New York City Fire Pension Fund



Comprehensive Annual Financial Report

A Pension Trust Fund of the City of New York

For The Fiscal Years Ended

June 30, 2013 and June 30, 2012

Salvatore J. Cassano
Fire Commissioner
and Chairperson of the Board of Trustees
City of New York

New York City Fire Pension Fund

9 MetroTech Center, Brooklyn, N.Y. 11201 - 3857 (718) 999 - 1190



Comprehensive Annual Financial Report A Pension Trust Fund of the City of New York For Fiscal Years Ended

June 30, 2013 and June 30, 2012

Prepared under the

Direction of:

Mary E. Basso

Pension Director

Prepared By:

Angel G. Garcia

Assistant Deputy Director

Maureen V. Dale

Administrative Staff Analyst

Agnes S. Chan

Associate Accountant

Actuary:

Robert C. North, Jr.

Chief Actuary

255 GREENWICH ST, 9th FLOOR

NEW YORK, NY 10013

Custodian of the Fund:

John C. Liu

Comptroller of the City of New York

1 CENTRE STREET NEW YORK, NY 10007

TABLE OF CONTENTS

| INTR | ODUCTORY SECTION P | age |
|----------|---|-----|
| | Certificate of Achievement for Excellence | |
| | In Financial Reporting. | 9 |
| (| Chairperson Report | 11 |
| | Letter of Transmittal | 13 |
| | Administrative Organization | 19 |
| | Members of the Board of Trustees | 21 |
| · | Pension Fund Administration and Reporting. | 22 |
| | Summary Plan and Options Benefits Tiers I and II | 23 |
| | Summary Plan Benefits Tier III | 39 |
| | ~ · · · · · · · · · · · · · · · · · · · | 37 |
| FINA | NCIAL SECTION | |
| | | |
| | Report of Independent Auditors | 45 |
|] | Management's Discussion and Analysis (Unaudited) | 47 |
| ļ | Financial Statements | |
| 9 | Statements of Plan Net Position Held in Trust for Pension Benefits | 52 |
| | Statements of Changes in Plan Net Position Held in Trust for Pension Benefits | • |
| | Notes to Financial Statements | 54 |
| 1 | Notes to Financial Statements | 77 |
| <u>]</u> | Required Supplementary Information (Unaudited): | |
| | Schedule -1 Schedule of Funding Progress | 72 |
| | Schedule -2 Schedule of Employer Contributions | 74 |
| | Schedule -3 Schedule of Actuarial Methods and Assumptions | 75 |
| <u> </u> | Additional Supplementary Information: | |
| 9 | Schedule -4 Schedule of Investment Expenses | 76 |
| | | |

(Continued)

| INVESTMENT SECTION | <u>Page</u> | | | | |
|--|-------------|--|--|--|--|
| Outline of Investment Policies and Objectives | 85 | | | | |
| Summary of Investment Results for fiscal year 2013 | | | | | |
| Asset Allocation | | | | | |
| Investment Results: | 00 | | | | |
| Graphic representation of Asset Mix and Allocation | 88 | | | | |
| Graphic representation of Asset Wilk and Allocation | | | | | |
| Graphic representation of Total multi-year Investment Income | | | | | |
| Schedule of Portfolio returns | | | | | |
| Schedule of Largest Bond Holdings | | | | | |
| Schedule of Largest Stock Holdings | | | | | |
| Schedule of Largest International Investment Holdings | | | | | |
| Schedule of Broker Commission Report | | | | | |
| Investment Summary | | | | | |
| investment Summary | 109 | | | | |
| | | | | | |
| ACTUADIAL SECTION | | | | | |
| ACTUARIAL SECTION | | | | | |
| Actuary's Certification Letter | 113 | | | | |
| Summary of Actuarial Assumptions and Methods | | | | | |
| Table 1a - Deaths among Service and Disability Pensioners | 123 | | | | |
| Table 1b – Death among Beneficiaries | 124 | | | | |
| Table 2a - Withdrawals from Active Serv. Due to Death or Dis. Tier I and tier II | 125 | | | | |
| Table 2b - Withdrawals from Active Serv. Due to Death or Dis eligible for WTC | | | | | |
| Table 2c – Withdrawals from Active Service Due to death or Dis. Tier III Memb | er 127 | | | | |
| Table 3 - Withdrawal from Active service | | | | | |
| Table 4a - Withdrawal from Active service Tier I and Tier II Members | | | | | |
| Table 4b - Withdrawal from Active Service tier III Unreduced with Full COLA | | | | | |
| Table 5 - Salary scale | | | | | |
| Salary Scale Graph | | | | | |
| Table 6 - Overtime | | | | | |
| Active member Valuation Data | | | | | |
| Summary of Plan Membership | | | | | |
| Schedule of Retirants and Beneficiaries Added to and Removed from Rolls | 135 | | | | |
| Schedule of Statutory vs. Annual Required Contributions | | | | | |
| Funded Status Based on Entry Age Actuarial Cost Method | | | | | |
| Schedule of Solvency Test | | | | | |
| Solvency Test Notes | | | | | |
| Other Measures of Funded Status | | | | | |
| Table of Asset and Obligation Values | | | | | |
| Table of Funded Ratios | | | | | |
| Comments on Funded Ratios and Funding Methodology | 147 | | | | |
| Acknowledgement of qualification | 149 | | | | |
| ransan is an Gamman or Gamman or in the contract of the contra | | | | | |

Appendix A Census Data for Active Members.....

Appendix B Census Data for Pensioners. 157

(Continued)

151

| C | FΑ | TI | CT | 17 | AF | I | SE | CT | T | זר | V. |
|----------|----|----|----|----|----|---|----|-----|----|----|----|
| . | LA | | OL | 17 | -r | | | U I | 11 | J. | ٧. |

| P | a | g | e |
|---|---|---|---|
| | | | |

| Statistical Narrative | 163 |
|---|------|
| Table of Benefit Expenses by Type | 164 |
| Table of Retired Members and Beneficiaries by Type of Benefit | 165 |
| Table of Retired Members and Beneficiaries by Type of Option Selected | 166 |
| Exhibit 4 Retired Members by Type of Benefit | 167 |
| Exhibit 5 Average Benefit Payments | 168 |
| Exhibit 6 Benefit and Deductions from Net Position by Type | 169 |
| Schedule of Average Annual Benefit Payment Amounts | |
| Graphic Representation of Total Current Investments at Market Value | 171 |
| Schedule of Changes in Net Position | .172 |
| Schedule of Revenues by Source | 173 |
| Graphic Representation of Sources of Current Investment Income | 174 |
| Schedule of Expenses by Type | 175 |
| Table of Compensation to Administrative Officials and | |
| Commissions and Payments to Brokers and Consultants | 176 |

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]

New York City Fire Pension Fund

Comprehensive Annual Financial Report

A Pension Trust Fund of the City of New York



Introductory Section

Part I

Fiscal Year Ended June 30, 2013

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

New York City

Fire Department SubChapter Two

Pension Fund, New York

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2012

Executive Director/CEO

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]



FIRE DEPARTMENT

9 METROTECH CENTER

BROOKLYN, N.Y. 11201-3857

SALVATORE J. CASSANO Fire Commissioner

Suite 8W-6

December 9, 2013

TO: ALL MEMBERS OF THE NEW YORK CITY FIRE PENSION FUND

RE: PENSION FUND COMPREHENSIVE ANNUAL FINANCIAL REPORT FOR FISCAL YEAR 2013

As Fire Commissioner and Chairperson of the Board of Trustees, I hereby present the New York City Fire Pension Fund Comprehensive Annual Financial Report for the Fiscal Year ended June 30, 2013. Within this report you will find financial, investment, actuarial and statistical information disclosing the results of operations and the financial position of the Pension Fund.

