-22	46,722	46,970	46,838	131
'31418NAR1	FNMA POOL AD0915	5.50	1-Dec-38	42,697	47,794	46,826	968
'31417CDR3	FNMA POOL AB5511	3.50	1-Jul-42	44,420	45,823	46,585	(761)
'74432QBD6	PRUDENTIAL FINANCIAL INC	6.63	1-Dec-37	35,700	47,627	46,580	1,047
'312941RX7	FED HM LN PC POOL A93202	4.50	1-Jul-40	44,504	47,681	46,486	1,194
'38378XEN7	GOVERNMENT NATIONAL MORT- GAGE A	1.89	16-Jun-38	45,707	45,500	45,999	(499)
'26207YAE1	DRIVE AUTO RECEIVABLES TRUST	3.17	15-May-20	44,948	45,089	44,945	143
'912810RC4	US TREASURY N/B	3.63	15-Aug-43	40,800	46,935	45,866	1,069
'695156AR0	PACKAGING CORP OF AMERIC	3.65	15-Sep-24	45,900	46,804	45,784	1,019
'3128KT4Q0	FED HM LN PC POOL A63531	6.50	1-Jul-37	40,038	45,714	45,693	21
'382388AW6	GOODRICH CORP	4.88	1-Mar-20	42,500	45,322	45,667	(345)
'81180WAS0	SEAGATE HDD CAYMAN	4.88	1-Mar-24	45,900	46,782	45,591	1,190
'95001FAZ8	WELLS FARGO COMMERCIAL MORTGAG	3.84	15-Jan-60	44,200	\$45,440	\$45,522	\$(81)

NYC Police Pension Fund
List of randomly selected 100 Fixed Asset Holdings as of June 30, 2017

Cusip	Security Description	Nominal Interest Rate	Maturity Date	Ouantity	Market Value	Book Value	Gain/Loss
Симър	Security Description		2400	Quinitity	172012100 ( 01200	Door varae	G
'13645RAE4	CANADIAN PACIFIC RR CO	5.75	15-Mar-33	39,100	\$45,976	\$45,406	\$569
'26207YAE1	DRIVE AUTO RECEIVABLES TRUST	3.17	15-May-20	44,948	45,089	44,945	143
'36176VVD2	GNMA POOL 777612	4.00	15-May-45	41,917	45,107	44,942	164
'45567YAH8	INDIGO MERGER SUB I INC	0.00	8-Jul-21	44,941	45,334	44,828	505
'013822AA9	ALCOA NEDERLAND HOLDING	6.75	30-Sep-24	42,500	46,112	44,519	1,593
'161175AX2	CHARTER COMM OPT LLC/CAP	3.58	23-Jul-20	44,200	45,675	44,217	1,457
'59156RBR8	METLIFE INC	4.60	13-May-46	44,200	48,633	44,195	4,438
'31419GQL1	FNMA POOL AE5858	4.50	1-Sep-40	42,047	45,107	44,188	918
'31371PN55	FNMA POOL 257912	5.50	1-Feb-38	42,859	47,436	43,674	3,762
'63902MAB4	NATURAL RESRCE PART LP	9.13	1-Oct-18	44,880	45,328	42,368	2,960
'976YDRII5	517 W 173RD ST NEW YORK	6.31	1-Jan-46	38,359	49,879	38,359	11,520
'923ARTII2	132 WEST 113TH STREET	5.78	30-Jun-38	38,634	\$47,378	\$38,108	\$9,270

A complete list of the Plan's securities is available upon request.

		Nominal Interest				
Cusip	Security Description	Rate	Quantity	Fair Value	Par Value	Gain/Loss
'037833100	APPLE INC	-	1,498,314	\$215,787,129	\$127,448,506	\$88,338,623
'594918104	MICROSOFT CORP		2 152 770	148,459,927	00 135 056	60,324,070
394910104	WICKOSOFT CORP	-	2,153,778	146,459,927	88,135,856	60,324,070
'023135106	AMAZON.COM INC	-	114,095	110,443,966	44,938,637	65,505,328
'30303M102	FACEBOOK INC A	-	670,272	101,197,688	46,737,328	54,460,360
'30231G102	EXXON MOBIL CORP	_	1,158,456	93,522,187	100,163,962	(6,641,775)
302310102	BERKSHIRE HATHAWAY INC CL		1,130,430	33,322,107	100,103,302	(0,041,773)
'084670702	В	-	525,824	89,058,785	62,862,566	26,196,219
'46625H100	JPMORGAN CHASE + CO	-	966,813	88,366,682	53,532,123	34,834,560
			,	,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
'478160104	JOHNSON + JOHNSON	-	624,320	82,591,283	57,159,717	25,431,566
102070V20F	ALDUARET INC. CL. A		05 472	70.464.506	42 CO4 257	25 057 140
'02079K305	ALPHABET INC CL A	-	85,472	79,461,506	43,604,357	35,857,149
'02079K107	ALPHABET INC CL C	-	86,821	78,896,954	44,233,789	34,663,165
'949746101	WELLS FARGO + CO	-	1,227,909	68,038,447	54,233,774	13,804,673
'060505104	BANK OF AMERICA CORP	=	2,722,736	66,053,573	40,545,823	25,507,750
'00206R102	AT+T INC	_	1,681,562	63,445,323	59,291,604	4,153,719
	-		7 7	, -,	, . ,	,
'742718109	PROCTER + GAMBLE CO/THE	-	664,044	57,871,436	51,807,267	6,064,169
'717081103	PFIZER INC	-	1,616,827	54,309,205	47,402,307	6,906,898
'166764100	CHEVRON CORP	_	516,419	53,878,005	59,380,302	(5,502,297)
			,		, , , , , , , , , , , , , , , , , , , ,	(2)
'369604103	GENERAL ELECTRIC CO	-	1,962,472	53,006,360	47,704,415	5,301,945
'437076102	HOME DEPOT INC	_	345,024	52,926,753	28,085,147	24,841,606
			,-	- ,,	2,222,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
'91324P102	UNITEDHEALTH GROUP INC	-	275,236	51,034,248	35,119,602	15,914,646
'172967424	CITIGROUP INC	-	753,018	50,361,840	37,186,994	13,174,845
'92826C839	VISA INC CLASS A SHARES	-	530,504	\$ 49,750,645	\$25,941,593	\$23,809,052

NYC Police Pension Fund
List of randomly selected 100 Equity Asset Holdings as of June 30, 2017

Cusip	Security Description	Nominal Interest Rate	Quantity	Fair Value	Par Value	Gain/Loss
Cusip	Security Description	Rate	Quantity	Tan value	1 at value	Gain/Loss
'20030N101	COMCAST CORP CLASS A	-	1,250,814	\$48,681,673	\$30,523,958	\$18,157,715
'677172009	SAMSUNG ELECTRONICS CO	-	22,050	45,808,432	24,211,811	21,596,621
'BMMV2K903	TENCENT HOLDINGS LTD	-	1,278,783	45,736,039	18,614,794	27,121,245
'718172109	PHILIP MORRIS INTERNATION- AL		385,900	45,323,947	35,189,115	10,134,833
'58933Y105	MERCK + CO. INC.	-	707,163	45,322,077	35,594,341	9,727,737
'458140100	INTEL CORP	-	1,287,788	43,449,975	32,227,333	11,222,642
'17275R102	CISCO SYSTEMS INC	-	1,370,053	42,882,666	33,377,256	9,505,410
'02209S103	ALTRIA GROUP INC	-	554,985	41,329,715	22,324,509	19,005,206
'713448108	PEPSICO INC	-	356,680	41,192,945	29,723,304	11,469,641
'688910900	TAIWAN SEMICONDUCTOR MANUFAC	-	5,543,166	37,993,098	20,763,396	17,229,702
'191216100	COCA COLA CO/THE	-	824,793	36,991,988	32,438,060	4,553,928
'68389X105	ORACLE CORP	-	721,791	36,190,601	28,898,123	7,292,478
'580135101	MCDONALD S CORP	-	234,287	35,883,364	23,261,842	12,621,522
'01609W102	ALIBABA GROUP HOLDING SP ADR	-	254,671	35,883,194	22,959,639	12,923,555
'88579Y101	зм со	-	166,422	34,647,395	21,382,674	13,264,721
'00287Y109	ABBVIE INC	-	457,312	33,159,663	22,849,230	10,310,433
'57636Q104	MASTERCARD INC A	-	270,427	32,843,383	18,992,365	13,851,018
'254687106	WALT DISNEY CO/THE	<u>-</u>	307,004	32,619,205	27,260,158	5,359,047
'097023105	BOEING CO/THE	-	163,289	32,290,330	18,629,013	13,661,318
'677062903	SOFTBANK GROUP CORP	-	394,101	31,907,549	22,450,400	9,457,149
'G5960L103	MEDTRONIC PLC	-	347,291	\$30,822,050	\$26,201,173	\$4,620,878

NYC Police Pension Fund
List of randomly selected 100 Equity Asset Holdings as of June 30, 2017

	Nominal Interest				
Security Description	Rate	Quantity	Fair Value	Par Value	Gain/Loss
WAL MART STORES INC	-	398,187	\$30,134,821	\$29,191,850	\$942,971
INDUSTRIA DE DISENO TEXTIL	-	777,477	29,803,716	16,260,096	13,543,620
CELGENE CORP	-	222,330	28,874,034	17,756,821	11,117,213
AIA GROUP LTD	-	3,699,391	27,035,366	17,420,535	9,614,830
BROADCOM LTD	-	114,531	26,691,469	11,952,060	14,739,409
PRICEINE CROUPING/THE					
	-	14,091	26,356,653	14,608,839	11,747,814
	_	586 382	26 187 810	27 320 552	(1,132,742)
		300,302	20,107,010	27,320,332	(1,132,742)
CORP	-	169,540	26,080,413	29,219,367	(3,138,954)
				·	
ASML HOLDING NV	-	198,062	25,775,110	18,387,856	7,387,254
ADTALEM GLOBAL EDUCA-					
TION INC	-	19,189	728,223	488,239	239,983
SDV 51 OW ING		44.005	540.455	442.054	77.000
SPX FLOW INC	-	14,085	519,455	442,064	77,390
CLEVELAND CLIFFS INC	-	53,711	371,680	362,164	9,516
JANUS HENDERSON GROUP		<u> </u>	ŕ	,	<u> </u>
PLC	-	8,079	267,496	202,794	64,702
PINNACLE ENTERTAINMENT					
INC	-	11,445	226,153	202,333	23,821
ENERGIZER HOLDINGS INC		4.540	240.044	220.252	(2.244)
	-	4,540	218,011	220,252	(2,241)
	_	8 468	211 700	215 656	(3,956)
		0,400	211,700	213,030	(3,330)
ESSENDANT INC	-	12,609	186,991	235,528	(48,536)
ARCHROCK INC	-	15,680	178,752	124,823	53,929
CARE CAPITAL PROPERTIES					
INC	-	6,591	175,980	174,899	1,081
VIAVI SOLUTIONS INC	-	15,861	167,016	100,870	66,146
TIER REIT INC	-	8,522	\$157,487	\$132,174	\$25,312
	WAL MART STORES INC  INDUSTRIA DE DISENO TEXTIL  CELGENE CORP  AIA GROUP LTD  BROADCOM LTD  PRICELINE GROUP INC/THE  VERIZON COMMUNICATIONS INC  INTL BUSINESS MACHINES CORP  ASML HOLDING NV  ADTALEM GLOBAL EDUCA- TION INC  SPX FLOW INC  CLEVELAND CLIFFS INC  JANUS HENDERSON GROUP PLC  PINNACLE ENTERTAINMENT INC  ENERGIZER HOLDINGS INC  ARMOUR RESIDENTIAL REIT INC  ARCHROCK INC  CARE CAPITAL PROPERTIES INC  VIAVI SOLUTIONS INC	WAL MART STORES INC  INDUSTRIA DE DISENO TEXTIL  CELGENE CORP  AIA GROUP LTD  BROADCOM LTD  PRICELINE GROUP INC/THE  VERIZON COMMUNICATIONS INC  INTL BUSINESS MACHINES CORP  ASML HOLDING NV  ADTALEM GLOBAL EDUCATION INC  SPX FLOW INC  CLEVELAND CLIFFS INC  JANUS HENDERSON GROUP PLC  PINNACLE ENTERTAINMENT INC  ENERGIZER HOLDINGS INC  ARMOUR RESIDENTIAL REIT INC  ARCHROCK INC  CARE CAPITAL PROPERTIES INC  VIAVI SOLUTIONS INC  -  VIAVI SOLUTIONS INC  -  VIAVI SOLUTIONS INC  -  INDUSTRIA REIT INC  -  VIAVI SOLUTIONS INC  -  -  -  VIAVI SOLUTIONS INC  -  -  VIAVI SOLUTIONS INC  -  -  -  -  VIAVI SOLUTIONS INC  -  -  -  -  VIAVI SOLUTIONS INC  -  -  -  -  -  VIAVI SOLUTIONS INC  -  -  -  -  -  VIAVI SOLUTIONS INC  -  -  -  -  -  -  VIAVI SOLUTIONS INC  -  -  -  -  -  -  VIAVI SOLUTIONS INC  -  -  -  -  -  -  VIAVI SOLUTIONS INC  -  -  -  -  -  -  VIAVI SOLUTIONS INC  -  -  -  -  -  -  -  VIAVI SOLUTIONS INC  -  -  -  -  -  -  -  -  VIAVI SOLUTIONS INC  -  -  -  -  -  -  -  -  -  -  -  -  -	Security Description  WAL MART STORES INC  INDUSTRIA DE DISENO TEXTIL  CELGENE CORP  AIA GROUP LTD  BROADCOM LTD  BROADCOM LTD  PRICELINE GROUP INC/THE  VERIZON COMMUNICATIONS INC  ASML HOLDING NV  CLEVELAND CLIFFS INC  JANUS HENDERSON GROUP PLC  PINNACLE ENTERTAINMENT INC  ENERGIZER HOLDINGS INC  ARMOUR RESIDENTIAL REIT INC  ARCHROCK INC  CARE CAPITAL PROPERTIES INC  LINE SESENDANT INC  15,680  CARE CAPITAL PROPERTIES INC  LINE SESENDANT INC  15,861  VIAVI SOLUTIONS INC  -  398,187  -  4777,477  -  77,477  -  77,477  -  77,477  -  77,477  -  77,477  -  77,477  -  77,477  -  77,477  -  77,477  -  77,477  -  77,47  77,47  -  77,47  -  77,47  -  77,47  -  77,47  -  74,409  -  74,409  -  74,409  -  74,409  -  74,409  -  74,409  -  74,409  -	Security Description         Interest Rate         Quantity         Fair Value           WAL MART STORES INC         -         398,187         \$30,134,821           INDUSTRIA DE DISENO TEXTIL         -         777,477         29,803,716           CELGENE CORP         -         222,330         28,874,034           AIA GROUP LTD         -         3,699,391         27,035,366           BROADCOM LTD         -         114,531         26,691,469           PRICELINE GROUP INC/THE         -         14,091         26,356,653           VERIZON COMMUNICATIONS INC         -         586,382         26,187,810           INTL BUSINESS MACHINES CORP         -         169,540         26,080,413           ASML HOLDING NV         -         198,062         25,775,110           ADTALEM GLOBAL EDUCATION INC         -         19,189         728,223           SPX FLOW INC         -         14,085         519,455           CLEVELAND CLIFFS INC         -         53,711         371,680           JANUS HENDERSON GROUP PLC         -         8,079         267,496           PINNACLE ENTERTAINMENT INC         -         4,540         218,011           ARMOUR RESIDENTIAL REIT INC         -         4,540         218,	Interest Rate   Quantity   Fair Value   Par Value