Our goal is to manage the assets of the Fund efficiently and prudently, in full compliance with established Regulations and Laws, so as to promote growth and provide secure retirement benefits for our members and their beneficiaries. The external auditors, Deloitte & Touche LLP, confirm in their Independent Auditors' Report on the financial condition of the Fund for Fiscal Year 2013 that we have adhered to required standards in all material respects.

During Fiscal Year 2013, despite modest national economic growth, debt concerns and continued volatility in investment markets, our Pension Fund's investment portfolio posted positive results. Growth in assets assures the soundness of the Fund and is a good indicator of the Fund's ability to meet its obligations. Members and their beneficiaries may therefore be assured that the Fund is well managed and that their retirement benefits are secure.

On behalf of the Board of Trustees, I wish to express our sincere appreciation to all active and retired uniformed members for their valuable service and dedication to the Fire Department and the City of New York.

Sincerely.

Salvatore J. Cassano Fire Commissioner

Chairperson of the Board of Trustees

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]



FIRE DEPARTMENT

9 METROTECH CENTER, 6TH FLOOR

BROOKLYN N. Y. 11201-3857

Mary E. Basso
Director
Bureau of Pension

December 9, 2013

TO: Board of Trustees

New York City Fire Pension Fund

I am pleased to present this Comprehensive Annual Financial Report of the New York City Fire Pension Fund ("Fire" or the "Plan"), also known as the New York City Fire Department Subchapter Two Pension Fund, for the fiscal year ended June 30, 2013. Management is responsible for the preparation, accuracy and completeness of this presentation. We believe that the data in this report is a fair representation of the financial position and results of operations of the Fund and to the best of our knowledge, the information is accurate and includes all required disclosures. Our report is organized into the Introductory, Financial, Investment, Actuarial and Statistical sections. Users of the financial statements are encouraged to review the Management's Discussion and Analysis (MD&A) presented in the financial section.

Profile of the Fund

The New York City Fire Pension Fund, also known as The New York City Fire Department Subchapter Two Pension Fund (formerly Article I-B), was established pursuant to Local Law No. 53, enacted July 14, 1941. On that date all participants covered under Article 1-A and those subsequently appointed to the Fire Department were granted the option of membership in either Article I-A or Subchapter Two, in accordance with the legislation. At that time, all members of the Article 1-A Fund became participants in the Fund established under Subchapter Two and, with one exception, all new appointees elected membership in the Subchapter Two Fund.

Effective July 1, 1980, the Article 1-A Fund was terminated and its assets transferred to the Subchapter Two Fund. Prior to July 1, 1980, each member contributed by salary deduction an amount determined to provide approximately 25% of the cost of their benefits, while the City contributed the remaining 75%. The total contributions under this arrangement proved inadequate to fund the benefits, and the Pension Fund became actuarially unsound.

Pursuant to an increased take home pay (ITHP) provision established under Section 13-326 of the New York City Administrative Code, members' contributions were reduced by 2½% of their earnings. The ITHP rate has since been increased from 2½% to 5%, under the provisions of Chapter 373 of the laws of 2000. Additional City funding made up the reduction in the amount of member contributions.

New State laws, effective July I, 1980, July I, 1981, and July I, 1982, amended the benefit provisions of the Fund by establishing a new Plan known as the Improved Benefits Plan (IBP). The IBP provides increased benefits along with higher member and City contributions. The Original Plan (OP) was closed to new entrants on July I, 1981. Membership in the IBP is mandatory for employees hired on or after that date. Members of the OP have the option, during specified time periods each year, to transfer to the IBP. The new laws were expected to correct the previous under-funding of the Pension Fund. The provisions of these laws increased City contributions each year to provide an amount deemed sufficient to cover benefits, excluding annuities and refunds from member contribution accounts. This amount covers the normal cost of operation each year.

Current Initiatives

Management's goal is to administer the Plan in a manner that will ensure accurate and timely payment of benefits to retirees and beneficiaries and provide members with the best information available so that they may prepare for a secure retirement. The highlights of our accomplishments during the past year evidence our commitment to deliver exemplary member services.

During fiscal year 2013, our unit and a technology team from the Fire Department Bureau of Technology Development and Systems (BTDS) worked on the enhancement of our new administrative pension system (e-UPS). The challenge was to design and implement a member self-service portal that will allow members to view updated account details, current Annual Pension Statements and to download manuals and forms. Phase I of this project was completed and became operational in May 2013. For the first time, members' Annual Pension Statements were not only distributed electronically, they were available months earlier than in prior years. The unit also updated the e-UPS system with information on the requirements for newly enacted Tier 3 and modified Tier 3 legislation. The update will facilitate the registration of applicants for membership in the pension system, under the new laws.

The pension managers and key personnel of our unit completed the challenging task of processing membership applications for over 320 probationary firefighters, hired by the Fire Department during the fiscal year. These firefighters are now members of the pension system under either Tier 2 or the new Tier 3 legislation.

The Retirement Counseling unit advised many prospective retirees and processed new retirement applications for over 350 members during fiscal year 2013. These applicants are now receiving 90% of their expected retirement benefit, pending finalization.

In addition, the Pension Payroll and Calculations Units were able to finalize approximately 545 retirees and beneficiaries who were previously receiving 90% of their benefits. These retirees and beneficiaries are now receiving the full amount of their benefits.

Financial Information

Economic Conditions in Fiscal Year 2013 and Outlook for Fiscal Year 2014

Economic conditions at both the national and local levels significantly impact financial markets and investment revenues. Our pension fund relies on employer and employee contributions and investment revenues to meet current obligations and future commitments. Therefore, the state of the economy is always of great concern. The U.S. economy, as measured by the change in real Gross Domestic Product (GDP), grew moderately at an annual rate of 2.5% in the fourth quarter of fiscal year 2013. Also, the unemployment rate continued to improve, moving from a high of 8.2% in July 2012 to 7.6% in June 2013. During the period, the Federal Reserve continued to pursue highly accommodative monetary policy actions, by purchasing over \$85 billion per month in longer-term Treasuries and Agency mortgage-backed securities and holding the Federal Funds short term interest rate at the target range between 0% and 0.25%. These actions were attempts to boost aggregate demand and promote growth in the economy. There was also a tightening of fiscal policy through tax increases and spending sequestration. This had the effect of further restraining growth in the economy. In addition, there was some easing of financial stresses globally, due mainly to policies adopted by the European Central Bank (ECB) to stabilize the economies of the Euro Zone.

The City's economy continued to strengthen in fiscal year 2013. Job creation remained strong, while the unemployment rate trended downward. The City's economy, as measured by change in real Gross City Product (GCP), grew by approximately 1.8% during fiscal year 2013. Although this pace of growth was slower than that of the national economy, it was a positive trend compared to the 1.3% rate achieved in fiscal year 2012. The City's unemployment rate fell to 8.4% in fiscal year 2013, a significant change from the 9.4% in fiscal year 2012. The decrease in the City's unemployment rate can be attributed to a stable labor force participation rate combined with modest job growth.

For fiscal year 2014, it is predicted that the national economy will continue to recover at a moderate pace, although current risk factors may continue to impact the economy. The Comptroller's Office remains hopeful that both the national and the local economies will recover over time and return to historic levels of growth. The Bureau of Economic Analysis indicated that GDP increased at the modest rate of 2.8% in the third quarter of calendar year 2013 (advance estimate). Also, the Bureau of Labor Statistics indicated that the unemployment rate had fallen to 7.2% by end of September 2013. The increase in economic activity (GDP) and the decline in the unemployment rate are signals that the economy is in recovery and gaining traction. Improvement in the economy will have a positive impact on investment markets and ultimately the earnings of the Fund's portfolio.

Accounting and Reporting

This report was prepared to conform to principles of governmental accounting and reporting as promulgated by the Governmental Accounting Standards Board (GASB) and according to guidelines adopted and published by the Government Finance Officer's Association of the United States and Canada (GFOA). The requirements of GASB Statement No. 25, "Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans," have been adhered to in determining the information in the financial statements.