NYC Police Pension Fund
List of randomly selected 100 Equity Asset Holdings as of June 30, 2017

Consis	Samuita Danniation	Nominal Interest	Organista	Fain Walna	Day Valera	Coin/I are
Cusip	Security Description	Rate	Quantity	Fair Value	Par Value	Gain/Loss
'71377A103	PERFORMANCE FOOD GROUP	-	5,640	\$154,536	\$143,910	\$10,626
'91336L107	UNIVAR INC	-	5,230	152,716	95,885	56,831
'55024U109	LUMENTUM HOLDINGS INC	-	2,671	152,381	89,564	62,817
'Y7546A122	SCORPIO BULKERS INC	-	20,518	145,678	110,083	35,595
'76120W708	RESOURCE CAPITAL CORP	-	12,615	128,295	203,254	(74,959)
'12685J105	CABLE ONE INC	-	173	122,986	92,995	29,990
'06777U101	BARNES + NOBLE EDUCATION INC	-	11,527	122,532	121,031	1,501
'319383204	FIRST BUSEY CORP	-	3,899	114,319	72,757	41,561
'36164Y101	GCP APPLIED TECHNOLOGIES	-	3,208	97,844	97,791	53
'78413P101	SEACOR MARINE HOLDINGS	-	4,802	97,769	106,142	(8,373)
'30227H106	EXTERRAN CORP	-	3,306	88,270	97,268	(8,998)
'949090104	WELBILT INC	-	4,464	84,146	85,800	(1,653)
'379378201	GLOBAL NET LEASE INC	-	3,636	80,865	83,459	(2,594)
'681116109	OLLIE S BARGAIN OUTLET HOLDI	-	1,765	75,189	59,115	16,074
'87403A107	TAILORED BRANDS INC	-	6,640	74,102	86,984	(12,881)
'05614L100	BABCOCK + WILCOX ENTERPR	-	5,632	66,232	103,507	(37,275)
'638517102	NATIONAL WESTERN LIFE GROU A	-	199	63,604	28,411	35,194
'85572F105	STARWOOD WAYPOINT HOMES	-	1,607	55,136	40,352	14,784
'17878Y108	CIVEO CORP	-	25,290	53,109	70,037	(16,928)
'86881A100	SURGERY PARTNERS INC	-	2,230	50,733	34,707	16,026
'518613203	LAUREATE EDUCATION INC A	-	2,564	\$44,947	\$42,488	\$2,458

**NYC Police Pension Fund** 

### List of randomly selected 100 Equity Asset Holdings as of June 30, 2017

		Nominal Interest				
Cusip	Security Description	Rate	Quantity	Fair Value	Par Value	Gain/Loss
'30555Q108	FAIRMOUNT SANTROL HOLD- INGS I	-	11,090	\$43,251	. \$53,356	\$(10,105)
'98421B100	XPERI CORP	-	1,411	42,048	3 25,700	16,348
'Y26889108	GENER8 MARITIME INC	-	6,828	38,851	. 34,882	3,970
'30034T103	EVERI HOLDINGS INC	-	5,303	38,606	33,972	4,634
'88104M101	TERRAFORM GLOBAL INC CL A	-	6,769	34,183	3 24,467	9,717
<u>'553573106</u>	MSG NETWORKS INC. A	-	1,264	28,377	20,798	7,579
'74967R106	RMR GROUP INC/THE A	-	405	19,703	8,762	10,942
'33812L102	FITBIT INC A	-	3,445	18,293	30,755	(12,462)
'66706L101	NORTHSTAR REALTY EUROPE CORP	-	1,227	15,558	3 15,003	555
'04238R106	ARMSTRONG FLOORING INC	-	802	14,412	14,864	(452)
'21870U502	CORENERGY INFRASTRUCTURE TRU	-	417	14,007	14,873	(866)
'74909E106	QUORUM HEALTH CORP	-	3,348	13,894	28,722	(14,828)
'861642403	STONE ENERGY CORP	-	693	12,737	14,943	(2,205)
'44052W104	HORIZON GLOBAL CORP	-	657	9,435	15,152	(5,718)
'269279501	EXCO RESOURCES INC	-	2,325	6,161	. 175,122	(168,961)
'19075F304	COBALT INTERNATIONAL ENER- GY	-	533	\$1,317	\$21,303	\$(19,987)

A complete list of the Plan's securities is available upon request.

### **NYC Police Pension Fund**

### List of randomly selected 100 Alternative Asset Holdings as of June 30, 2017

		Nominal Interest				
Cusip	Security Description	Rate	Quantity	Fair Value	Par Value	Gain/Loss
'ACI01YEJ3	WARBURG PINCUS XI, LP	-	59,198,891	\$81,570,685	\$59,198,891	\$22,371,794
'ACI00PZ50	SUMMIT PTN GROWTH EQTY FD VIII	-	60,423,372	77,112,368	60,423,372	16,688,996
'ACI00WK02	BC EUROPEAN CAPITAL IX, L.P	-	35,362,837	60,863,832	42,858,530	18,005,301
'ACI018UL7	GREEN EQUITY INVESTORS VI	-	52,904,428	56,368,557	52,904,428	3,464,129
'98899C937	YUCAIPA AMERICAN ALLIANCE II	-	36,436,152	53,412,083	36,436,152	16,975,931
'ACI06CN64	CVC CAPITAL PARTNERS VI	-	37,942,565	53,042,994	42,472,017	10,570,977
'ACI02MQ63	NB STRATEGIC CO INVEST II, LP	-	41,112,900	50,983,860	41,112,900	9,870,961
'ACI00LY92	AMERICAN SECURITIES PTRNS VI	-	27,950,702	50,299,692	27,950,702	22,348,990
'984ERM904	EQT VI FUND	-	26,999,424	48,976,963	34,104,754	14,872,209
'ACI020X48	ARES CORPORATE OPPS FUND IV	-	34,684,726	48,042,612	34,684,726	13,357,886
'979FZS906	CREDIT SUISSE EM DOM MGRS FD	-	38,931,741	44,844,071	38,931,741	5,912,330
'89699L946	TRIDENT V	-	29,145,870	43,089,459	29,145,870	13,943,588
'979GFY903	PEQUOT PRIVT EQ FUND IV	-	5,989,176	41,155,906	6,516,556	34,639,351
'ACI06CZS3	CARLYLE PARTNERS VI	-	36,333,611	39,197,426	36,333,611	2,863,815
'ACI00HX50	AXA SECONDARY FUND V, PL	-	1	38,084,811	1	38,084,810
'ACI04PT38	PLATINUM EQ CAP PRTNRS III LP	-	24,384,162	35,388,319	24,384,162	11,004,158
'ACI06BTJ2	TRILANTIC CAPITAL PARTNERS V	-	25,918,263	33,001,310	25,918,263	7,083,047
'979FZQ900	PALADIN HOMELAND SEC III	-	26,687,980	31,458,136	26,687,980	4,770,156
'ACI00C198	BLACKSTONE CAPITAL PRTS VI	-	24,672,152	31,284,881	24,672,152	6,612,729
'59899A990	MIDOCEAN PARTNERS III LP	_	21,567,851	27,719,175	21,567,851	6,151,324
'ACI02BIO7	PALLADIUM EQUITY PART- NERS IV	-	20,087,986	\$25,392,119	\$20,087,986	\$5,304,132

Consis	Committee Description	Nominal Interest	0	Frin Valera	Day Valera	Cain/Lass
Cusip	Security Description	Rate	Quantity	Fair Value	Par Value	Gain/Loss
'64799B940	NEW MOUNTAIN PARTNERS III	-	10,006,273	\$24,687,446	\$10,006,273	\$14,681,173
'ACI06KHR7	LANDMARK EQUITY PRTNRS XV	-	18,505,148	24,102,789	18,505,148	5,597,641
'ACI061SL0	OLYMPUS GROWTH FUND VI LP	-	17,208,550	22,642,356	17,208,550	5,433,806
'ACI002FY0	BDCM OPPORTUNITY FUND III	_	18,116,509	22,407,350	18,116,509	4,290,841
'975TTG903	PEGASUS PARTNERS V LP	-	12,191,668	22,352,984	12,191,668	10,161,316
'988PLK905	COMVEST INVESTMENT PRTNRS	-	26,178,542	20,459,630	26,178,542	(5,718,912)
'040999971	ARES CORPORATE OPP FUND III	-	11,317,252	19,774,475	11,317,252	8,457,224
'979GFF904	RRE VENTURES IV	-	6,938,034	18,836,728	6,938,034	11,898,694
'ACI0764C4	JPM FLEMING TRANCHE A	-	19,388,583	17,329,186	19,388,583	(2,059,397)
'979GFK903	U S POWER FUND II LP	-	14,287,962	15,312,980	14,287,962	1,025,018
'ACI00D7C3	H2 SPECIAL OPPOTUNITIES II LP	-	15,035,591	14,765,356	15,035,591	(270,235)
'69699A942	PALLADIUM EQUITY PARTNERS	-	9,977,858	14,660,158	9,977,858	4,682,300
'979GGK902	AMPERSAND 2011 LP	-	8,532,404	14,327,195	8,532,404	5,794,791
'03799N918	APOLLO INVESTMENT FUND VI	-	26,040,081	13,819,106	26,040,081	(12,220,974)
'ACI06T856	CVC EUROPEAN EQUITY V A	-	6,456,497	13,770,218	8,755,853	5,014,365
'921RRK905	OLYMPUS CAPITAL ASIA III LP	-	6,623,881	13,154,087	6,623,881	6,530,206
'03899N958	APOLLO INVESTMENT FUND VII LP	-	14,755,039	13,104,983	14,755,039	(1,650,056)
'979FZM909	NORTHBOUND EMERGING MG	-	7,947,610	12,642,406	7,947,610	4,694,796
'979FZT904	CARPENTER COMMUNITY BANC FUND	-	6,677,629	12,075,911	6,677,629	5,398,282
'72399C945	PCG CLEAN ENERGY + TECH- NOLOGY	-	30,334,218	11,315,786	30,334,218	(19,018,433)
'979FYE908	BLUE WOLF CAPITAL FUND II	-	6,492,644	\$11,046,428	\$6,492,644	\$4,553,784

### NYC Police Pension Fund

### List of randomly selected 100 Alternative Asset Holdings as of June 30, 2017

		Nominal Interest				
Cusip	Security Description	Rate	Quantity	Fair Value	Par Value	Gain/Loss
'979GFG902	ATLANTIC EQUITY PTNRS IV	-	17,281,660	\$10,840,284	\$17,281,660	\$(6,441,376)
'979GFC901	PSILOS GROUP PTNRS III	-	5,689,510	9,228,767	5,689,510	3,539,257
'614996981	YUCAIPA CORP INITIATIVES II LP	-	7,339,180	8,783,348	7,339,180	1,444,167
'80599F956	SCALE VENTURE PARTNERS III LP	-	91,177	8,612,375	91,177	8,521,198
'979GGN906	SCP VITALIFE PTNRS II	-	14,430,555	8,578,676	14,430,555	(5,851,879)
'98899C945	MONTREUX EQ PRT IV LP	-	9,334,461	8,473,348	9,334,461	(861,113)
'76899R914	RIVERSTONE CARLYLE GLOBAL	-	8,316,586	8,125,080	8,316,586	(191,506)
'37499B964	GI PARTNERS FUND III	-	4,332,803	7,672,991	4,332,803	3,340,188
'98899A964	YUCAIPA AMERICAN ALLIANCE FUND	-	10,114,556	7,121,962	10,114,556	(2,992,594)
'979FYZ901	VSS COMMUNICATION PART- NERS IV	-	453,625	7,071,482	453,625	6,617,857
'979GGH909	FDG	-	12,293,735	6,387,505	12,293,735	(5,906,230)
'75799C910	QUAKER BIO VENTURES II	-	7,653,175	6,168,107	7,653,175	(1,485,068)
'979FYH901	CELTIC PHARMA HOLDINGS LP	-	7,059,162	6,078,292	7,059,162	(980,871)
'ACI00ELR2	NB CO INVESTMENT FUND	-	18,663,695	6,060,811	18,663,695	(12,602,884)
'981VNG906	AVISTA CAPITAL PARTNERS OFFSHO	-	9,571,637	6,017,525	9,571,637	(3,554,111)
'314999954	FENWAY CAPITAL PARTNERS FD III	-	11,926,852	5,975,544	11,926,852	(5,951,308)
'654993955	NGN BIOMED OPPORTUNITY II	-	6,691,760	5,934,146	6,691,760	(757,614)
'ACI06T872	LOMBARD ODIER DH III	-	9,822,383	5,535,530	4,761,650	773,880
'42365Q103	HEMISPHERE MEDIA GROUP INC	-	465,456	5,515,654	5,627,363	(111,709)
'12399H916	CONSTELLATION VENTURE	-	9,261,593	5,311,477	9,261,593	(3,950,116)
'30699A951	FALCONHEAD CAPITAL PART- NERS II	-	4,694,903	\$4,743,946	\$4,694,903	\$ 49,043