The accrual basis of accounting is used to record all transactions executed by the Pension Fund. Under this method, revenue is recognized when earned and expenses are recognized when the fund incurs an unconditional obligation to pay. The accrual basis of accounting provides a more realistic picture of the financial activity and performance of the Pension Fund for each period.

Internal Control

The management of the Pension Fund is responsible for establishing and maintaining an internal control structure, designed to ensure that the assets of the Fund are protected from loss, theft, or misuse. Additionally, the control structure should ensure that all transactions are properly recorded to allow for the preparation of financial statements in conformity with generally accepted accounting principles. The objective of internal control is to provide reasonable rather than absolute assurance that the financial statements are free of material misstatements. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and also that the evaluation of costs and benefits requires estimates and judgments to be made by management.

Procedures that reinforce established controls are periodically reviewed and evaluated by management, the Internal Audit unit of the Fire Department and the New York City Comptroller's Office through its assessment of the Funds Financial Integrity Compliance statement. In addition, Independent Certified Public Accountants audit the financial statements each year.

Independent Audit

The Fire Pension Fund is required to undergo an annual audit by independent certified public accountants in accordance with generally accepted auditing standards. The accounting firm of Deloitte & Touche was selected to perform the annual audits for the fiscal years ended June 30, 2010 through June 30, 2013. The Independent Auditor's Report on the general-purpose financial statements and schedules of historical information required by the Governmental Accounting Standard Board (GASB) is presented in the financial section of this report. As required under GASB pronouncement 34, adopted in fiscal year 2001, the financial section also contains Management's' Discussion and Analysis (MD&A) with comparative data for fiscal years 2011, 2012 and 2013. The contents of this letter should be considered along with additional information contained in the MD&A.

Funding

Adequate funding is essential for the financial soundness of a pension plan. If funding levels are adequate, the total amount of accumulated assets will be comparable to the total amount of benefit obligations of the Plan. The City's funding policy is to contribute statutorily- required contributions which, along with member contributions and investment income, will be ultimately sufficient to pay benefits when due. A well-funded plan gives members the assurance that the pension benefits promised are secure.

The Plan's funded ratio, which is the ratio of Actuarial Asset Value to the Actuarial Accrued Liability, stands at 50.3% for fiscal year 2013, an increase from 48.2% in the previous period. (Funded status - Note 5 of Notes to Financial Statements). The change can be attributed to the revised actuarial assumptions and methods adopted by the Plan for fiscal year 2012. Funding is further addressed in the actuarial section of our report, which details the revised actuarial methods and assumptions used in the determination of the required funding for the Plan.

Investments

The Comptroller of the City of New York is the designated custodian of the Fund's investment portfolio, subject to the direction, control and approval of the Board of Trustees. The investment policy adopted by the Board is one that promotes growth through increasing returns. The strategy used to implement this policy is the allocation of assets, which are diversified into a broad array of instruments to minimize overall risk, maintain liquidity and generate competitive returns.

The Fund's portfolio is comprised largely of holdings in domestic, international, private equities and fixed income securities. Equity investments, although historically volatile, provide superior performance and growth over time, while fixed income investments provide predictable cash flows to meet the Fund's current obligations. For fiscal year 2013, the Fund's investment portfolio of approximately \$ 9.1 billion under management posted gains of 11.9 %, while the corresponding Policy Index posted gains of 11.8%. A detailed discussion of investment policy, activities and results is presented in the Investment Section of our report.

Other Information

Awards

The Government Finance Officers' Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the New York City Fire Department Subchapter Two Pension Fund, for its Comprehensive Annual Financial Report for the fiscal year ended June 30, 2012. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to conform to the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for fiscal year 2013.

Professional Services

The Comptroller of the City of New York provides investment services through independent advisors. The Chief Actuary of the City's pension systems provides actuarial services to the Fund, while the Corporation Counsel provides legal services to the Fund. The City of New York defrays the expenses associated with these services.

Acknowledgements

The timely preparation of this annual report represents the efforts of the management and staff of the Pension Accounting Unit, whom we thank for their hard work and dedication. Our report presents complete and reliable information to provide a basis for making management decisions, to comply with legal provisions and to assure responsible stewardship of the assets of the Fund.

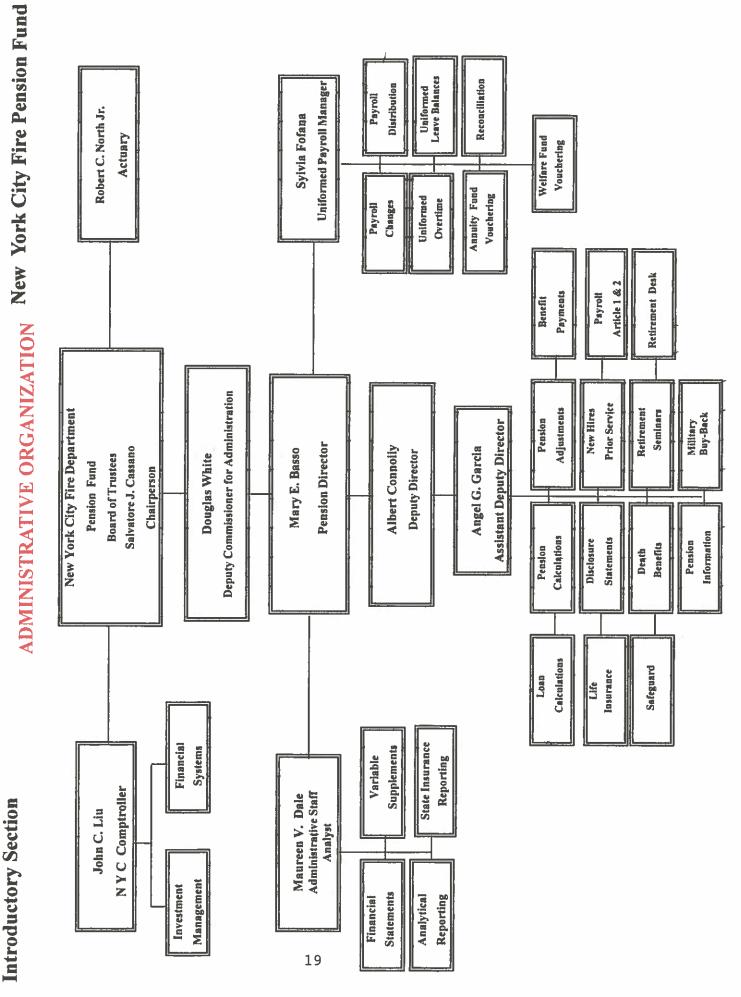
I wish to thank the Office of the Actuary and the Office of the Comptroller for the expertise and the wide range of valuable information they provided for our unit. I am also very grateful to the Board of Trustees for the leadership and direction they provided during this period.

In closing, I wish to express my sincere gratitude to the managers and staff of the Pension Bureau, who have worked so diligently to enhance the delivery of member services and to assure the successful daily operation of the Fire Department Pension Fund.

Respectfully submitted,

Mary E. Basso

Director of Pensions



[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]

MEMBERS OF THE BOARD OF TRUSTEES

As of June 30, 2013

Michael R. Bloomberg Mayor, City of New York.

Salvatore J. Cassano Fire Commissioner and Chairperson.

John C. Liu Comptroller, City of New York.

David M. Frankel Commissioner, of Finance.

Stephen J. Cassidy President of the Uniformed Firefighters

Association of Greater New York.

James M. Slevin Vice-President of the Uniformed Firefighters

Association of Greater New York.

Robert Straub Treasurer of the Uniformed Firefighters

Association of Greater New York.

John Kelly Chairperson of the Board of Trustees

Uniformed Firefighters Association

of Greater New York.