Cusip	Security Description	Nominal Interest Rate	Quantity	Fair Value	Par Value	Gain/Loss
Cusip	Security Description	Tutt	Quantity	Tur vuice	I uI V uIuc	Guiii/E033
'979GGF903	CAPITAL PTNRS PRIVATE EQ INCOM	-	2,037,281	\$4,461,598	\$2,037,281	\$ 2,424,317
'988PLA907	ARSENAL CAPITAL PARTNERS II	-	5,251,233	4,211,568	5,251,233	(1,039,665)
'916LFV904	AISLING CAPITAL III LP	-	3,895,177	4,051,915	3,895,177	156,738
'ACI04SXN3	ICV PARTNERS III	-	2,948,671	3,936,063	2,948,671	987,392
'979FZF904	MEDICA MANAGEMENT III LP	-	5,731,091	3,346,000	5,731,091	(2,385,091)
'599999950	MILESTONE PARTNERS III LP	-	8,345,823	2,765,772	8,345,823	(5,580,050)
'52999A986	LEVINE LEICHTMAN CAPITAL IV	-	2,442,813	2,715,309	2,442,813	272,496
'ACI002DC0	LANDMARK EQUITY PARTNERS XIII	-	164,331	2,714,148	164,331	2,549,817
'979GGE906	ARES CORP	-	9,065,599	2,480,448	9,065,599	(6,585,152)
'921RLZ908	FDG CAPITAL PARTNERS II LP	-	9,731,430	2,144,253	9,731,430	(7,587,178)
'979FYN908	COMVEST INVEST PTNRS III	-	6,211,612	1,973,634	6,211,612	(4,237,978)
'ACI018LE3	ACON EQUITY PARTNERS III LP	-	1,375,446	1,961,504	1,375,446	586,058
'32299B918	FIRST RESERVE FUND XI	-	13,621,543	1,707,651	13,621,543	(11,913,892)
'14399X974	COLLER INTERNATIONAL PART- NERS	-	1	1,579,105	1	1,579,104
'979FYT905	ERASMUS NYC GROWTH FD A	-	4,316,360	1,549,780	4,316,360	(2,766,580)
'12999L911	CARLYLE PARTNERS IV, L.P.	-	2,712,410	1,400,016	2,712,410	(1,312,394)
'04099N921	ARES CORP OPPORTUNITY FUND II	-	1,216,045	1,380,491	1,216,045	164,446
'516990926	LANDMARK EQUITY PARTNERS XI	-	1	1,363,106	1	1,363,105
'30399Z926	FS EQUITY PARTNERS V LP	-	3,969,162	1,176,075	3,969,162	(2,793,087)
'ACI06K251	INCLINE EQUITY PARTNERS III	-	1,205,877	1,172,084	1,205,877	(33,794)
'45879A910	INTERMEDIA PARTNERS VII L P	-	7,755,211	\$1,170,541	\$7,755,211	\$(6,584,670)

NYC Police Pension Fund
List of randomly selected 100 Alternative Asset Holdings as of June 30, 2017

Cusip	Security Description	Nominal Interest Rate	Quantity	Fair Value	Par Value	Gain/Loss
Cusip	Security Description	Rate	Quantity	ran value	Tai value	Gain/Loss
'ACI06T864	LODH PRIVATE EQUITY	-	2,770,801	\$1,161,400	\$ -	\$1,161,400
'979FYP903	CORALS 2007 MOMENTUM FUND	-	7,278,657	1,053,535	7,278,657	(6,225,122)
'ACI05XFV3	GREY MOUNTAIN PARTNERS FD III,	-	939,799	914,987	939,799	(24,812)
'979FZP902	PALADIN HMLD SEC	-	18,997,823	842,420	18,997,823	(18,155,403)
'05199B931	AURORA EQUITY PARTNERS	-	4,627,864	805,410	4,627,864	(3,822,454)
'12699Z921	CVC EURO EQUITY PARTNERS	-	915,574	667,208	915,574	(248,366)
'89699L938	TRILANTIC CAPITAL PART- NERS III	-	1,395,214	422,352	1,395,214	(972,862)
'ACIOCL336	CENTRE LANE PARTNERS 2014B+LT	-	10,814,966	161,965	10,814,966	(10,653,001)
'ACI004QM0	BLACKSTONE MEZZANINE FND II	-	1,410,911	151,950	1,410,911	(1,258,962)
'647552918	NEW MOUNTAIN PARTNERS II	-	884,215	149,917	884,215	(734,298)
'33199G924	GSC RECOVERY III L P	-	1,677,329	103,183	1,677,329	(1,574,146)
'571999929	MARKSTONE CAPITAL PART- NERS LP	-	6,318,929	68,055	6,318,929	(6,250,874)
'14399B972	CYPRESS MERCHANT BANK- ING PTRS	-	20,725,893	37,327	20,725,893	(20,688,566)
'ACI0R4QZ2	HEMISPHERE MEDIA GROUP WTS	-	34,478	3,103	3,103	-
'377995964	GLEACHER MEZZANINE FUND	-	1	9	1	8
'979GFU901	LEVINE LEICHTMAN DVF	-	6,948,045	\$ -	\$6,948,045	\$(6,948,045)

A complete list of the Plan's securities is available upon request.

NYC Police Pension Fund

List of randomly selected 50 Treasury Inflation Protected Securities as of June 30, 2017

Cusip	Security Description	Quantity	Market Value	Book Value	Gain/Loss	Accrued Income
'912828MF4	STATE STREET	22,492,249	\$23,311,641	\$23,772,448	\$(460,806)	\$142,673
'912810PS1	STATE STREET	17,918,076	20,802,349	20,966,808	(164,459)	196,290
'912810PZ5	STATE STREET	17,284,138	20,780,372	21,071,531	(291,158)	199,312
'912810QV3	STATE STREET	21,166,365	20,138,525	20,801,788	(663,262)	59,635
'912810PV4	STATE STREET	17,854,161	19,900,426	19,867,020	33,405	144,126
'912810FD5	STATE STREET	15,167,550	19,814,129	19,905,873	(91,743)	115,673
'912810RR1	STATE STREET	19,299,637	19,282,267	20,243,149	(960,882)	72,497
'912828LA6	STATE STREET	18,455,486	19,235,414	20,016,071	(780,656)	159,625
'912828X39	STATE STREET	17,697,411	17,612,994	17,813,247	(200,253)	4,655
'912828JE1	STATE STREET	17,273,796	17,547,240	17,921,469	(374,228)	109,552
'912828JX9	STATE STREET	16,217,181	16,742,941	17,390,722	(647,781)	158,964
'912810QP6	STATE STREET	12,028,481	15,028,144	14,834,936	193,207	96,028
'912810RL4	BLACKROCK	15,606,515	14,636,101	14,875,470	(239,369)	43,974
'912810RA8	STATE STREET	15,622,982	14,371,581	14,684,586	(313,005)	36,689
'912828XL9	BLACKROCK	13,226,207	13,126,878	13,185,454	(58,576)	22,880
'912810RW0	STATE STREET	13,373,112	12,977,802	13,234,651	(256,848)	44,230
'912828SA9	BLACKROCK	12,932,003	12,912,605	13,184,966	(272,361)	7,457
'912828UH1	BLACKROCK	12,994,812	12,876,039	12,893,521	(17,481)	7,493
'912810QF8	STATE STREET	9,473,972	11,782,778	11,886,558	(103,779)	75,620
'912828UX6	BLACKROCK	10,784,906	10,745,757	10,832,092	(86,335)	2,853
'912828Q60	BLACKROCK	10,418,294	\$10,402,458	\$10,533,050	\$(130,591)	\$2,739

NYC Police Pension Fund

List of randomly selected 50 Treasury Inflation Protected Securities as of June 30, 2017

Cusip	Security Description	Quantity	Market Value	Book Value	Gain/Loss	Accrued Income
	a control of the cont	<b>Q</b>				
912828WU0	BLACKROCK	10,179,941	\$9,999,450	\$10,003,347	\$(3,896)	\$5,870
'912810FH6	BLACKROCK	7,272,538	9,873,124	9,739,223	133,900	59,288
'912810FQ6	STATE STREET	6,931,979	9,523,569	9,682,481	(158,911)	49,219
'912828VM9	BLACKROCK	9,304,873	9,364,796	9,483,073	(118,276)	16,097
'912828JX9	BLACKROCK	8,987,074	9,278,435	9,584,822	(306,387)	88,101
'912828K33	BLACKROCK	9,077,832	9,091,812	9,159,162	(67,350)	2,387
'912810PV4	BLACKROCK	7,504,518	8,364,610	8,265,722	98,887	60,585
'912828N71	BLACKROCK	8,290,355	8,342,832	8,560,856	(218,024)	23,903
'912810FR4	BLACKROCK	7,085,070	8,071,524	8,233,026	(161,502)	77,627
'912810FS2	BLACKROCK	6,896,053	7,727,785	8,029,211.	(301,426)	63,626
'912810QV3	BLACKROCK	8,113,887	7,719,876	7,641,241	78,634	22,862
'912810PS1	BLACKROCK	6,568,536	7,625,873	7,621,302	4,570	71,968
'912810FD5	BLACKROCK	5,769,708	7,537,258	7,895,739	(358,481)	44,001
'912828550	BLACKROCK	7,573,006	7,304,694	7,537,555	(232,860)	4,367
'912810QP6	BLACKROCK	4,951,486	6,186,288	6,053,542	132,745	39,529
'912810RF7	BLACKROCK	5,418,209	5,893,873	6,076,337	(182,464)	27,989
'912828NM8	BLACKROCK	5,191,224	5,411,850	5,636,513	(224,662)	29,935
'912810QF8	BLACKROCK	4,136,799	5,144,937	5,211,178	(66,240)	33,025
'912828JE1	BLACKROCK	4,966,469	5,045,087	5,338,218	(293,131)	31,503
'912810RW0	BLACKROCK	3,905,392	3,789,948	3,865,877	(75,928)	12,899
'912810PZ5	BLACKROCK	2,827,645	\$3,399,621	\$3,456,664	\$(57,043)	\$32,611

NYC Police Pension Fund

List of randomly selected 50 Treasury Inflation Protected Securities as of June 30, 2017

Cusip	Security Description	Quantity	Market Value	Book Value	Gain/Loss	Accrued Income
'912810FQ6	BLACKROCK	2,332,077	\$3,203,947.05	\$3,312,562.37	\$(108,615.32)	\$16,558.70
'912828MF4	BLACKROCK	2,797,201	2,899,103.10	3,006,184.51	(107,081.41)	17,743.29
'912796LL1	BLACKROCK	2,677,964	2,676,517.46	2,676,523.68	(6.22)	-
'912810RA8	BLACKROCK	2,485,448	2,286,363.75	2,343,296.93	(56,933.17)	5,835.99
'912828LA6	BLACKROCK	1,722,554	1,795,349.36	1,903,868.96	(108,519.60)	14,899.86
'912810RR1	BLACKROCK	1,615,713	1,614,258.58	1,740,968.56	(126,709.97)	6,070.08
'977AGPII7	BLACKROCK	753,445	862,878.57	1,063,484.79	(200,606.22)	1,359.64
'8611229F8	STATE STREET	151,480	\$151,480.26	\$151,480.26	\$ -	\$ -

A complete list of the Plan's securities is available upon request.

### **NEW YORK CITY**

### **POLICE PENSION FUND**

### **Investment Summary**

### Fiscal Year Ended June 30, 2017

(In Thousands)

		Percentage of Total			
Type of Investments	Fair Value	Fair Value			
Debt Securities:					
U.S Government agency					
Corporate & Others	\$7,702,213	19.54%			
Equity Securities	6,518,200	16.54%			
Alternative Investments	7,209,973	18.29%			
Collective Trusts Funds:					
Fixed Income	1,225,828	3.11%			
Domestic Equity	7,310,206	18.55%			
International Equities	7,066,786	17.93%			
Mortgage Debt Security	308,817	0.78%			
Treasury Inflation Protected Securities	1,592,909	4.04%			
Promissory Notes	-	-			
Short-term Investments:					
Short-term Investments	478,510	1.21%			
Commercial Paper	-	-			
Discount Notes & Treasury Bills	-	-			
Total Investments*	\$39,413,442	100.00%			
*Security lending transactions of \$3,916,225 not included in total.  All returns are time weighted rates of return					

### **New York City**

### Police Pension Fund

### **Broker Commission Report**

Fiscal Year beginning July 1, 2016

Report includes the following period: June 2017

Broker Name	Shares/Par Value	Base Commission
ABLE NOSER Total	\$ 94,100	\$ 4,622
ACADEMY SECURITIES INC Total	43,752	944
AMERICAN PORTFOLIOS FINANIAL Total	2,086	104
ANCORA SECIRITIES INC Total	67,250	3,311
AUTONOMOUS Total	1,782	62
AVONDALE PARTNERS LLC Total	10,636	352
B.RILEY &CO., LLC Total	18,815	582
BANK OF NOVA SCOTIA - SCUSA Total	21,302	10
BARCLAYS CAPITAL INC./LE Total	532,422	7,439
BARCLAYS CAPITAL LE Total	4,751,085	61,430
BARRINGTON RESEARCH ASSOCIATES Total	22,607	1,014
BB&T SECURITIES, LLC Total	6,168	167
BERENBERG Total	845	29
BLAYLOCK ROBERT VAN LLC Total	974	27
BLOOMBERG TRADEBOOK LLC Total	33,404	668
BLUEFIN RESEARCH PARTNER INC. Total	26,260	1,313
BMO CAPITAL MARKETS Total	81,863	3,018
BREAN CAPITAL LLC Total	9,973	264
BROADCORT CAPITAL (THRU ML) Total	11,808	354
BROADCORT CAPITAL CORP Total	3,085	107
BTIG, LLC Total	357,263	12,191
BUCKINGHAM RESEARCH GROUP INC Total	154,755	7,657
BURKE ANDQUICK PARTNERS LLC Total	3,765	131
CABRERA CAPITAL MARKETS Total	42,821	1,133
CANACCORD GENUITY INC. Total	87,434	3,277
CANTOR CLEARING SERVICES Total	6,389	127
CANTOR FITZGERALD & CO / CASTLEOAK SEC Total	151,548	1,373
CANTOR FITZGERALD + CO. Total	822,788	12,929
CANTOR FITZGERALD/CANTOR CLEARING SERV Total	323,559	2,910
CAPITAL INSTITUTIONAL SVCS INC EQUITIES Total	69,969	2,928
CHEEVERS & CO. INC. Total	400,807	11,710
CITATION GROUP Total	41,430	2,022
CITIGROUP GLOBAL MARKETS INC Total	589,113	9,134
CITIGROUP GLOBAL MARKETS INC. Total	1,886,995	10,748
CITIGROUP GLOBAL MARKETS LIMITED Total	3,980,595	3,222
CJS SECURITIES INC Total	22,246	1,055
CLSA AMERICAS Total	5,000	175
COMPASS POINT RESEARCH + TRADING, LLC Total	28,611	1,087
CONVERGEX EXECUTION SOLUTIONS LLC Total	26,583	786
CONVERGEX LLC Total	\$ 3,862,870	\$ 83,844

Fiscal Year beginning July 1, 2016
Report includes the following period: June 2017