Al Hagan President of the Uniformed Fire Officers'

Association of Greater New York.

James A. Lemonda Chiefs' Representative of the Uniformed

Fire Officers' Association of Greater New York.

John Dunne Captains' Representative of the Uniformed

Fire Officers' Association of Greater New York.

James McGowan Lieutenants' Representative of the

Uniformed Fire Officers' Association

of Greater New York.

Sean O'Connor Representative of the Uniformed Pilots'

and MarineEngineers' Association

of Greater New York.

PENSION FUND ADMINISTRATION AND REPORTING

Douglas White
Deputy Commissioner for Administration

Mary E. Basso
Pension Director

Albert Connolly
Deputy Director

Angel G. Garcia
Assistant Deputy Director

Maureen V. Dale
Administrative Staff Analyst

Summary Plan and Options Benefits

TIERS I & II

The Fire Department Pension Fund, Subchapter II, (the "Fund") is a corporation, separate from the Fire Department of the City of New York, your employer. All uniformed employees of the Department become members of the Fund upon appointment.

MEMBERSHIP

TIERS

Firefighters who became members of the Fund before July I, 1973 are Tier I members. Firefighters who became members of the Fund on or after July 1, 1973 are Tier II members.

ORIGINAL PLAN - PRE-JULY 1, 1981 MEMBERS

Prior to July 1, 1981, all members of the Fund were enrolled in the "Original Plan". After the Fund was financially restructured in 1981, the "Original Plan" was closed to new entrants, and the "Improved Benefits Plan," which covers all firefighters hired on or after July I, 1981, was adopted. It provides some increases in benefits, along with somewhat higher member and City contributions.

Although closed to new entrants, the "Original Plan" continues to cover pre-7/1/81 members who have not elected to transfer to the "Improved Benefits Plan." Legislation enacted in 1986 permits such transfers in June, July, and August of every year.

IMPROVED BENEFITS PLAN (IBP) – POST-JUNE 30, 1981 MEMBERS

All firefighters who become members of the Fire Department Pension Fund on or after July 1, 1981 are covered only by the "Improved Benefits Plan." Unless specifically stated otherwise, all information in this Summary Plan Description refers to members of the IBP only.

SUMMARY

| Date of Membership | Tier | Applicable Plan |
|--------------------|------|------------------------------------|
| Pre-7/1/73 | 1 | Original of Improved Benefits Plan |
| 7/1/73-6/30/81 | 2 | Original of Improved Benefits Plan |
| Post-6/30/8 I | 2 | Improved Benefits Plan |

If your membership date or equated date is between June 17, 1971 and June 30, 1973, you are subject to the limitations on final salary imposed by the Kingston Law.

KINGSTON LAW LIMITATIONS

For all members of the Fund appointed between June 17, 1971 and June 30, 1973, the pensionable compensation for the final year of service is limited to 120% of the pensionable compensation for the year immediately preceding the final year. For example, a member's final year of service is July 6, 2009 through July 5, 2010. If between July 6, 2008 and July 5, 2009 the member earned \$90,000.00 in pensionable salary, holiday pay, night-shift differential, and overtime, the final year pensionable compensation cannot exceed \$108,000 (\$90,000 X 120%).

CONTRIBUTIONS

REQUIRED EMPLOYEE CONTRIBUTIONS

Tier I and Tier II members contribute a percentage of all earnings through payroll deductions to a 20-year plan. Contribution rate is based on age at appointment. Member contributions earn interest, currently 8 1/4% per year. Contributions are required for the first twenty (20) years of allowable fire service. After 20 years, contributions will continue unless the member submits a written request to the Pension Bureau to discontinue the contributions.

Contributions and any interest earned are referred to as "accumulated deductions". The amount of accumulated deductions required to be in the member's account at any given time is referred to as the "minimum required contribution." The total minimum required contribution is determined on the member's 20th anniversary. Contributions made above the minimum required are referred to as "excess" contributions.

TAXATION

Contributions made before December 1989 were federally taxed. Regular contributions made since December 1989 are federally tax-deferred as per section 414(h) of the Internal Revenue Code, but are subject to state and local income taxation. Thus, upon retirement or termination, withdrawal of these contributions and interest earnings will be subject to federal taxation only. Members who are under the age 50 may be subject to an additional 10% Federal tax penalty and should consult a tax advisor before withdrawing excess contributions at retirement. Minimum required contributions may not be withdrawn except upon separation from service before retirement (i.e. resignation or termination).

VOLUNTARY EMPLOYEE CONTRIBUTIONS 50% INDICATOR

Members may make additional contributions equal to 50% of their required employee contributions on a voluntary basis. Since these contributions are not covered by section 414(h) of the Internal Revenue Code, they are subject to immediate federal, state and city income taxation. These additional contributions will also increase a member's excess contributions, which will provide an additional annuity, or may be withdrawn as a lump sum, at retirement.

ITHP WAIVER

The City of New York makes employer contributions to the Fund. The City of New York also pays a portion of employee contributions. These contributions are called "Increased-Take-Home-Pay" (ITHP) and currently equal 5% of gross salary. For example, assume an employee contribution rate of 7.3% of pay. With ITHP, the member contributes 2.3% (the "minimum required contribution") and the City contributes 5%.

Members may waive the ITHP and contribute at the full employee rate. These additional contributions are covered by section 4I4(h) of the Internal Revenue Code, and are therefore federally tax-deferred. Although this lowers take-home pay during employment, it results in either a greater annuity at retirement or a lump-sum return of any excess. For example, assume a contribution rate of 7.3% of pay, and the employee waives the ITHP. While the employee contributes 7.3% of pay, the City of New York continues to make ITHP contributions equal to 5%. Excess tax-deferred 414(h) contributions are taxable in the year withdrawn.

NOTE: From March 27, 1976 through September 30, 2000, the ITHP rate was 2.5%.

HOW TO REDUCE PAYROLL DEDUCTIONS (138-b REGULATIONS)

To increase take-home pay, required employee contributions may be reduced up to the amount of Social Security (FICA) contributions. If required contributions are less than FICA contributions, the member will not be making any pension contributions, thereby creating a deficit in his/her retirement account. For example, assume a member has a pension contribution rate of 7.5%. The required contribution rate is 2.5%, and the ITHP is 5%. Under the 138-B election, the member will not be making any pension contributions since his/her required contribution rate of 2.5% is less than the current Social Security rate of 6.2%. If the percentages change and the required contribution rate becomes greater than the FICA rate, the member would contribute the difference into the retirement account.

If the 138-B option is elected, Social Security benefits will not be affected. However, the value of the retirement allowance will be reduced because it is based in part on required employee contributions and the interest earned thereon. After maximum Social Security contributions have been reached during any calendar year, pension contributions will resume.

EXCESS CONTRIBUTIONS

At retirement, Service and Accidental Disability retirees can choose to take any excess contributions as either a lump-sum payment or as an additional annuity. Members retiring for Ordinary Disability are required to take a lump-sum payment of any excess. Members considering requesting a refund of excess contributions are reminded that withdrawal of 414(h) contributions and interest is subject to federal tax in the year withdrawn. In addition, members who are under age 50 at retirement may also be subject to an additional 10% Federal tax penalty and should consult a tax advisor prior to withdrawal. Retiring members may request a direct rollover of any taxable excess into a qualified plan such as the NYC Deferred Compensation/401K plans, or an IRA in order to defer payment of federal tax.

CREDITED SERVICE

Credited service is classified as uniformed service or non-uniformed service.

ALLOWABLE FIRE SERVICE

Twenty (20) years of allowable fire service are required for Service Retirement. Such service includes:

All member service rendered as a uniformed member of the New York City Fire Department in the competitive class of the civil service.

Credit for service rendered in the uniformed force of the New York City Police Department immediately preceding service in the uniformed force of the New York City Fire Department, provided application for such credited service is made within prescribed time limits and such credited service is transferred to the Fund.

New York City Employees' Retirement System (NYCERS) uniformed force service rendered immediately before appointment as a uniformed member of the New York City Fire Department, provided application for such credited service is made within prescribed time limits and such credited service is transferred to the Fund. Uniformed service from NYCERS includes uniformed service in the Department of Correction, Sanitation as well as service as an Emergency Medical Technician (EMT) of Fire Alarm Dispatcher. It also includes all allowable Peace Officer service (as defined in Section 2.10 of the Criminal Procedure Law), service as Sheriff, Marshal, or D.A. Investigator, and any position specified in Appendix A of the agreement dated October 27, 2005 among the City of New York, the Uniformed Firefighters' Association and the Uniformed Fire Officers' Association.

Credit for any service rendered while a member of the New York State Policemen's and Firemen's Retirement System or the New York State & Local Retirement System, provided application for such credited service is made within prescribed time limits and such credited service is transferred to the Fund.

Credit for up to five (5) years of military service provided you were a member of a City retirement system at the time you entered military service and you immediately returned to City service upon discharge from the military.

Uniformed Services Employment & Reemployment Rights Act (USERRA) credit for members called off a Military Preferred List.

BUYBACK CREDIT

Chapter 548 of the Laws of 2000 allows members to purchase pension credit for up to three (3) years of certain wartime military service rendered prior to the commencement of the public employment. A member must have at least five (5) years of credited service to be eligible to receive credit under this law.

Chapter 646 of the Laws of 1999 – Tier Reinstatement: This law amends §645 of the RSSL and permits a member, who was previously a member of any New York public retirement system, to be deemed to have become a member of the current retirement system as of the original date of such previous ceased membership. If membership in the prior retirement system is based on certain designated law enforcement service, such service will be credited as "allowable" up-front service, towards the required 20-year period. For this purpose, such service shall include:

- a) Uniformed service in the police department, fire department or sanitation department of the City of New York or the State of New York or any agency or political subdivision thereof;
- b) Service as a peace officer as specified in §2.10 of the Criminal Procedure law (CPL); or
- c) Service in the title of sheriff, deputy sheriff, marshal district attorney investigator, or other State law enforcement positions. This benefit is available only where the member restores his or her refunded contribution balance with interest. In some cases, this may provide for a reinstatement of Tier I status.

- * Chapter 552 of the Laws of 2000 Prior Service Credit: This law allows members who were eligible for membership in any of the New York State or New York City retirement systems, but did not become members of such system, to buy pension credit for the time that was eligible for membership. If membership in the prior retirement system is based on certain designated law enforcement service, such service will be credited as "allowable" up-front service. For this purpose, such service shall include:
 - a) Uniformed service in the police department, fire department or sanitation department of the City of New York or the State of New York or any agency or political subdivision thereof;
 - b) Service as a peace officer as specified in §2.10 of the Criminal Procedure Law (CPL); or
 - c) Service in the title of sheriff, deputy sheriff, marshal, district attorney investigator, or other State law enforcement positions. Except for the service indicated above, all other service will be "Other Credited Service," which counts as additional service credit after the completion of twenty (20) years in the fire pension system.

OTHER CREDITED SERVICE

Other Credited Service is any New York City service (except Teachers' Retirement System service) which is not considered allowable credited service. It counts as additional service credit after completing the required twenty (20) years and includes service rendered while a member in a non-uniformed position with the New York City Employees' Retirement System and membership in the Board of Education Retirement System. However, there is no credit for profit non-uniformed service for members who are granted an accidental disability pension. Uniformed service credit that does not immediately precede uniformed service in the New York City Fire Department is Other Credited Service. Time not transferred can be purchased as a buyback under Chapter 646 or Chapter 552. All such Other Credited Service must be applied for within the time limits prescribed by law and transferred to the Fire Department Pension Fund.

RETIREMENT PROCESS

SERVICE RETIREMENT

Members may retire for service (non-disability) after completing 20 years of uniformed service. To initiate Service Retirement, Form BP-165 must be submitted through the chain of command. The Retirement Counseling Unit must receive the form at least (30) days before the date on which the member wishes to retire and at least ten (10) days before the date on which usage of accrued and terminal leave begins.

WITHDRAWAL OF SERVICE RETIREMENT APPLICATION

If a member has begun to utilize terminal leave and decides to withdraw the application for retirement, the FDNY Medical Board must evaluate the member for a duty determination before he/she can return to full duty.

DISABILITY RETIREMENT

A member may apply either for ordinary disability (non-service connected) retirement or accidental disability (service connected) retirement, or both. Applications for service or non-service incurred disability retirement shall be submitted to the Fire Commissioner on Form BP-409 (2 copies). The following steps are necessary before disability retirement is considered.

STEP I: SUBMISSION OF APPLICATION

Member's Application for Disability Retirement:

A member may initiate the disability retirement process by submitting Form BP-409, whether or not there has been an examination by a Bureau of Health Services (BHS) physician or by the BHS Medical Board. However, the BHS Medical Board is required to make a determination of the member's fitness for duty status prior to or during the disability pension application process. When any officer submits an application for disability retirement, vacation leaves, accrued and terminal leaves must begin immediately.

Depending upon the results of an initial examination by a medical officer at the Fire Department's Bureau of Health Services, the member will be referred to the BHS Medical Board, which is comprised of three or more FDNY medical officers. The BHS Medical Board makes fitness for duty determinations. The BHS Medical Board examines the member and may make one of the following determinations:

- a) Temporarily unfit for full duty. In this case, the member is placed on light duty or medical leave with an exception of being returned to full duty.
- b) Permanently until for full duty. This category is also known as REC/LSS (Recommended Limited Service Squad or Long Term Light Duty). Pursuant to Mayoral Directive 78-14, the member may remain on Light Duty for up to one year.
- c) Undetermined. This requires examination by the full BHS Medical Board at the monthly meeting of all medical officers.
- d) Full Duty.

Fire Commissioner's Application for Disability Retirement:

Pursuant to Mayoral Executive Order No. 78-14, the Fire Commissioner must apply for the disability retirement of any member found permanently unfit for full firefighting duty by the BHS Medical Board. Within thirty days of the BHS Medical Board's determination that a member is permanently unfit for full firefighting duty (REC/LSS), the transcript or minutes from the BHS Medical Board are forwarded to the Pension Bureau Retirement Desk. The Pension Bureau Retirement Desk is when required to file a Fire Commissioner's Application for Disability Retirement with the 1-B Medical Board.

STEP II: REVIEW OF APPLICATION BY THE 1-B MEDICAL BOARD

The 1-B Medical Board is composed of three physicians and is independent of both the Fire Department and the Pension Board of Trustees. The 1-B Medical Board meets weekly and is the sole authority in determining whether a member is disabled for retirement/pension purposes. In reviewing an application, the 1-B Medical Board addresses the following questions:

- a) Is the member disabled for retirement purposes?
- b) If the member is disabled for retirement purposes, is the disability due to a line-of-duty accident? (a.k.a. the *Causation* question). Please note that while the 1-B Medical Board's disability determination is binding upon the Pension Board of Trustees, it may only make recommendations with respect to the causation component.

The application has the right to submit any and all evidence in support of a disability retirement and the 1-B Medical Board must evaluate all of the evidence and report its conclusions and recommendations to the Pension Board of Trustees.

The 1-B Medical Board's recommendation on the cause of a disability for retirement purposes is based on a review of the relevant medical records contained in the member's medical chart (from the Bureau of Health Services) and any additional documents submitted by the member, including relevant CD-72s. Often, during its initial review of a case, the 1-B Medical Board may request that one of its impartial medical consultants evaluate the member. The medical consultant will be a specialist that deals with the member's specific medical condition. After its initial review, the 1-B Medical Board reaches one of the following conclusions:

- a) Disabled due to line-of-duty accident (Accidental Disability)
- b) Disabled due to non-line-of-duty condition (Ordinary Disability)
- c) Not Disabled for retirement purposes (Denied)
- d) Decision deferred until the 1-B Medical Board has evaluated the consultant's report or other additional evidence.