Broker Name	Shares/Par Value	Base Commission
CORNERSTONE MACRO LLC Total	\$ 4,010	\$ 200
COWEN AND COMPANY, LLC Total	349,920	13,934
CRAIG - HALLUM Total	56,919	1,820
CREDIT SUISSE SECURITIES (USA) LLC Total	3,404,051	16,759
CUTTONE &CO. Total	5,717	114
DAVIDSON D.A. + COMPANY INC. Total	62,297	2,382
DEUTSCHE BANK SECURITIES INC Total	562,193	12,125
DOUGHERTY & COMPANY LLC Total	44,373	1,406
DREXEL HAMILTON LLC Total	14,919	392
FBR CAPITAL MARKETS & CO. Total	185,381	6,433
FEDERATED MANAGED GROWTH + INCOME 17 A7 Total	439,946	3,298
FIDELITY CAPITAL MARKETS Total	3,557	119
FIG PARTNERS LLC Total	6,362	127
FIRST ANALYSIS SECURITIES CORP Total	13,661	609
GABELLI &COMPANY Total	1,520	76
GOLDMAN SACHS + CO Total	2,850,961	19,639
GREEN STREET TRADING, LLC Total	21,602	1,080
GREENTREE BROKERAGE SERVICES INC Total	31,000	620
GUGGENHEIM CAPITAL MARKETS LLC Total	104,716	3,198
GUZMAN AND COMPANY Total	56,431	1,128
HEIGHT SECURITIES, LLC Total	10,400	364
HIBERNIA SOUTHCOAST CAPITAL INC Total	59,719	2,387
HSBC BROKERAGE (USA) INC. Total	600	25
IMPERIAL CAPITAL LLC Total	13,920	610
INDUSTRIAL AND COMMERCIAL BANK Total	5,538	133
INSTINET Total	10,296,464	86,560
INSTINET LLC Total	468,500	3,513
INSTINET U.K. LTD Total	3,933,031	25,454
INTL FC STONE SECURITIES INC Total	4,407	220
INVESTMENT TECHNOLOGY GROUP INC. Total	830,294	10,982
ISI GROUP INC Total	3,283,333	45,507
ITG CANADA Total	86,200	763
ITG INC. Total	499,760	5,383
IVY SECURITIES, INC. Total	293,475	9,571
J.P. MORGAN CLEARING CORP. Total	309,540	2,936
J.P. MORGAN SECURITIES INC. Total	1,053,947	17,560
JANNEY MONTGOMERY, SCOTT INC Total	69,548	2,037
JEFFERIES + COMPANY INC Total	2,032,700	30,747
JMP SECURITIES Total	22,643	1,035
JNK SECURITIES INC Total	\$ 4,770	\$ 190

Fiscal Year beginning July 1, 2016
Report includes the following period: June 2017

Broker Name	Shares/Par Value	Base Commission
JOHNSON RICE & COMPANY LLC Total	\$ 91,031	\$ 3,004
JONESTRADING INSTITUTIONAL SERVICES LLC Total	323,760	9,026
KCG AMERICAS LLC Total	579,634	4,101
KEEFE BRUYETTE + WOODS INC Total	159,941	5,572
KEYBANC CAPITAL MARKETS INC Total	525,536	17,926
KING, CL,& ASSOCIATES, INC Total	1,705,841	69,915
KNIGHT EQUITY MARKETS L.P. Total	106,869	1,977
LADENBURG THALMAN + CO Total	9,598	208
LEERINK PARTNERS LLC Total	59,288	1,979
LEK SECURITIES CORP Total	7,582	322
LIQUIDNET INC Total	2,853,670	97,076
LONGBOW SECURITIES LLC Total	16,990	849
LOOP CAPITAL MARKETS Total	8,436,737	61,534
LOOP CAPITAL MARKETS LLC Total	538,666	3,695
LUMINEX TRADING AND ANALYTICS LLC Total	24,690	284
MACQUARIE BANK LIMITED Total	4,168,900	159
MACQUARIE SECURITIES (USA) INC Total	40,035	1,673
MACQUARIE SECURITIES KOREA LIMITED Total	3,393	447
MACQUARIE SECURITIES LIMITED Total	2,918,500	353
MAXIM GROUP Total	97,039	3,353
MERRILL LYNCH PIERCE FENNER + SMITH INC Total	8,109,137	88,389
MERRILL LYNCH PROFESSIONAL CLEARING CORP Total	110,122	2,501
MERRILL LYNCH, PIERCE FENNER SMITH Total	542,046	24,232
MISCHLER FINANCIAL GROUP, INC-EQUITIES Total	2,815,464	20,918
MITSUBISHI UFJ SECURITIES Total	3,315	132
MIZUHO SECURITIES USA INC. Total	24,325	997
MKM PARTNERS LLC Total	103,257	4,441
MONNESS, CRESPI, HARDT & CO. INC Total	148,737	7,436
MONTROSE SECURITIES EQUITIES Total	8,300	72
MORGAN STANLEY CO INCORPORATED Total	1,020,950	21,057
NATIONAL FINANCIAL SERVICES CORP. Total	459,248	5,167
NEEDHAM +COMPANY Total	65	2
NEEDHAM AND COMPANY LLC Total	121,865	4,495
NOBLE INTERNATIONAL INVESTMENTS INC. Total	9,128	254
NORTH SOUTH CAPITAL LLC Total	25,213	901
NORTHLAND SECURITIES INC. Total	70,135	1,982
O NEIL, WILLIAM AND CO. INC/BCC CLRG Total	4,708	188
OPPENHEIMER + CO. INC. Total	180,416	8,687
OPPENHEIMER INVESTOR SERVICES INC Total	2,018	27
OTR GLOBAL TRADING LLC Total	\$ 10,301	\$ 360

Fiscal Year beginning July 1, 2016

Report includes the following period: June 2017

oker Name	Shares/Par Value	Base Commission
PENSERRA SECURITIES Total	\$ 518,774	\$ 15,083
PERSHING LLC Total	723,942	6,910
PICKERING ENERGY PARTNERS, INC Total	18,466	646
PIPER JAFFRAY Total	201,167	7,577
RAFFERTY CAPITAL MARKETS LLC Total	3,800	38
RAYMOND JAMES AND ASSOCIATES INC Total	470,300	18,934
RBC CAPITAL MARKETS Total	853,172	25,303
RBC DOMINION SECURITIES INC. Total	43,900	226
RENAISSANCE MACRO SECURITIES, LLC Total	3,379	118
RICHARD B. VANCE & CO., INC.(CLRS 443) Total	471	9
ROBERT W. BAIRD CO.INCORPORATE Total	300,971	11,384
ROSENBLATT SECURITIES INC. Total	6,332	46
ROSENBLATT SECURITIES LLC Total	7,609	150
ROTH CAPITAL PARTNERS LLC Total	5,396	173
SAMUEL A RAMIREZ & COMPANY INC Total	120,723	905
SANDLER ONEILL AND PARTNERS L.P. Total	79,976	3,111
SANFORD C BERNSTEIN CO LLC Total	984,557	25,353
SCOTIA CAPITAL (USA) INC Total	28,465	996
SEAPORT GROUP SECURITIES, LLC Total	236,703	8,407
SG AMERICAS SECURITIES LLC Total	8,201	164
SIDOTI + COMPANY LLC Total	77,052	3,118
SIEBERT CISNEROS SHANK & CO, LLC Total	1,067	32
STATE STREET BANK AND TRUST COMPANY Total	190,522	2,857
STATE STREET GLOBAL MARKETS, LLC Total	383,416	8,133
STEPHENS, INC. Total	281,741	12,112
STERNE AGEE & LEACH INC. Total	12,039	583
STIFEL NICOLAUS + CO INC Total	458,254	16,344
STOCK DISTRIBUTION Total	12,871	643
STRATEGAS SECURITIES LLC Total	26,160	1,308
STUART FRANKEL + CO INC Total	112,376	4,490
STURDIVANT AND CO., INC. Total	391,450	19,535
SUNTRUST CAPITAL MARKETS INC Total	1,517	59
SUNTRUST CAPITAL MARKETS, INC. Total	153,064	5,634
TELSEY ADVISORY GROUP LLC Total	492,031	20,497
THE VERTICAL TRADING GROUP Total	3,835	153
TORONTO DOMINION BANK Total	47,400	812
UBS AG Total	304,996	90
UBS SECURITIES LLC Total	1,231,296	16,798
VANDHAM SECURITIES CORP Total	2,949	88
WALL STREET ACCESS Total	\$ 119,111	\$ 1,676

Fiscal Year beginning July 1, 2016

Report includes the following period: June 2017

Broker Name	Shares/Par Value	Base Commission
WEDBUSH MORGAN SECURITIES INC Total	\$ 208,834	\$ 5,459
WEEDEN + CO. Total	7,874,917	85,459
WELLS FARGO SECURITIES LLC Total	175,351	3,387
WELLS FARGO SECURITIES, LLC Total	339,602	7,936
WILLIAM BLAIR & COMPANY L.L.C Total	348,486	14,230
WILLIAMS CAPITAL GROUP LP (THE) Total	1,385,769	27,958
WOLFE TRAHAN SECURITIES Total	79,015	3,506
WUNDERLICH SECURITIES INC Total	42,064	1,835
XP INVESTIMENTOS CCTVM SA Total	100,424	519
YAMNER & CO INC (CLS THRU 443) Total	80,345	803
Grand Total	\$ 106,093,791	\$ 1,453,049

# New York City Police Pension Fund

Comprehensive Annual Financial Report

A Pension Trust Fund of the City of NewYork



## Actuarial Section Part IV

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### OFFICE OF THE ACTUARY



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

SHERRY S. CHAN
CHIEF ACTUARY

December 8, 2017

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, 2017

### 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. June 30, 2015 (Lag) actuarial valuation to determine Fiscal Year 2017 Employer Contributions (the Actuarial Contributions)).

The funding policy of the City of New York (the City) is to contribute statutorilyrequired contributions (Statutory Contributions) and these contributions are generally funded by the City within the appropriate fiscal year.

For Fiscal Year 2017, the Actuarial Contributions to POLICE, are equal to those recommended by the Actuary of the New York City Pension Funds and Retirement Systems (the Actuary) and represent the Statutory Contributions.

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

On September 29, 2017, 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, 2017" (the Fiscal Year 2017 GASB67/68 Report). Appendix D of the Fiscal Year 2017 GASB67/68 Report contains information developed in accordance with GASB67 for POLICE.

### Actuarial Assumptions and Methods

The Actuary issued a Report entitled "Proposed Changes in Actuarial Assumptions and Methods for Determining Employer Contributions for Fiscal Years Beginning on and After July 1, 2011 for the New York City Police Pension Fund," dated February 10, 2012. Components of the Actuary's proposed changes required the enactment of legislation by the New York State Legislature and Governor.

The Board of Trustees of POLICE adopted those changes in actuarial assumptions that require Board approval during Fiscal Year 2012. The New York State Legislature and the Governor enacted Chapter 3 of the Laws of 2013 (Chapter 3/13) to provide for those changes to the actuarial assumptions and methods that require legislation, including the Actuarial Interest Rate (AIR) assumption of 7.0% per annum, net of investment expenses. Together, this package of actuarial assumptions and methods is referred to as the "2012 A&M."

In Fiscal Year 2016, the Actuary proposed and the Board of Trustees adopted, revised post-retirement mortality assumptions for use in determining employer contributions beginning in Fiscal Year 2016. In addition, beginning in Fiscal Year 2016, the Actuary revised the Actuarial Asset Valuation Method by constraining the Actuarial Value of Assets to be no more than 20% from the Market Value of Assets. The 2012 A&M reflecting these revisions is referred to herein as the "2016 A&M."

The "Summary of Actuarial Assumptions and Methods in Effect for the June 30, 2015 (Lag) Actuarial Valuation" provided later in this Actuarial Section of the CAFR presents the 2016 A&M. There were no changes to any of the actuarial assumptions and methods since the prior year. These actuarial assumptions and methods (2016 A&M) used for funding purposes meet the parameters set forth by the Actuarial Standards of Practice (ASOPs).

### Benefits and Census Data

A summary of the benefits applicable to Plan members included in the June 30, 2015 (Lag) actuarial valuation is shown earlier in the Financial Section of the CAFR. There are no changes in any of the plan provisions since the prior year.

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

A summary of the census data used in the June 30, 2015 (Lag) actuarial valuation is included in this CAFR. A summary of the census data used in the June 30, 2014 (Lag) actuarial valuation of the Plan is available in the Fiscal Year 2016 CAFR.

### Funded Status

The Funded Status of the Plan is usually expressed by the relationship of Assets to Liabilities.

With respect to the Funded Status of the Plan, included in the Actuarial Section of the CAFR is a schedule of Funded Status based on the Entry Age Normal cost method (Table 11).

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 12) as prescribed by the Government Finance Officers Association (GFOA). This Solvency Test represents an alternative approach to describing progress toward funding objectives.

### Presentation Style and Sources of Information

The actuarial information herein is being presented in a manner believed to be consistent with the requirements of the GFOA, and, where applicable, 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, 2015 (Lag) Actuarial Valuation.
- Active Member Valuation Data.
- · Summary of Plan Membership.
- Retirees and Beneficiaries Added to and Removed from Rolls.
- Statutory vs. Actuarial Contributions.
- · Funded Status based on Entry Age Normal Cost Method.
- Comparative Summary of Accrued Liabilities Funded by Actuarial Value of Assets Solvency Test.
- · Contributions.

Some items in the Financial Section and Statistical Section of the CAFR were also provided by the OA.

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

### Acknowledgement of Qualification

I, Sherry S. Chan, am the Chief Actuary for, and independent of, the New York City 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 (ERISA), 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: mm

Att:

cc: Mr. Kevin Holloran - New York City Police Pension Fund

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

Ms. Marlene Markoe-Boyd - New York City Office of the Actuary

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

Ms. Bavakutty Sunny - New York City Police Pension Fund

Keith Snow, Esq. - New York City Office of the Actuary

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### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION

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

Also, in accordance with the Administrative Code of the City of New York (ACNY), the Boards of Trustees of the five actuarially-funded NYCRS are to periodically review and adopt actuarial assumptions as proposed by the Actuary for use in the determination of Employer Contributions.

The Actuary issued a Report entitled "Proposed Changes in Actuarial Assumptions and Methods for Determining Employer Contributions for Fiscal Years Beginning on and After July 1, 2011 for the New York City Police Pension Fund," dated February 10, 2012. Components of the Actuary's proposed changes required the enactment of legislation by the New York State Legislature and the Governor.

The Board of Trustees adopted those changes that require Board approval during Fiscal Year 2012. The New York State Legislature and the Governor enacted Chapter 3 of the Laws of 2013 (Chapter 3/13) to provide for those changes in actuarial assumptions and methods that require legislation, including the Actuarial Interest Rate (AIR) assumption of 7.0% per annum, net of investment expenses. Together, this package of actuarial assumptions and methods is referred to as the "2012 A&M."

In Fiscal Year 2016, the Actuary proposed and the Board of Trustees adopted, revised post-retirement mortality assumptions for use in determining employer contributions beginning in Fiscal Year 2016. In addition, beginning in Fiscal Year 2016, the Actuary revised the Actuarial Asset Valuation Method by constraining the Actuarial Value of Assets to be no more than 20% from the Market Value of Assets. The 2012 A&M reflecting these revisions is referred to herein as the "2016 A&M."

The actuarial assumptions and methods in effect for the June 30, 2015 (Lag) actuarial valuation are unchanged from those used in the June 30, 2014 (Lag) actuarial valuation.

(2) The investment rate of return assumption is 7.0% per annum, net of investment expenses.

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION (Cont'd)

- (3) The mortality tables for service and disability pensioners are based primarily on the experience of POLICE (the Base Tables) and the application of Mortality Improvement Scale MP-2015, published by the Society of Actuaries in October 2015. Sample probabilities are shown in Table 1a. Mortality tables for beneficiaries were also developed from experience review and application of Mortality Improvement Scale MP-2015. Sample probabilities are shown in Table 1b.
- (4) Active Service tables are used to estimate various withdrawals from Active Service. Sample probabilities are shown in Tables 2a, 2b, and 2c for members withdrawing from Active Service due to Death or Disability, in Table 3 for members withdrawing from Active Service without employer-provided benefits or with Vested Benefits, and in Table 4 for members retiring after eligibility for Service Benefits.
- (5) A Salary Scale is used to estimate salaries at termination, retirement, or death. Sample percentage increases are shown in Table 5. The Salary Scale includes a General Wage Increase (GWI) assumption of 3.0% per annum.
- (6) Overtime earnings are also used to estimate salaries at termination, retirement, or death. Sample percentage increases from the base salary in the Baseline Overtime assumptions and the Dual Overtime assumptions (i.e. the assumption for overtime for the years included in the calculation of Final Salary or Final Average Salary) are shown in Table 6.
- (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, 2010 (Lag) actuarial valuation, the Entry Age Normal (EAN) cost method of funding is utilized by the Plan's Actuary to calculate Employer Contributions.

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION (Cont'd)

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

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

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

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

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

The June 30, 2015 (Lag) actuarial valuation uses a June 30, 2015 valuation date to determine Fiscal Year 2017 Employer Contributions.

This methodology requires adjustments to determine the Fiscal Year 2017 Employer Contributions:

- a. <u>Present Value of Future Salary (PVFS)</u>: The PVFS at June 30, 2015 is reduced by the value of salary projected to be paid during Fiscal Year 2016.
- b. <u>Salary for Determining Employer Contributions</u>: Salary used to determine the employer normal contribution is the salary projected to be paid during Fiscal Year 2017 to members on payroll at June 30, 2015.

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION (Cont'd)

- c. <u>UAAL Payments</u>: For determining the UAAL payments for Fiscal Year 2017, and to be consistent with OYLM, the UAAL as of June 30, 2015 is adjusted by the discounted value of employer normal contributions paid during Fiscal Year 2016 and the discounted value of the administrative expenses reimbursed during Fiscal Years 2016 and 2017.
- (11) The Actuary reset the Actuarial Value of Asset (AVA) to the Market Value of Assets (MVA) as of June 30, 2011.

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

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

(12) The obligations of the Plan to the Police Officer's Variable Supplements Fund (POVSF) and the Police Superior Officers' Variable Supplements Fund (PSOVSF) are recognized through the Liability Valuation Method.

Under this method, the APV of Future SKIM from the Plan to the POVSF and PSOVSF is included directly as an actuarial liability to the Plan. SKIM is all or a portion of the excess earnings on equity securities of the Plan 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 AVA of the POVSF and PSOVSF, respectively. Under the EAN cost method, a portion of the APV of Future SKIM is reflected in the APV of Future Normal Costs and a portion is reflected in the AAL.

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION (Cont'd)

- (13) The APVB as of June 30, 2015, used to determine the Fiscal Year 2017 Employer Contributions, includes estimates of liabilities for World Trade Center (WTC) Post-Retirement Reclassifications.
- (14) As discussed herein, the actuarial assumptions and methods are unchanged from those used in the June 30, 2014 (Lag) actuarial valuation.

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION (Cont'd)

Table la
Deaths among Service and Disability Pensioners
Percentage of Pensioners Dying within Next Year

	Service Per	nsioners	Disability Pensioners	
Age	Males	Females	Males	Females
40	0.0836%	0.0567%	0.1355%	0.0684%
45	0.1302	0.0979	0.2024	0.1276
50	0.1940	0.1908	0.3753	0.2605
55	0.5104	0.3398	0.6219	0.4853
60	0.7617	0.5288	0.9432	0.6219
65	1.1038	0.7617	1.2995	0.9208
70	1.8000	1.1933	2.2100	1.5428
75	2.9829	2.2197	3.5554	2.7254
80	5.0173	3.6572	5.9024	4.6534
85	8.3278	6.1272	9.9480	7.7713
90	14.0346	10.1351	17.1410	12.7907
95	22.4197	17.0098	25.7438	18.4872
100	31.0742	21.4488	33.8579	21.6887
105	37.2467	27.4666	37.4446	27.4666
110	96.7583	96.7971	96.7583	96.7971
115	100.0000	100.0000	100.0000	100.0000

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

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 1b  Deaths among Beneficiaries  Percentage of Beneficiaries Dying within Next Year			
Age	Males	Females	
20	0.0219%	0.0126%	
25	0.0294	0.0178	
30	0.0400	0.0264	
35	0.0708	0.0507	
40	0.0925	0.0680	
45	0.2600	0.1175	
50	0.4086	0.2472	
55	0.8133	0.4437	
60	1.0773	0.7335	
65	1.4468	1.0111	
70	1.9534	1.3903	
75	2.8711	2.1928	
80	5.2649	3.7065	
85	8.0972	6.1669	
90	14.0544	10.5748	
95	22.5336	17.8640	
100	31.0742	21.4655	
105	37.2467	27.4666	
110	96.7583	96.7971	
115	100.0000	100.0000	

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

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION (Cont'd)

## Table 2a Withdrawals from Active Service (Due to Death or Disability) Tier I and Tier II Members Not Eligible for WTC Benefits Percentage of Active Members Separating within Next Year

	Accidental		Ordinary Death		Accidental	
Age	Disability	Ordinary Disability	Males	Females	Death	
20	0.150%	0.050%	0.040%	0.030%	0.010%	
25	0.200	0.075	0.040	0.030	0.010	
30	0.500	0.100	0.040	0.030	0.010	
35	1.000	0.125	0.040	0.030	0.015	
40	1.250	0.150	0.050	0.040	0.020	
45	1.500	0.175	0.100	0.070	0.025	
50	2.000	0.200	0.150	0.100	0.030	
55	3.000	0.800	0.200	0.150	0.035	
60	5.000	6.000	0.300	0.200	0.040	
63(1)	NA	NA	NA	NA	NA	

<sup>(1)</sup> Assumed to retire for service immediately at age 63.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION (Cont'd)

### Table 2b Withdrawals from Active Service (Due to Death or Disability) Tier I and Tier II Members Eligible for WTC Benefits Percentage of Active Members Separating within Next Year

	4 1		Ordinary Death			
Age	Accidental Disability	Ordinary Disability	Males	Females	Accidental Death	
20	0.300%	0.050%	0.040%	0.030%	0.010%	
25	0.400	0.075	0.040	0.030	0.010	
30	1.000	0.100	0.040	0.030	0.010	
35	2.000	0.125	0.040	0.030	0.015	
40	2.500	0.150	0.050	0.040	0.020	
45	3.000	0.175	0.100	0.070	0.025	
50	4.000	0.200	0.150	0.100	0.030	
55	6.000	0.800	0.200	0.150	0.035	
60	10.000	6.000	0.300	0.200	0.040	
63(1)	NA	NA	NA	NA	NA	

<sup>(1)</sup> Assumed to retire for service immediately at age 63.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION (Cont'd)

## Table 2c Withdrawals from Active Service (Due to Death or Disability) Tier III and Tier III Revised Members Percentage of Active Members Separating within Next Year

	42 4324 19505	48-W 1994	Ordinar	y Death	
Age	Accidental Disability	Ordinary Disability	Males	Females	Accidental Death
20	0.150%	0.050%	0.040%	0.030%	0.010%
25	0.200	0.075	0.040	0.030	0.010
30	0.500	0.100	0.040	0.030	0.010
35	1.000	0.125	0.040	0.030	0.015
40	1.200	0.150	0.050	0.040	0.020
45	1.300	0.175	0.100	0.070	0.025
50	1.500	0.200	0.150	0.100	0.030
55	2.000	0.800	0.200	0.150	0.035
60	3.000	6.000	0.300	0.200	0.040
63(1)	NA	NA	NA	NA	NA

<sup>(1)</sup>Assumed to retire for service immediately at age 63.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION (Cont'd)

Percentag		ole 3 m Active Service s Separating with	in Next Year	
		Tier III and Tier III Revised Early Service Retirement		
Years of Service	All Tiers Withdrawal	Reduced Retirement	Unreduced Before Full Escalation	
0	4.00%	NA	NA	
1	3.00	NA	NA	
2	2.00	NA	NA	
3	2.00	NA	NA	
4	2.00	NA	NA	
5	2.00	NA	NA	
10	1.00	NA	NA	
15	0.30	NA	NA	
20	NA	5.00%	NA	
21	NA	2.00	NA	
22	NA	NA	5.00%	
23	NA	NA	2.00	
24	NA	NA	2.00	

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 4
Withdrawals from Active Service (Due to Unreduced Service Retirement)
Percentage of Eligible Active Members Separating within Next Year

	Years	of Service Since Fir	st Eligible
Age	0-1	1-2	2+
40	60.00%	15.00%	10.00%
45	60.00	15.00	10.00
50	60.00	15.00	15.00
55	60.00	15.00	15.00
60	60.00	20.00	20.00
63	100.00	100.00	100.00

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 5 Salary Scale				
Years of Service	Assumed Annual Percentage Increases Within Next Year <sup>(1)</sup>			
0	3.00%			
5	36.00			
10	5.00			
15	4.50			
20	4.00			
25	3.50			
30	3.50			
35	3.50			
40	3.50			
45	3.50			

<sup>(1)</sup> Salary Scale includes a General Wage Increase assumption of 3.0% per annum.

### SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION (Cont'd)

	Table 6 Overtime							
Years of Service	All Tiers Baseline	Tier I/II Dual Service	Tier I/II Dual Disability	Tier III/ Tier III Revised Dual Service	Tier III/ Tier III Revised Dual Disability			
0	15.00%	18.00%	8.00%	17.00%	12.00%			
5	15.00	18.00	8.00	17.00	12.00			
10	15.00	18.00	8.00	17.00	12.00			
15	15.00	18.00	8.00	17.00	12.00			
20	15.00	18.00	12.00	17.00	14.00			
25	12.00	15.00	9.00	14.00	11.00			
30	7.00	10.00	6.00	9.00	6.00			
35	6.00	8.00	6.00	7.00	6.00			
40	6.00	8.00	6.00	7.00	6.00			
45	6.00	8.00	6.00	7.00	6.00			

### ACTIVE MEMBER VALUATION DATA

Table 7 Active Member Valuation Data						
Valuation Date	Number	Annual Payroll <sup>(1)</sup>	Annual Average Pay	Percentage Increase (Decrease) in Average Pay		
6/30/06 (Lag)	35,194	\$2,816,928,536	\$80,040	0.5%		
6/30/07 (Lag)	34,956	2,961,649,327	84,725	5.9		
6/30/08 (Lag)	35,337	3,095,903,827	87,611	3.4		
6/30/09 (Lag)	35,608	3,261,118,111	91,584	4.5		
6/30/10 (Lag) <sup>(2)</sup>	34,597	3,464,096,750	100,127	9.3		
6/30/11 (Lag)	33,705	3,480,066,072	103,251	3.1		

101,582

103,741

105,171

103,500

(1.6)

2.1

1.4

(1.6)

3,478,153,934

3,607,606,894

3,618,095,284

3,564,029,659

6/30/12 (Lag)

6/30/13 (Lag)

6/30/14 (Lag)

6/30/15 (Lag)

34,240

34,775

34,402

34,435

Annual Payroll was increased by a percentage to reflect overtime earnings, and, where applicable, adjusted to be consistent with collective bargaining agreements estimated to be achieved.

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

As of the June 30, 2015 (Lag) and June 30, 2014 (Lag) actuarial valuations, the Plan's Membership consisted of:

Table 8 SUMMARY OF PLAN MEMBERSHIP							
Group	June 30, 2015 (Lag)	June 30, 201 (Lag)					
Retirees and beneficiaries currently receiving benefits	48,703	48,212					
Terminated vested members not yet receiving benefits	546	572					
Other Inactives(1)	1,484	1,369					
Active members	34,435	34,402					
Total	85,168	84,555					

<sup>(5)</sup> Represents members who are no longer on payroll but not otherwise classified.

Table 9

RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

	Added	i to Rolls	Removed from Rolls		Rolls end of Year			
Year Ended Number A	Annual Allowances <sup>(1)</sup>	Number	Annual Allowances	Number	Annual Allowances <sup>(2)</sup>	% Increase In Annual Allowances	Average Annual Allowances	
6/30/06	2,330	\$131,918,392	988	\$25,047,689	42,474	\$1,492,294,412	7.7%	\$35,134
6/30/07	2,268	123,856,605	1,011	26,869,025	43,731	1,589,281,992	6.5	36,342
6/30/08	1,541	92,191,424	982	27,012,317	44,290	1,654,461,099	4.1	37,355
6/30/09	1,025	89,094,934	1,030	30,086,313	44,285	1,713,469,720	3.6	38,692
6/30/10	1,355	110,403,824	1,006	29,554,813	44,634	1,794,318,731	4.7	40,201
6/30/11	2,142	141,323,253	1,021	30,315,285	45,755	1,905,326,699	6.2	41,642
6/30/12	1,893	133,158,449	1,010	32,287,109	46,638	2,006,198,039	5.3	43,016
6/30/13	1,346	99,488,158	1,034	33,621,831	46,950	2,072,064,366	3.3	44,133
6/30/14	2,220	144,660,995	958	32,759,640	48,212	2,183,965,721	5.4	45,299
6/30/15	1,578	117,595,035	1,087	37,293,047	48,703	2,264,267,709	3.7	46,491

Balancing Item – Amounts shown include changes due to benefit finalization change in benefit type (e.g. Service to Accidental Disability), COLA increases, and other changes.

Allowances shown in table are those used in the actuarial valuation as of the Year Ended date and are not adjusted for anticipated changes due to finalization of benefit calculation or contract settlements.