The 1-B Medical Board's certification of each is forwarded to the Board of Trustees for a final determination of the disability application.

STEP III: REVIEW BY THE BOARD OF TRUSTEES

The Board of Trustees consists of City and Union representatives, each with an equal number of votes. During its monthly meetings, the Board reviews the reports of the 1-B Medical Board, the relevant medical records and the relevant CD-72s. Although the Board of Trustees cannot change the 1-B Medical Board's decision on whether a member is permanently disabled from full duty, it can overrule the I-B Medical Board's recommendation on causation. When the Board of Trustees cannot reach the vote necessary to pass a motion (7/12 or 14 votes) on the cause of the disability, the member will be retired for ordinary disability. This is based on a court case known as the "Schoeck Decision."

WITHDRAWAL OF DISABILITY RETIREMENT APPLICATION

If the Fire Commissioner applied for a member's disability retirement, only the Fire Commissioner can stop the process. If a member has applied for disability retirement, the member may stop the process by withdrawing the application. If the I-B Medical Board's doctors have found the member disabled for retirement purposes, the member may not return to full duty. However, members found to be disabled by the I-B Medical Board will be afforded the opportunity to request a reasonable accommodation as outlined in PAID I/2000.

A request to withdraw a disability retirement application by the member shall be made on a letter-head report to the Fire Commissioner and processed through the chain of command. The report shall include:

NAME, RANK, UNIT, SOCIAL SECURITY NUMBER, REASON MEMBER SUBMITTED RETIREMENT APPLICATION, REASON FOR REQUESTING WITHDRAWAL, DATE(S) OF PREVIOUS RETIREMENT APPLICATIONS AND WITHDRAWAL REQUEST

Upon receipt of the request, the Bureau of Personnel shall direct the member to the Bureau of Health Services for examination. The Fire Commissioner may elect to either withdraw or keep in effect the Fire Commissioner's application for retirement. An application to withdraw shall be denied for either for the following reasons:

The member is found unfit for any duty by the Fire Department BHS Medical Board: The member has had disability certified by the Board of Trustees prior to receipt of his/her withdrawal application.

If the application to withdraw is approved, member will be notified to report to the Bureau of Personnel for clarification of duty status and suitable assignment.

RETIREMET PROCEDURES FOR ALL RETIREES

During the retirement process, retirees will be advised regarding health insurance, pension options, post-retirement employment restrictions, withholding tax, and related issues. At this time, the member's projected retirement date will be determined, and an estimate of the final pension allowable, as well as the amount of the partial allowance, will be determined. NOTE: Health insurance is not provided for members with less than ten (10) years of service, retiring on an ordinary disability.

Members are generally entitled to take all vacation leave, accrued and terminal leave (normally one (1) day per four (4) completed months of service) after their last day on duty, and remain on the active payroll during this time. Terminal leave is not granted for vested separations. Under limited circumstances, service retirees and vested separations may submit a request for withdrawal of their retirement application before going off the payroll. To do so, the Retirement Counseling Unit must be notified at least ten (10) business days before the date on which the member is requesting a return to active status. (Note: Service retirees who have begun to utilize terminal leave must be evaluated by the FDNY Medical Board prior to return to full duty).

Upon retirement, a member must return all Department property and obtain a Property Release Form (BP-71) from the Bureau of Personnel. The retiree must forward a copy of the Property Release Form to the Pension Bureau before any pension checks are issued. In addition, a copy of the Property Release Form must also be forwarded to Uniformed Payroll for release of the final active paycheck.

TIER I: SERVICE RETIREMENT ALLOWANCE

Members will be eligible to receive a retirement allowance after completing 20 years of allowable fire service.

The Service retirement allowance is calculated as follows:

50% of final salary

plus

1/60th x total earnings after your 20th anniversary

กไบร

1/80th x average annual earnings of the last 5 years x the years and days of other credited service, if applicable

plus

a pension based on the actuarial value of the ITHP contributions made after completion of 20 years of allowable fire service, together with the interest earned on those

contributions

plus

an annuity based on any accumulations in excess of minimum required contributions remaining in the member's account at retirement, including interest earned on those contributions

less

the annuity value of any shortage in the member's account (shortages result from a contribution rate deficiency, prior loans, unpaid loans, and/or nonpayment of contributions).

TIER I: DISABILITY RETIREMENT ALLOWANCE

ORDINARY DISABILITY RETIREMENT

A member is eligible to receive an ordinary disability retirement allowance, regardless of age or years of credited service, provided the 1-B Medical Board and the Board of Trustees have found the member physically or mentally unable to perform his/her regular job duties.

An Ordinary Disability retirement allowance is calculated as follows:

years and days of all service, (uniformed and other credited service) divided by 40 and multiplied by final salary

Iess

the annuity value of any shortages in the member's account (shortages result from prior loans, unpaid loans, and/or nonpayment of contributions)

plus

a lump-sum return of any accumulated deductions in excess of the minimum required contributions remaining in the account at retirement, including interest earned on these contributions.

ACCIDENTAL DISABILITY RETIREMENT

There is no minimum service requirement for accidental disability retirement. The 1-B Medical Board must find a member physically (includes the presumptive Lung Law, and the Heart/Cancer/Infectious Diseases/WTC Bills) or mentally unable to perform his/her regular job duties because of an accidental injury received in the line-of-duty. Such disability must not be the result of a member's own negligence.

An Accidental Disability retirement allowance is calculated as follows:

a pension equal to 75% of final salary

plus

1/60th x total earnings after the member's 20th anniversary

plus

an additional pension based on the actuarial value of the ITHP reserve account as of the effective date or retirement

plus

an annuity based on the actuarial value of accumulated deductions as of the effective date of retirement

less

a deduction for the annuity value of any loan outstanding at time of retirement.

Notes:

For members retiring on or after January 1, 2009, accidental disability pensions are federally taxed on the 1/60th portion, ITHP over 20 years, and the annuity based on contributions attributed to 414H and interest. The balance of an accidental disability pension is Federally tax-free. However, the entire accidental disability is exempt from New York State and New York City Income Tax.

There is no credit for prior non-uniformed City service for IBP members granted an accidental disability pension.

TIER I: OPTIONS

MAXIMUM RETIREMENT ALLOWANCE (NO OPTION)

At retirement, a member may elect to receive the maximum retirement allowance. The maximum retirement allowance is the largest benefit that can be received. Payments are made throughout the retiree's lifetime and cease upon death. There are no survivor benefits under the maximum retirement allowance.

OPTIONS

An option is an election that provides a continued pension benefit or lump-sum payment to a beneficiary. When electing an option, the member accepts a reduced retirement allowance during his/her lifetime. The reduction is based on the option selected, age, and sometimes the age of the beneficiary. After certification by the Office of the Actuary, the pension is finalized. Once the member receives his/her full pension check, the option selected cannot be changed. There are four options available to Tier I members.

OPTION 1

This option sets up an initial <u>pension reserve</u>. If the retirees dies before receiving payments equal to this total pension reserve (the reserve set aside to pay benefits over a retiree's lifetime), the difference between the total pension reserve and all payments received will be awarded to the beneficiary. This option may be selected for the annuity reserve, the pension reserve, or both. More than one beneficiary may be named, and the beneficiary(ies) may be changed at any time.

OPTION 2

Joint and 100% Survivor: The retiree receives a reduced monthly lifetime allowance. Upon the death of the retiree, this option allows the named beneficiary to receive 100% of the reduced pension allowance for life. Only one beneficiary may be named, and the designated beneficiary may not be changed once the option is in effect.