Table 10 STATUTORY VS ACTUARIAL CONTRIBUTIONS							
Fiscal Year Ended	Statutory Contribution <sup>(1)</sup>	Actuarial Contribution	Employer Rate of Contribution (2)				
6/30/08	\$1,797,824,362	\$1,797,824,362	64.3%				
6/30/09	1,932,150,215	1,932,150,215	65.6				
6/30/10	1,980,996,299	1,980,996,299	64.0				
6/30/11	2,083,632,616	2,083,632,616	64.1				
6/30/12	2,385,731,163	2,385,731,163	69.2				
6/30/13	2,424,690,421	2,424,690,421	70.1				
6/30/14	2,320,909,885	2,320,909,885	67.9				
6/30/15	2,309,618,694	2,309,618,694	65.7				
6/30/16	2,393,939,871	2,393,939,871	67.6				
6/30/17	2,293,839,525	2,293,839,525	65.4				

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

Beginning Fiscal Year 2006, the Statutory Contributions were computed using a One-Year Lag Methodology in accordance with Chapter 152/06 which also eliminated the use of ten-year phase-in of Chapter 278/02 for funding the additional actuarial liabilities attributed to Chapter 125/00.

<sup>(2)</sup> The Employer Rate of Contribution equals the Statutory Contribution as a percentage of the salaries of members who were on payroll or projected to be on payroll (under One-Year Lag Methodology) as of the preceding June 30 increased to reflect overtime earnings and adjusted, where applicable, to be consistent with collective bargaining agreements estimated to be achieved.

### FUNDED STATUS BASED ON ENTRY AGE NORMAL COST METHOD

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 Unfunded Actuarial Accrued Liabilities (UAAL), actuarial gains and losses are financed over the working lifetimes of active participants and are not identified as separate UAAL.

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

		Tal	ble 11					
FU	NDED STATUS I	BASED ON ENT	RY AGE NORM	AL COST M	ÆTHOD			
(Dollar Amounts in Thousands)								
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) <sup>(1)</sup> - Entry Age (b)	Unfunded AAL (UAAL) - Entry Age (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage Of Covered Payroll ((b-a)/c)		
June 30, 2006 (Lag)	\$18,689,451	\$26,902,144	\$8,212,693	69.5%	\$2,816,929	291.5%		
June 30, 2007 (Lag)	19,800,553	28,728,913	8,928,360	68.9	2,961,649	301.5		
June 30, 2008 (Lag)	21,393,152	30,226,568	8,833,416	70.8	3,095,904	285.3		
June 30, 2009 (Lag)	22,676,172	31,822,043	9,145,871	71.3	3,261,118	280.5		
June 30, 2010 (Lag) <sup>(2)</sup>	22,908,732	38,134,430	15,225,698	60.1	3,464,097	439.5		
June 30, 2011 (Lag)(2)	24,748,860	40,524,580	15,775,720	61.1	3,480,066	453.3		
June 30, 2012 (Lag)(2)	26,777,077	42,015,625	15,238,548	63.7	3,478,154	438.1		
June 30, 2013 (Lag) <sup>(2)</sup>	29,087,154	43,900,094	14,812,940	66.3	3,607,607	410.6		
June 30, 2014 (Lag) <sup>(2)</sup>	29,212,981	44,384,022	15,171,041	65.8	3,618,095	419.3		
June 30, 2015 (Lag)(2)	31,092,977	45,297,561	14,204,584	68.6	3,564,030	398.6		

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

AAL includes the accrued liabilities attributable to the Variable Supplements Funds, net of their Actuarial Value of Assets, if any.

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

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

Table 12
SOLVENCY TEST

(Dollar Amounts in Thousands)

	Aceru	ed Liabilities fo		80			
As of June 30	Accumulated Curre Member Retirees Contributions Benefici			Actuarial Value of Assets	Percentage of Accrued Liabilities Funded by Actuarial Value of Assets		
	(A)	(B)	(C)	(D)	(A)	(B)	(C)
2006 (Lag)	\$1,628,376	\$15,866,403	\$7,627,823	\$18,689,451	100%	100%	16%
2007 (Lag)	1,690,817	16,893,533	8,067,768	19,800,553	100	100	15
2008 (Lag)	1,841,590	17,590,712	8,429,458	21,393,152	100	100	23
2009 (Lag)	2,030,929	17,852,955	9,217,265	22,676,172	100	100	30
2010 (Lag)	2,180,671	20,639,838	16,892,925	22,908,732	100	100	1
2011 (Lag)	2,564,754	21,974,393	16,953,617	24,748,860	100	100	1
2012 (Lag)	2,456,478	23,181,744	17,191,876	26,777,077	100	100	7
2013 (Lag)	2,741,297	23,991,098	17,907,612	29,087,154	100	100	13
2014 (Lag)	2,978,441	26,373,360	15,820,520	29,212,981	100	99	0
2015 (Lag)	3,053,313	27,543,329	15,438,728	31,092,977	100	100	3

See following "SOLVENCY TEST - NOTES."

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

### 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 APV 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 (GASB 5).

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

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

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

### CONTRIBUTIONS

### A. MEMBER CONTRIBUTIONS

For Tier I and Tier II members, member contributions are made on the basis of a normal rate of contribution that is assigned by the Plan at the time of membership. The normal rate, which is dependent upon the member's age and the Plan at the time of membership, as well as the tables in effect for such purpose, is determined to provide an annuity of approximately one-fourth of the service retirement allowance at the earliest date for service retirement. Members may voluntarily increase their rates of contribution by 50% for the purpose of purchasing an additional annuity.

Tier III members and Tier III Revised members contribute 3.0% of annual wages for a maximum of 25 years.

Contributions from members are recorded when the employer makes payroll deductions from Plan members. Tier I and Tier II 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.

Loans are not permitted for Tier III and Tier III Revised 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.

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# New York City Police Pension Fund

Comprehensive Annual Financial Report

A Pension Trust Fund of the City of NewYork



## Statistical Section Part V

fiscal year ended

June 30, 2017

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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 schedule show data on benefit ranges, years of credited service, types of retirement and options selected and the amount of monthly, annual or average benefit paid to each group of retirees and beneficiaries. The data is presented for the fiscal period or over a ten year period.

#### Demographic and Economic Information

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

#### **Financial Trends**

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

#### Revenue Capacity

Revenue capacity information helps users evaluate the different sources of 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**

### BENEFIT EXPENSES BY TYPE (In Thousands)

#### **Benefits Payments**

Fiscal Year Ended 6/30	Other Benefits	Ordinary Death	Death Gamble	Line of Duty Deaths	Total
2008	\$1,779,292	\$2,793	\$2,837	\$8,734	\$1,793,656
2009	1,812,777	2,576	6,081	8,598	1,830,032
2010	1,899,416	2,258	1,689	7,968	1,911,331
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

The table offers a comparison for the Benefit Payment of the Plan for the past 10 Years.

#### NEW YORK CITY POLICE PENSION FUND

#### AVERAGE ANNUAL BENEFIT PAYMENT AMOUNTS

		rvice nt Benefits		(Non-Duty) y Benefits		tal (Duty) y Benefits	
Valuation Date	Number	Average Annual Allowance	Number	Average Annual Allowance	Number	Average Annual Allowance	
6/30/06 (Lag)	26,290	\$33,613	3,857	\$29,512	10,823	\$43,654	
6/30/07 (Lag)	27,497	34,809	3,776	29,886	11,041	45,017	
6/30/08 (Lag)	27,990	35,721	3,691	30,033	11,253	46,240	
6/30/09 (Lag)	27,890	36,867	3,601	30,391	11,494	47,996	
/30/10 (Lag)	28,184	38,290	3,538	30,769	11,645	49,793	
6/30/11 (Lag)	29,247	39,766	3,454	31,231	11,815	51,341	
6/30/12 (Lag)	30,119	41,205	3,346	31,468	11,948	52,806	
6/30/13 (Lag)	30,405	42,230	3,262	31,692	12,072	54,231	
6/30/14 (Lag)	31,610	43,412	3,172	31,926	12,244	55,499	
6/30/15 (Lag)	32,148	44,626	3,068	32,217	12,298	56,788	

NEW YORK CITY
POLICE PENSION FUND
SCHEDULE OF CHANGES IN NET POSITION
June 30, 2017
(In Thousands)

Additions to Plan Net Position

**Deductions from Plan Net Position** 

Year	Member	Employer	Net Investment	Other	Total	Benefit	Other	Administrative	Total	Change in
Ended	Contributions	Contributions Income (	Income (Loss)	Income	Additions	Payments	Deductions	Expenses	Deductions	Net position
2008	\$143,755	\$1,797,824	(\$981,185)	\$4,008	\$964,402	\$1,793,656		\$15,205	\$1,808,861	(\$844,459)
2009	211,559	1,932,150	(3,937,833)	3,759	(1,790,365)	1,830,032	1	16,580	1,846,612	(3,636,977)
2010	222,711	1,980,066	2,283,072	3,060	4,488,909	1,911,331	ı	16,518	1,927,849	2,561,060
2011	206,859	2,084,563	4,535,097	2,561	6,829,080	2,049,193	ı	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

The table offers a 10 year comparison for the operations of the Police Pension Fund

<sup>\*</sup> Transfer to QPP (29,364+2,154,000) \$2,183,364 is eliminated from the total

## **NEW YORK CITY**

## POLICE PENSION FUND

# SCHEDULE OF RETIRED MEMBERS BY BENEFIT TYPE

## JUNE 30, 2015 (LAG)

## SERVICE RETIREMENT

		Male		l	Female		8	Both Male and Female	
Age	Number	Benefits	Average	Number	Benefits	Average	Number	Benefits	Average
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	_	37,560	37,560	0	0	0	~	37,560	37,560
40 TO 44	848	45,930,332	54,163	213	10,020,274	47,044	1,061	55,950,606	52,734
45 TO 49	3,655	205,647,803	56,265	160	36,722,376	48,319	4,415	242,370,179	54,897
50 TO 54	5,981	307,693,537	51,445	1,363	62,060,146	45,532	7,344	369,753,683	50,348
55 TO 59	4,455	213,832,108	47,998	883	38,568,108	43,678	5,338	252,400,216	47,284
60 TO 64	2,306	104,993,576	45,531	334	13,683,468	40,968	2,640	118,677,044	44,953
65 TO 69	2,771	115,223,491	41,582	94	3,471,512	36,931	2,865	118,695,003	41,429
70 TO 74	3,607	132,932,319	36,854	87	3,155,011	36,264	3,694	136,087,330	36,840
75 TO 79	2,220	69,771,265	31,428	37	1,293,328	34,955	2,257	71,064,593	31,486
80 TO 84	1,218	34,791,790	28,565	23	714,814	31,079	1,241	35,506,604	28,611
85 TO 89	853	23,347,192	27,371	19	426,103	22,426	872	23,773,295	27,263
90 & UP	413	10,136,695	24,544	7	175,997	25,142	420	10,312,692	24,554
Total	28,328	1,264,337,668	44,632	3,820	170,291,137	44,579	32,148	1,434,628,805	44,626

## **NEW YORK CITY**

## POLICE PENSION FUND

# SCHEDULE OF RETIRED MEMBERS BY BENEFIT TYPE

JUNE 30, 2015 (LAG)

## ORDINARY DISABILITY

	l	MALE			Female	1	Bo	Both Male and Female	e
Age	Number	Benefits	Average	Number	Benefits	Average	Number	Benefits	Average
Under 30	~	19,484	19,484	~	15,043	15,043	2	34,527	17,264
30 TO 34	12	356,040	29,670	4	120,620	30,155	16	476,660	29,791
35 TO 39	40	1,246,716	31,168	20	606,406	30,320	09	1,853,122	30,885
40 TO 44	131	4,778,812	36,479	55	1,853,663	33,703	186	6,632,475	35,658
45 TO 49	227	7,480,715	32,955	129	3,984,725	30,889	356	11,465,440	32,206
50 TO 54	198	5,834,362	29,466	125	3,342,163	26,737	323	9,176,525	28,410
55 TO 59	130	3,338,306	25,679	92	1,971,143	25,936	206	5,309,449	25,774
60 TO 64	92	2,913,814	31,672	28	682,109	24,361	120	3,595,923	29,966
65 TO 69	318	8,195,278	25,771	17	374,534	22,031	335	8,569,812	25,582
70 TO 74	481	12,455,343	25,895	18	390,709	21,706	499	12,846,052	25,744
75 TO 79	289	10,009,890	34,636	O	191,587	21,287	298	10,201,477	34,233
80 TO 84	264	11,380,806	43,109	∞	235,543	29,443	272	11,616,349	42,707
85 TO 89	283	12,383,547	43,758	Ŋ	189,053	37,811	288	12,572,600	43,655
90 & UP	104	4,372,286	42,041	က	118,058	39,353	107	4,490,344	41,966
Total	2,570	84,765,399	32,983	498	14,075,356	28,264	3,068	98,840,755	32,217

## **NEW YORK CITY**

## POLICE PENSION FUND

# SCHEDULE OF RETIRED MEMBERS BY BENEFIT TYPE

JUNE 30, 2015 (LAG)

## ACCIDENTAL DISABILITY

		Male		j	Female		Во	Both Male and Female	
Age	Number	Benefits	Average	Number	Benefits	Average	Number	Benefits	Average
Under 30	9	348,840	58,140	~	56,969	56,969	7	405,809	57,973
30 TO 34	114	7,176,010	62,947	25	1,467,663	58,707	139	8,643,673	62,185
35 TO 39	221	14,864,944	67,262	40	2,398,782	59,970	261	17,263,726	66,145
40 TO 44	754	55,237,496	73,259	113	7,127,832	63,078	867	62,365,328	71,932
45 TO 49	1,657	121,085,851	73,075	249	15,453,122	62,061	1,906	136,538,973	71,636
50 TO 54	1,871	121,198,830	64,778	357	21,591,440	60,480	2,228	142,790,270	64,089
55 TO 59	1,225	73,195,960	59,752	184	10,135,740	55,086	1,409	83,331,700	59,142
60 TO 64	711	37,460,447	52,687	69	3,599,219	52,163	780	41,059,666	52,641
65 TO 69	1,485	67,589,432	45,515	4	1,481,970	36,146	1,526	69,071,402	45,263
70 TO 74	1,662	70,989,908	42,714	37	1,507,786	40,751	1,699	72,497,694	42,671
75 TO 79	773	32,896,417	42,557	10	418,384	41,838	783	33,314,801	42,548
80 TO 84	358	16,744,510	46,772	က	99,489	33,163	361	16,843,999	46,659
85 TO 89	240	10,621,341	44,256	7	331,211	47,316	247	10,952,552	44,342
90 & UP	84	3,269,727	38,925	_	26,372	26,372	85	3,296,099	38,778
Total	11,161	632,679,713	56,687	1,137	62,695,979	57,780	12,298	698,375,692	56,788