OPTION 3

<u>Joint and 50% Survivor</u>: The retiree receives a reduced monthly lifetime allowance. Upon the death of the retiree, this option allows the named beneficiary to receive 50% of the reduced pension allowance for life. Only one beneficiary may be named, and the designated beneficiary may not be changed once this option is in effect.

OPTION 4

<u>Lump Sum</u>: The retiree receives a reduced annual pension allowance for life with the provision that upon the death of the retiree, the beneficiary(ies) will receive a limited lump-sum payment specified by the retiree at the time the option is chosen. More than one beneficiary may be named and the beneficiary(ies) may be changed at any time;

Annuity: The retiree receives a reduced annual pension allowance for life with the provision that upon the death of the retiree, the beneficiary will receive a specified annual annuity, as pre-determined by the retiree. Only one beneficiary may be named, and the designated beneficiary may not be changed once the option is in effect.

"POP-UP" OPTION MODIFICATION

Under this option modification, if the named beneficiary predeceases the retiree, the retirement allowance reverts back to the maximum retirement allowance. The "Pop-up" may ONLY be applied to Option 2, Option 3, and Option 4 annuities. There is an extra cost for this option.

Notes:

Fifty percent (50%) of any cost-of-living adjustments (COLAs) are paid to a spouse under Options 2 and 3, under Option 4 Annuity, and any "Pop-up" option, whose deceased spouse, if alive, would be eligible for a COLA benefit increase.

Under current tax laws, for the beneficiary(ies) of line-of-duty (accidental) disability retirees, all options are federally taxed on a portion of the pension that was taxable to the retiree, however, the total pension received under an option is exempt from New York State and New York City taxation.

TIER I: SURVIVOR BENEFITS

Tier I survivor benefits are paid if a member dies before retirement, whether death occurs on or off the job.

There are two types of death benefits:

Death Gamble Benefit – for ordinary (non-line-of-duty) deaths. Accidental Death Benefit (Line-of-Duty)

DEATH GAMBLE BENEFIT

For non-line-of-duty deaths, the benefit is computed as though the member had retired the day before his/her death. The designated beneficiary(ies) will be eligible to receive an amount equal to the reserve for the service retirement allowance that would have been payable had the member retired on the day before his/her death. If the beneficiary predeceases the member, this death benefit is paid to the member's estate.

ACCIDENTAL (LINE -OF-DUTY) DEATH BENEFIT

If the 1-B Medical Board determines that death is the result of an accidental injury received in the line of duty, an accidental death benefit will be paid as follows:

a pension equal to 50% of final compensation will be paid to a surviving spouse, to continue for life;

or

if there is no surviving spouse or if a surviving spouse dies before any eligible child attains 18 years of age (or, if a student, 23 years of age), then to such child or children under such age, until every such child dies or attains such age;

or

if there is no surviving spouse or eligible child under the age of 18 years (or 23 years, if a student), then to the member's dependent parent(s) to continue for life;

plus

a lump sum equal to the balance of the member's ITHP reserve account

plus

a lump sum equal to the member's accumulated deductions/contributions will be paid to the designated beneficiary(ies)

plus

a Special Accidental Death benefit under Section 208-f of the General Municipal Law (State portion)

This Special Accidental Death benefit, when added to the 50% of final compensation pension paid by the City, and any Social Security Death benefits payable to a surviving spouse, equal to 100% of the member's final salary (final salary is defined as the last 12 months of earnings, and is never less than the full salary of a first-grade Firefighter). The Special Accidental Death benefit is increased from time to time by act of the New York State Legislature and is not payable to dependent parents. Effective September 1, 2000, any COLA (Cost of Living Adjustment) received on the 50% pension payable from the Fund shall be subtracted from the Special Accidental Death Benefit (State's portion).

BENEFICIARY DESIGNATION

Upon membership in the Fund, a beneficiary(ies) for the Life Insurance benefit and for Death Benefits is(are) elected. A member may change beneficiary(ies) at any time by filing the appropriate form(s) with the Pension Bureau. Please note that the beneficiary(ies) designated on the Death Benefits beneficiary form will receive this benefit in the event of the member's non-line-of-duty death. In the event of Accidental Death (Line-of-Duty), benefits will be paid to the appropriate beneficiary(ies) in accordance with the Administrative Code of the City of New York and other applicable sections of the law.

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]

Summary Plan Benefits

TIER III

This Summary Plan Description (SPD) summarizes the benefits provided by the New York City Fire Department Pension Fund, Subchapter II (the "Fire Pension Fund"), for Tier 3 members. Anyone who became a member of the Fire Pension Fund between July 1, 2009 and March 31, 2012 is a Tier 3 member. Those who become members of the Fire Pension Fund on or after April 1, 2012 are "modified Tier 3" members, also known as Tier 6. The main difference is that "Modified Tier 3" members have 5 year Final Average Salary (FAS) calculation upon retirement. Unless otherwise noted, the information presented in this SPD is applicable to both Tier 3 and Modified Tier 3 members, and will be collectively referred to as "Tier 3." This summary and any applicable laws, including, but not limited to, the Administrative Code of the City of New York (ACNY), the Retirement and Social Security Law (RSSL), and the rules of the Fire Pension Fund, the applicable Law or Rule will govern.

The Fire Pension Fund is a separate entity from the Fire Department of the City of New York (FDNY), your employer. All Uniformed employees of the Fire Department become members of the Fire Pension Fund upon appointment.

MEMBERSHIP

Uniformed members of the FDNY appointed on or after July I, 2009 are subject to Article 14 of the RSSL, also known as Tier 3.

CONTRIBUTIONS

Members are required to contribute 3% of pensionable salary for the first 25 years of credited service (RSSL 517). Member contributions are federally tax-deferred as per section 414(h) of the Internal Revenue Code, but are subject to state and local income taxation.

MINIMUM REQUIRED AND INTEREST

Member contributions and any interest earned are referred to as accumulated contributions." The Tier 3 rate of interest on member contributions is currently 5%. The amount of accumulated contributions required to be in a member's account at any given time is referred to as the "minimum required." In order to be eligible for a benefit at retirement, a member must have the "minimum required" of accumulated contributions, which is equal to the 3% contribution rate plus the statutory interest earned.

ITHP (INCREASED-TAKE-HOME-PAY)

ITHP stands for "Increased-Take-Home-Pay" and relates to the increase in a member's take home pay due to the City paying a portion or all of the required rate by making the contribution on the member's behalf. If applied to Tier 3, this could eliminate or reduce any contribution being made by the member. The Supreme Court, New York County, recently found that Tier 3 members are eligible for ITHP; however, the City of New York has appealed the case. The decision is now on appeal in the Appellate Division, First Department. Tier 3 members will continue to make the 3% contributions until and unless the Supreme Court decision is ultimately upheld. The Fire Pension Fund will keep members up-to-date on developments in the litigation.

DEFICITS

A deficit occurs when a member's pension account balance falls below the minimum required. Deficits may occur because of delays in contract settlements. Pension contributions on retroactive pay from a contract settlement do not include the interest that would have been earned on those contributions. Since interest earned on contributions is apart of a member's minimum required, a deficit can occur.

Members are not permitted to retire with a deficit, and are responsible for any account shortages. Members may opt to make a lump sum payment or bi-weekly payroll deductions to reduce and eliminate any deficit.

REFUNDS

Upon separation from the Fire Pension Fund for reasons other than retirement, such as resignation or termination, a written request for a refund of accumulated contributions plus interest may be made. If contributions are not withdrawn, the money will continue to earn interest for a maximum of five years from the date of separation.