## NEW YORK CITY POLICE PENSION FUND

# SERVICE OR DISABILITY June 30, 2015 (LAG)

# SURVIVORS OF DECEASED PENSIONERS UNDER SELECTED OPTIONS

δο	<u>Male</u> Nimber	Renefite	Average	<u>Female</u>	Ronofite	Average	Both Male	Both Male & Female	Average
Other Beneficiaries:									
Under 30	7	196,081	28,012	7	97,223	13,889	4	293,304	20,950
30 to 34	0	0	0	~	29,560	29,560	~	29,560	29,560
35 to 39	<del>-</del>	13,585	13,585	ဧ	80,046	26,682	4	93,631	23,408
40 to 44	2	65,676	32,838	O	467,254	51,917	#	532,930	48,448
45 to 49	9	248,361	41,394	25	790,875	31,635	31	1,039,236	33,524
50 to 54	5	162,788	32,558	45	1,718,679	38,193	20	1,881,467	37,629
55 to 59	2	59,286	29,643	39	1,206,332	30,932	41	1,265,618	30,869
60 to 64	2	52,437	26,219	53	1,467,001	27,626	55	1,519,438	27,626
65 to 69	~	32,543	32,543	79	2,145,419	27,157	80	2,177,962	27,225
70 to 74	~	19,546	19,546	102	2,752,997	26,990	103	2,772,543	26,918
75 to 79	~	29,448	29,448	107	2,734,538	25,556	108	2,763,986	25,592
80 to 84	0	0	0	86	2,072,405	21,147	86	2,072,405	21,147
85 to 89	0	0	0	100	1,833,130	18,331	100	1,833,130	18,331
dn % 06	0	0	0	126	1,200,076	9,524	126	1,200,076	9,524
Total	28	879,751	31,420	794	18,595,535	23,420	822	19,475,286	23,693

## NEW YORK CITY POLICE PENSION FUND

# SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT June 30, 2015 (LAG)

# ACTUAL PERFORMANCE OF DUTY

	<u>Male</u>			<u>Female</u>		Δĺ	Both Male & Female	ΦI	
Age	Number	Benefits	Average	Number	Benefits	Average	Number	Benefits	Average
Accidental Death:									
Under 30	0	0	0	က	165,721	55,240	က	165,721	55,240
30 to 34	0	0	0	~	46,792	46,792	~	46,792	46,792
35 to 39	0	0	0	11	486,121	44,193	1	486,121	44,193
40 to 44	_	86,829	86,829	6	414,087	46,010	10	500,916	50,092
45 to 49	~	35,991	35,991	44	2,014,145	45,776	45	2,050,136	45,559
50 to 54	9	263,929	43,988	46	2,012,839	43,757	52	2,276,768	43,784
55 to 59	က	151,591	50,530	31	1,227,721	39,604	8	1,379,312	40,568
60 to 64	0	0	0	27	929,714	34,434	27	929,714	34,434
65 to 69	က	168,196	56,065	20	1,488,552	29,771	53	1,656,748	31,259
70 to 74	~	65,015	65,015	58	1,598,979	27,569	29	1,663,994	28,203
75 to 79	5	193,714	38,743	22	495,511	22,523	27	689,225	25,527
80 to 84	2	44,394	22,197	25	620,665	24,827	27	692,028	24,632
85 to 89	_	29,708	29,708	12	286,547	23,879	13	316,255	24,327
90 & up	<del>-</del>	33,609	33,609	4	86,801	21,700	Ŋ	120,410	24,082
Total	24	1,072,976	44,707	343	11,874,195	34,619	367	12,947,171	35,278

## NEW YORK CITY POLICE PENSION FUND

# SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT June 30, 2015 (LAG)

# ALL PENSIONERS AND BENEFICIARIES

			34,591	58,578	58,558	59,008	58,265	52,604	48,902	45,771	41,196	37,309	33,986	33,369	32,531	26,137	46,491
	Average																
Both Male & Female	Benefits		899,361	9,196,685	19,734,160	125,982,255	393,463,964	525,878,713	343,686,295	165,781,785	200,170,927	225,867,613	118,034,082	66,704,416	49,447,832	19,419,621	2,264,267,709
<b>Both Ma</b>	Number		26	157	337	2,135	6,753	6,997	7,028	3,622	4,859	6,054	3,473	1,999	1,520	743	48,703
	Average		27,913	53,698	48,262	49,832	48,853	46,862	43,783	39,846	31,893	31,144	27,748	23,840	21,441	11,399	42,556
	Benefits		334,956	1,664,635	3,571,355	19,883,110	58,965,243	90,725,267	53,109,044	20,361,511	8,961,987	9,405,482	5,133,348	3,742,916	3,066,044	1,607,304	280,532,202
<u>Female</u>	Number		12	31	74	399	1,207	1,936	1,213	511	281	302	185	157	143	141	6,592
	Average		40,315	59,778	61,456	61,117	60,314	53,983	49,970	46,744	41,767	37,632	34,337	34,181	33,683	295,589	47,107
	Benefits		564,405	7,532,050	16,162,805	106,099,145	334,498,721	435,153,446	290,577,251	145,420,274	191,208,940	216,462,131	112,900,734	62,961,500	46,381,788	17,812,317	1,983,735,507
<u>Male</u>	Number		<u> </u>	126	263	1736	5,546	8,061	5,815	3,111	4,578	5,752	3,288	1,842	1,377	602	42,111
	Age	All Pensioners & Beneficiaries:	Under 30	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 & up	Total

### NEW YORK CITY POLICE PENSION FUND June 30, 2017

### EXPENSES BY TYPE (In Thousands)

Fiscal Year	Benefit	Administrative			Contributions as a Percentage of Annual Covered
Ended 6/30	Payments	Expense	Other	Total	Payroll
2008	\$1,791,377	\$15,205	\$2,279	\$1,808,861	64.3
2009	1,827,541	16,580	2,491	1,846,612	65.6
2010	1,908,234	16,517	3,097	1,927,848	63.9
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	8169	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

The table offers comparison for the expenses of the plan for the past 10 Years

Transferable earnings (29,364+2,154,000) \$2,183,364 is an elimination in the statement.

### NEW YORK CITY POLICE PENSION FUND June 30, 2017

### REVENUE BY SOURCE (In Thousands)

Fiscal Year			Net			Employer Contributions as %
Ended	Member	Employer	Investment	Other		of Annual Covered
6/30	Contributions	Contributions	Income/Loss	Income	Total	Payroll
2008	\$143,755	\$1,797,824	-\$981,185	\$4,009	\$964,403	64.3
2009	211,559	1,932,150	-3,937,833	3,759	-1,790,365	65.6
2010	222,711	1,980,066	2,283,072	3,060	4,488,909	63.9
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

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, 2015 (LAG) ACTUARIAL VALUATION FOR DETERMINING FINAL FISCAL YEAR 2017 EMPLOYER CONTRIBUTIONS

#### MALES

AGE \ SVC	UNDER 5	5.9	10-14	15-19	20-24	25.29	30-34	35-39	40 & UP /	LL YEARS
NUMBER:										
UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	1,016	0	0	0	0	0	0	0	0	1.016
25 TO 29	3,712	980		0	0	0	0	0	0	4,697
30 TO 34	1,570	3,286	1,377	5	0	0	0	0	0	6,238
35 TO 39	637	1,355	2,698	778	0	0	0	0	0	5,468
40 TO 44	101	521	1,297	2,131	1,078	1	0	0	0	5,129
45 TO 49	2	71	565	1,021	1,887	439	1	0	0	3,986
50 TO 54	2	2	51	296	611	423	229	0	0	1,614
55 TO 59	1	3	3	39	57	97	186	22	0	408
60 TO 64	1	1	1		4	2	42	8	5	72
65 TO 69	0	1	100	2	0	.0	0	0	0	4
70 & UP	0	0	î.	0	1	1	0	0	2	5
TOTAL	7,042	6,220	5,999	4,280	3,638	963	458	30	7	28,637
SALARIES (IN										
UNDER 20	0	0	0	.0	0	0	0	0	0	. 0
20 TO 24	54,634	0	0	.0	0	0	0	0	0	54,634
25 TO 29	230,076	101,754	475	0	0	0	0	0	0	332,305
30 TO 34	99,258	352,165	155,703	539	0	. 0	0	0	0	607,666
35 TO 39	39,690	144,876	306,769	96,518	0	. 0	0	0	0	587,853
40 TO 44	6,747	55,447	146,502	263,312	144,615	129	0	0	0	616,753
45 TO 49	198	7,542	63,475	122,808	247,319	61,959	125	0	0	503,426
50 TO 54	241	212	5,659	35,696	76,181	57,549	33,076	0	0	208,612
55 TO 59	111	421	393	4,562	6,944	12,502	27,81.2	3,712	0	56,457
60 TO 64	127	140	153	1,046	704	251	5,965	1,307	762	10,455
65 TO 69	0	140	141	284	0	0	0	0	0	565
70 & UP	0	0	141	0	143	143	0	.0	299	727
TOTAL *	431,082	662,699	679,412	534,765	475,907	132,533	66,978	5,018	1,860	2,979,453
AVERAGE SA			40	Tw.		100		- 0	20	7.4
UNDER 20	0	0	0	0	0	0	0	0	0	63.000
20 TO 24	53,774	0	0	0	0	0	0	0	0	53,774
25 TO 29	61,982	103,831	94,995	.0	0	0	0	0	0	70,748
30 TO 34	63,222	107,171	113,074	107,874	0	-0	0	0	0	97,414
35 TO 39	62,308	106,920	113,702	124,059	0	0	0	0	0	107,508
40 TO 44	66,804	106,423	112,953	123,563	134,152	128,872	0	0	0	120,248
45 TO 49	98,806	106,225	112,346	120,282	131,065	141,136	125,031	0	0	126,299
50 TO 54	120,418	105,898	110,951	120,594	124,682	136,050	144,436	0	0	129,252
55 TO 59	111,442	140,261	131,143	116,981	121,819	128,883	149,526	168,713	0	138,374
60 TO 64	126,880	140,261	153,268	130,739	176,023	125,587	142,022	163,330	152,363	145,208
65 TO 69	0	140,261	141,284	141,796	0	0	0	0	0	141,284
70 & UP	0	. 0	141,284	0	143,330	143,330	- 0	0	149,322	145,318
TOTAL.	61,216	106,543	113,254	122,609	130,815	137,625	146,239	167,277	151,494	104,042

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

Total may not add up due to rounding.

Average based on unrounded salary.

POL Active FY17 NYC Office of the Actuary 12/8/2017

#### NEW YORK CITY POLICE PENSION FUND DATA USED IN THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION FOR DETERMINING FINAL FISCAL YEAR 2017 EMPLOYER CONTRIBUTIONS

#### FEMALES

AGE \ SVC	UNDER 5	5.9	10-14	15-19	20-24	25-29	30-34	35-39	40 & UP A	LL YEARS
NUMBER:										
UNDER 20	0	0	0	.0	0	.0	0	0	0	
20 TO 24	159	0	0	0	0	.0	0	0	0	1.9
25 TO 29	671	189	0	0	0	0	0	0	0	860
30 TO 34	316	704	249	0	0	-0	0	0	0	1,26
35 TO 39	166	407	613	158	0	0	0	0	0	1,34
40 TO 44	19	179	355	410	144	0	0	.0	0	1,10
45 TO 49	0	22	165	239	264	29	0	0	0	78
50 TO 54	0	0	11	62	139	57	1.5	0	0	28
55 TO 59	0	1	0	. 8	16	1.2	16	2	0	5
60 TO 64	0	0	0	0	0	0	3	0	0	3
65 TO 69	0	0	0	0	0	0	0	.0	0	
70 & UP	0	0	0	0	0	0	0	0	0	
TOTAL	1,331	1,502	1,393	877	563	98	32		0	5,798
SALARIES (IN	THOUSANDS	i.e.								
UNDER 20	0	0	0	0	0	0	0	0	0	17
20 TO 24	8,583	0	0	0	0	0	0	0	0	8.58
25 TO 29	40,825	19,276	0	0	0.	0	0	0	0	60,10
30 TO 34	19,316	73,754	27,604	0	0	0	0	0	0	120,63
35 TO 39	10,142	42,795	68,463	19,315	0	.0	0	0	0	140,72
77 T T T T				0.0000000		0	0	0	0	310000
40 TO 44 45 TO 49	1,304	18,808	38,826 17,984	49,302	17,965 33,554	3,692	0	0	0	126,204 85,88
			550000000	28,327		7,375	0.070	0	0	
50 TO 54	0	0	1,200	7,213	17,097		1,942		0	34,87
55 TO 59	0	138	0	908	1,955	1,491	2,348	349	0	7.18
60 TO 64	2.70	0	0	0	0	0		0	0	40
65 TO 69	0	0	0	0	0	0	0	0	752	
70 & UP	0	0	0	0	0	0	- 0	0	0	
TOTAL *	80,170	157,097	154,078	105,064	70,571	12,557	4,690	349	0	584,57
AVERAGE SAL	ARIES: **									
UNDER 20	0	0	0	0	0	0	0	0	0	1
20 TO 24	53,980	0	0	0	0	0	0	0	0	53,98
25 TO 29	60,842	101,989	0	0	0	0	0	0	0	69,88
30 TO 34	61,127	104,764	110,861	.0	0	0	0	0	0	95,09
35 TO 39	61,099	105,147	111,685	122,245	0	0	0	0	0	104,69
40 TO 44	68,625	105,072	109,368	120,248	124,760	0	0	.0	0	114,00
45 TO 49	0	105,766	108,997	118,521	127,098	127,302	0	0	0	119,44
50 TO 54	0	0	109,099	116,337	123,002	129,383	149,390	0	0	123,50
55 TO 59	0	138,074	0	113,503	122,178	124,227	146,726	174,596	0	130,70
60 TO 64	0	0	0	0	0	0	133,302	0	0	133,30
65 TO 69	0	0	0	0	0	0	0	0	0	
70 & UP	0	0	0	0	0	0	0	0	0	
TOTAL	60.233	104,592	110,608	119,799	125,349	128,135	146,550	174,596	0	100,834

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

\* Total may not add up due to rounding.

Average based on unrounded salary.

POL Active FY17 NYC Office of the Actuary 12/8/2017

#### NEW YORK CITY POLICE PENSION FUND DATA USED IN THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION FOR DETERMINING FINAL FISCAL YEAR 2017 EMPLOYER CONTRIBUTIONS

#### MALES AND FEMALES

AGE \ SVC	UNDER 5	5.9	10-14	15-19	20-24	25-29	30-34	35-59	40 & UP A	IL YEARS
NUMBER:	1000	100	10000	101	1000	120	50000	935	100	
UNDER 20	. 0	0	0	0	0	0	0	0	0	. 0
20 TO 24	1,175	0	0	0	0	0	0	0	0	1,175
2! TO 29	4,383	1,169	5	0	0	0	0	0	0	5,557
30 TO 34	1,886	3,990	1,626	5	0	0	0	0	0	7,507
3! TO 39	803	1,762	3,311	936	0	0	0	0	0	6,812
46 TO 44	120	700	1,652	2,541	1,222	- 1	0	0	0	6,236
4! TO 49	2	93	730	1,260	2,151	468	1	0	0	4,705
50 TO 54	2	2	62	358	750	480	242	0	0	1,896
5! TO 59	1	4	3	47	73	109	202	34	0	463
60 TO 64	1	1	1.5	н	4	2	45	8.	. 5	75
65 TO 69	. 0	1	1.0	2	0	0	0	0	0	4
70 & UP	0	0		0	L		- 0	- 0		
TOTAL	8,373	7,722	7,392	5,157	4,201	1,061	490	32	7	34,435
		2								
SALARIES (IN			100	1	100			- 2	100	-
UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	63,217	0	0	0	0	0	0	0	0	63,217
2! TO 29	270,901	121,030	475	0	0	0	0	0	0	392,406
30 TO 34	118,574	425,919	183,307	539	0	0	0	0	0	728,340
3: TO 39	49,833	187,671	375,232	115,833	0	0	0	0	0	728,568
40 TO 44	8,051	74,255	185,328	312,614	162,581	129	0	0	0	742,957
4! TO 49	198	9,869	81,460	151,135	280,873	65,650	125	0	0	589,309
50 TO 54	241	212	6,859	12,909	93,278	64,924	35,018	0	0	243,440
5! TO 59	111	559	393	5,470	8,899	13,992	30,159	4,061	0	63,645
60 TO 64	127	140	1.53	1,046	704	251	6,365	1,317	762	10,855
65 TO 69	0	140	141	284	0	0	0	0	0	565
70 & UP	0	0	141	0	143	143	0	0	299	727
TOTAL *	511,252	819,796	833,490	629,829	546,478	145,090	71,667	5,348	1,060	3,564,030
AVERAGE SAL										
UNDER 20	0	0	0	0	0	0	0	0	0	0
20 TO 24	53,802	.0	0	0	0	0	0	0	0	53,802
25 TO 29	61,807	103,533	94,995	0	0	0	0	0	0	70,615
30 TO 34	62,871	106,747	112,735	137,874	0	0	0	0	0	97,021
35 TO 39	62,058	106,510	113,329	123,753	0	0	0	0	0	106,954
40 TO 44	67,092	106,079	112,184	123,028	133,045	128,872	0	0	0	119,140
42 TO 49	98,806	106,116	111,589	119,948	130,578	140,278	125,031	0	0	125,252
50 TO 54	120,418	105,898	110,623	119,857	124,371	135,258	144,702	0	0	128,396
5! TO 59	111,442	139,714	131,143	116,389	121,898	128,370	149,304	169,243	0	137,463
60 TO 64	126,880	140,261	153,268	130,739	176,023	125,587	141,441	163,330	152,363	144,732
65 TO 69	0	140,261	141,284	111,796	0	0	0	0	0	141,284
70 & UP	0	0	141,284	0	143,330	143,330	0	- 0	149,322	145,318
TOTAL	61,060	106,164	112,756	122,131	130,083	136,748	146,260	167,735	151,494	103,500

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

\* Total may not add up due to rounding.

\*\* Average based on unrounded salary.

POL Active FY17 NYC Office of the Actuary 12/8/2017

### NEW YORK CITY POLICE PENSION FUND DATA USED IN THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION FOR DETERMINING FINAL FISCAL YEAR 2017 EMPLOYER CONTRIBUTIONS SUMMARY OF PENSIONERS BY CAUSE AND GENDER

		MALE			FEMALE		BOT	ALL FILES (ALL) H MALE & FEMA	
AGE -	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	AVERAGE	NUMBER	BENEFITS	
ACCIDENTAL DISABIL			TAT DICTOR			TT TO TO TO			TI LICION
UNDER 30	6	348,840	58,140	1	56,969	56,969	<b>∵7</b> ∵	405,809	57,973
30 TO 34	114	7,176,010	62,947	25	1,467,663	58,707	139	8,643,673	62,185
35 TO 39	221	14,864,944	67,262	40	2,398,782	59,970	261	17,263,726	66,145
40 TO 44	754	55,237,496	73.259	113	7.127.832	63.078	867	62.365.328	71.932
45 TO 49	1,657	121,085,851	73,075	249	15,453,122	62,061	1,906	136,538,973	71,636
50 TO 54	1,871	121,198,830	64,778	357	21,591,440	60,480	2,228	142,790,270	64,089
55 TO 59	1.225	73,195,960	59,752	184	10,135,740	55,086	1.409	83,331,700	59,142
60 TO 64	711	37,460,447	52,687	69	3,599,219	52,163	780	41,059,666	52,641
65 TO 69	1,485	67,589,432	45,515	41	1,481,970	36,146	1,526	69,071,402	45,263
70 TO 74	1,662	70,989,908	42,714	37	1,507,786	40,751	1.699	72,497,694	42,671
75 TO 79	773	32,896,417	42,557	10	418.384	41.838	783	33,314,801	42,548
80 TO 84	358	16,744,510	46,772	3	99,489	33, 163	361	16,843,999	45,659
85 TO 89	240	10.621.341	44,256	7	331,211	47,316	247	10,952,552	44,342
90 & UP	84	3,269,727	38,925	1	26,372	26.372	85	3,296,099	38,778
TOTAL	11,161	632,679,713	56,687	1.137	65,695,979	26,372 57,780	12,298	698,375,692	55,788
ORDINARY DISABILITY	Y.								
UNDER 30	1	19.484	19.484	1	15.043	15.043	2	34,527	17,264
30 TO 34	12	356,040	29,670	4	120,620	30,155	16	476,660	29,791
35 TO 39	40	1,246,716	31,168	20	605,406	30,320	50	1,853,122	30,885
40 TO 44	131	4,778,812	36,479	55	1.853.663	33,703	186	6.632.475	35,658
45 TO 49	227	7,480,715	32,955	129	3,984,725	30,889	356	11,465,440	32,206
50 TO 54	198	5,834,362	29,466	125	3,342,163	26,737	323	9,176,525	28,410
55 TO 59	130	3,338,306	25,679	76	1,971,143	25,936	206	5,309,449	25,774
60 TO 64	92	2,913,814	31,672	28	682,109	24.361	120	3,595,923	29,966
65 TO 69	318	8,195,278	25,771	17	374,534	22,031	33.5	8,569,812	25,582
70 TO 74	481	12,455,343	25,895	18	390,709	21.706	499	12,846,052	25,744
75 TO 79	289	10,009,890	34,636	9	191,587	21,287	298	10,201,477	34,233
80 TO 84	264	11,380,806	43,109	8	235,543	29,443	272	11,616,349	42,707
85 TO 89	283	12,383,547	43,758	5	189.053	37,811	288	12,572,600	43,655
90 & UP	104	4,372,286	42,041	3	118,058	39,353	107	4,490,344	41,966
TOTAL	2,570	84,765,399	32,983	498	14,075,356	28,264	3,068	98,840,755	32,217
SERVICE RETIREMENT	1		33	To Control					
UNDER 30	0	0	0	0	0	0	0	0	0
30 TO 34	0	0	0	0	0	0	0	0	0
35 TO 39	1	37,560	37,560	0	0	0	1	37,560	37,560
40 TO 44	848	45,930,332	54,163	213	10,020,274	47,044	1,061	55,950,606	52,734
45 TO 49	3,655	205,647,803	56,265	760	36,722,376	48,319	4,415	242,370,179	54,897
50 TO 54	5,981	307,693,537	51,445	1,363	62,060,146	45,532	7,344	369,753,683	50,348
55 TO 59	4,455	213,832,108	47,998	883	38,568,108	43,678	5,338	252,400,216	47,284
60 TO 64	2,306	104,993,576	45,531	334	13,683,468	40,968	2,640	118,677,044	44,953
65 TO 69	2,771	115,223,491	41,582	94	3,471,512	36,931	2,855	118,695,003	41,429
70 TO 74	3,607	132,932,319	36,854	87	3,155,011	36,264	3,694	136,087,330	35,840
75 TO 79	2,220	69,771,265	31,428	37	1,293,328	34,955	2,257	71,064,593	31,486
80 TO 84	1,218	34,791,790	28,565	23	714,814	31,079	1,241	35,506,604	28,611
85 TO 89	853	23,347,192	27,371	19	426,103	22,426	872	23,773,295	27,263
90 & UP	413	10,136,695	24,544	7	175,997	25, 142	420	10,312,692	24,554
TOTAL	28,328	1,264,337,668	44,632	3,820	170,291,137	44,579	32,148	1,434,628,805	44,626

Statistical Schedules - John's part NYC Office of the Actuary 12/8/2017

### NEW YORK CITY POLICE PENSION FUND DATA USED IN THE JUNE 30, 2015 (LAG) ACTUARIAL VALUATION FOR DETERMINING FINAL FISCAL YEAR 2017 EMPLOYER CONTRIBUTIONS SUMMARY OF PENSIONERS BY CAUSE AND GENDER

		MALE		<u> </u>	FEMALE		BOT	ALL FILES (ALI H MALE & FEM.	
AGE	NUMBER		AVERAGE	NUMBER		AVERAGE	NUMBER		AVERAGE
ACCIDENTAL DEATH	ł:			<u> </u>					
UNDER 30	0	0	0	3	165,721	55,240	3	165,721	55,240
30 TO 34	0	0	0	1	46,792	46,792	1	46,792	46,792
35 TO 39	0	0	0	11	486,121	44, 193	11	486,121	44,193
40 TO 44	1	86,829	86,829	9	414.087	46,010	10	500,916	50,092
45 TO 49	1	35,991	35,991	44	2.014.145	45,776		2,050,136	45,559
50 TO 54	6	263,929	43,988	46	2,012,839	43,757	52	2,276,768	43,784
55 TO 59	3	151.591	50,530	31	1,227,721	39,604	34	1.379.312	40.568
60 TO 64	o	0	0:	27	929.714	34,434	27	929,714	34,434
65 TO 69	3	168.196	56,065	50	1.488.552	29.771	53	1.656.748	31.259
70 TO 74	1	65,015	65.015	58	1.598.979	27,569	59	1,663,994	28,203
75 TO 79	5	193,714	38.743	22	495.511	22,523	27	689.225	25,527
80 TO 84	2	44,394	22,197	25	620,665	24,827	27	665,059	24,632
5 THE EL T. AV			10.00			The state of the s			
85 TO 89	1	29,708	29,708	12	286,547	23,879	13	316,255	24,327
90 & UP TOTAL	<u>1</u> 24	33,609 1,072,976	33,609 44,707	343	86,801 11,874,195	21,700 34,619	5 367	120,410 12,947,171	24,082 35,278
IOIAL	24	1,0/2,9/0	44,707	343	11,8 /4,190	34,019	307	12,947,171	33,278
OTHER BENEFICIARI	ES:					į			
UNDER 30	7	196.081	28.012	7	97,223	13.889	14	293.304	20.950
30 TO 34	Ó	0	0	1	29,560	29.560	1	29,560	29,560
35 TO 39	1	13,585	13,585	3	80.046	26,682	4	93,631	23,408
40 TO 44	2	65,676	32.838	9	467.254	51,917	11	532,930	48,448
45 TO 49	6	248.361	41.394	25	790,875	31,635	31	1.039.236	33,524
50 TO 54	5	162,788	32,558	45	1,718,679	38,193	50	1,881,467	37,629
		The state of the s						107,740,000,000,000	
55 TO 59	2	59,286	29,643	39	1,206,332	30,932	41	1,265,618	30,869
60 TO 64	2	52,437	26,219	53	1,467,001	27,679	55	1,519,438	27,626
65 TO 69	1	32,543	32,543	79	2,145,419	27,157	80	2,177,962	27,225
70 TO 74	1	19,546	19,546	102	2,752,997	26,990	103	2,772,543	26,918
75 TO 79	1	29,448	29,448	107	2,734,538	25,556	108	2,763,986	25,592
80 TO 84	0	0	0	98	2,072,405	21,147	98	2,072,405	21,147
85 TO 89	0	0	0	100	1,833,130	18,331	100	1,833,130	18,331
90 & UP	0	0	0	126	1,200,076	9,524	126	1,200,076	9,524
TOTAL	28	879,751	31,420	794	18,595,535	23,420	822	19,475,286	23,693
ALL DESPIOSEDS AS	ID DESERVOIA	ATTO.		S					
ALL PENSIONERS AN UNDER 30	IA BENEFICIAL	564,405	40.215	12	334,956	27.012	26	899,361	34,591
Control of the Contro			40,315	12		27,913			
30 TO 34	126	7,532,050	59,778	31	1,664,635	53,698	157	9,196,685	58,578
35 TO 39	263	16,162,805	61,456	74	3,571,355	48,262	337	19,734,160	58,558
40 TO 44	1,736	106,099,145	61,117	399	19,883,110	49,832	2,135	125,982,255	59,008
45 TO 49	5,546	334,498,721	60,314		58,965,243	48,853	6,753	393,463,964	58,265
50 TO 54	8,061	435,153,446	53,983	1,936	90,725,267	46,862	9,997	525,878,713	52,604
55 TO 59	5,815	290,577,251	49,970	1,213	53,109,044	43, 783	7,028	343,686,295	48,902
60 TO 64	3,111	145,420,274	46,744	511	20,361,511	39,846	3,622	165,781,785	45,771
65 TO 69	4,578	191,208,940	41,767	281	8,961,987	31,893	4,859	200,170,927	41,196
70 TO 74	5,752	216,462,131	37,632	302	9,405,482	31,144	6,054	225,867,613	37,309
75 TO 79	3,288	112,900,734	34,337	185	5,133,348	27,748	3,473	118,034,082	33,986
80 TO 84	1,842	62,961,500	34,181	157	3,742,916	23,840	1,999	66,704,416	33,369
85 TO 89	1,377	46,381,788	33,683	143	3,066,044	21,441	1,520	49,447,832	32,531
90 & UP	602	17,812,317	29,589	141	1,607,304	11,399	743	19,419,621	26,137
TOTAL	42.111	1,983,735,507	47,107	6,592	280,532,202	42,556	48, 703	2,264,267,709	46,491

Statistical Schedules - John's part NYC Office of the Actuary 12/8/2017