WITHDRAWAL OF CONTRIBUTIONS

In the event of a resignation or termination, a member who is not vested or entitled to any other benefit under Tier 3 may withdraw accumulated contributions, and thereby terminate his or her Fire Pension Fund membership. A member who separates from service as a vested member, but with less than 10 years of credited service, may also withdraw his or her accumulated contributions. A withdraw of contributions by such a vested member, however, will terminate all membership rights, include the right to receive a vested retirement benefit in the future. After 10 years of service, contributions may not be withdrawn and members will receive a vested retirement benefit.

LOANS

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

CREDITED SERVICE

Unless otherwise stated, "credited service" is defined as allowable Uniformed service. Participation in the Fire Pension Fund is mandatory for Uniformed employees hired on or after July 1, 2009. Members receive credit for all Uniformed service time while on active payroll, up to a maximum, of 22 years.

ALLOWABLE UNIFORMED SERVICE

Twenty-two (22) years of allowable Uniformed service are required for Normal Service Retirement, or twenty (20) years for Early Service Retirement. Such service includes:

All member service rendered as a Uniformed member of the New York City Fire Department in the competitive class of the civil service.

Credit for service rendered in the Uniformed force of the New York City Police Department acquired pursuant to applicable law.

Credit for any service rendered while a member of the New York State and Local Police and Fire Retirement System as a Police Office or Firefighter.

Credit for military service acquired pursuant to applicable law.

PRIOR SERVICE CREDIT

A member may obtain prior credited service for any New York State Police or Fire Time, or for Uniformed service with the New York City Police Department, by filing for transfer or buy-back. This prior credit service counts toward the requirements for vesting and retirement.

MILITARY SERVICE CREDIT

Military service with the federal government may be credited pursuant to New York State Military Law 243, the federal Uniformed Services Employment and Reemployment Right Act (USERRA), and RSSL 1000. Members who join the Fire Pension Fund on or after April 1, 2012, and who wish to purchase credit for military service under RSSL 1000, pay an amount for such credit equal to the number of years of military credit being purchased multiplied by 6% of the compensation earned by the member during the 12 months of credited service immediately preceding the member's application to purchase such credit. Members who joined the Fire Pension Fund prior to April1, 2012 and who wish to purchase credit for military service under RSSL 1000, pay an amount for such credit equal to the number of years of military credit being purchased multiplied by 3% of the compensation earned by the member during the 12 months of credited service immediately preceding the member's application to purchase such credit.

TRANSFER TO THE FIRE PENSION FUND

A member may transfer to the Fire Pension Fund from another public retirement system within the State of New York. In Tier 3, transferring prior City or State service, other than Uniformed Police of Fire service, 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 July1, 2009 will become Tier 2 members of the Fire Pension Fund upon completion of a proper transfer. Before deciding whether to transfer service from another pension system, eligible members should contact the Fire Pension Fund Administration Office at (718) 999-2300.

New York City Fire Pension Fund

Comprehensive Annual Financial Report

A Pension Trust Fund of the City of New York



Financial Section

Part II

Fiscal Years Ended June 30, 2013 and June 30, 2012

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]



Deloitte & Touche LLP 30 Rockefeller Plaza New York, NY 10112-0015 USA

Tel: +1 212 492 4000 Fax: +1 212 492 5000 www.deloitte.com

INDEPENDENT AUDITORS' REPORT

To the Board of Trustees of the New York City Fire Department Pension Fund:

Report on the Financial Statements

We have audited the accompanying statements of plan net position of the New York City Fire Department Pension Fund (the "Plan") as of June 30, 2013 and 2012, and the related statements of changes in plan net position for the years then ended, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these 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 financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these 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 financial statements are free from material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net position as of June 30, 2013 and 2012, and the changes in plan 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 financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic 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 financial statements, and other knowledge we obtained during our audit of the basic 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 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 financial statements.

The Additional Supplementary Information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic 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 financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America by us and the other auditors. In our opinion the Additional Supplementary Information is fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

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

October 29, 2013

clotte of Touche LLP

NEW YORK FIRE DEPARTMENT PENSION FUND

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED) JUNE 30, 2013 AND 2012

This narrative discussion and analysis of the New York Fire Department Pension Fund's ("FIRE" or the "Plan"), also known as the New York Fire Department, Subchapter Two Pension Fund, financial performance provides an overview of the Plan's financial activities for the fiscal years ended June 30, 2013 and 2012. It is meant to assist the reader in understanding the Plan's financial statements by providing an overall review of the financial activities during the two years and the effects of significant changes, as well as a comparison with the prior years' activity and results. This discussion and analysis is intended to be read in conjunction with the Plan's financial statements.

OVERVIEW OF BASIC FINANCIAL STATEMENTS

The following discussion and analysis are intended to serve as an introduction to the basic financial statements. The basic financial statements are:

- The Statement of Plan Net Position presents the financial position of the Plan at each fiscal year end. It provides information about the nature and amounts of resources with present service capacity that the Plan presently controls (assets), consumption of net assets by the Plan that is applicable to a future reporting period (deferred outflow of resources), present obligations to sacrifice resources that the Plan has little or no discretion to avoid (liabilities), and acquisition of net assets by the Plan that is applicable to a future reporting period (deferred inflow of resources) with the difference between assets/deferred outflow of resources and liabilities/deferred inflow of resources being reported as net position. Investments are shown at fair value. All other assets and liabilities are determined on an accrual basis.
- The Statement of Changes in Plan Net Position presents the results of activities during the fiscal year. All changes affecting the assets and liabilities of the Plan 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 Financial Statements provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes present information about the Plan's accounting policies, significant account balances and activities, material risks, obligations, contingencies, and subsequent events, if any.

Other information as required by the Governmental Accounting Standards Board (GASB) is presented after the Notes to the Financial Statements.

The financial statements are prepared in accordance with GASB Pronouncements.

FINANCIAL HIGHLIGHTS

For fiscal year ended June 30, 2013, the Plan's net position held in trust for pension benefits increased by \$1.0 billion (12.3%) to approximately \$9.1 billion, compared to the Plan's net position for fiscal year 2012. The growth for fiscal year 2013 can be attributed to the excess of total contributions and net investment income over pension benefits paid. Additionally, due to a net appreciation in the fair value of the Plan's

investment portfolio, there was a significant increase in the amount of net investment income reported for the period.

For fiscal year ended June 30, 2012, the Plan's net position held in trust for pension benefits increased by \$169.0 million (2.1%) to approximately \$8.1 billion, compared to the Plan's net position for fiscal year 2011. The increase for fiscal year 2012 can be attributed to the excess of total contributions and net investment income over pension benefits paid. In addition, during the period a net depreciation in fair value of the Plan's investment portfolio, primarily the decrease in value of equity investments, served to reduce the amount of net investment income reported.

Changes in Plan Net Position Years Ended June 30, 2013, 2012 and 2011 (In thousands)

| (In thousands) | | 2013 | | 2012 | | 2011 |
|---|----|-----------|----|-----------|----|-----------|
| Additions: | | | | | | |
| Member contributions | \$ | 104,816 | \$ | 98,494 | \$ | 94,893 |
| Employer contributions | | 962,173 | | 976,895 | | 890,706 |
| Net investment income | | 961,192 | | 93,548 | | 1,472,892 |
| Other | | 38,965 | | 37,661 | | 41,887 |
| Total | | 2,067,146 | _ | 1,206,598 | _ | 2,500,378 |
| Deductions: | | | | | | |
| Benefit payments and withdrawals | _ | 1,064,631 | | 1,037,589 | _ | 983,474 |
| Net increase | | 1,002,515 | | 169,009 | | 1,516,904 |
| Plan net position held in trust for pension benefits: | | | | | | |
| Beginning of year | _ | 8,124,677 | _ | 7,955,668 | | 6,438,764 |
| End of year | \$ | 9,127,192 | \$ | 8,124,677 | \$ | 7,955,668 |

For fiscal year ended June 30, 2013, member contributions were approximately \$104.8 million or an increase of \$6.3 million (6.4%) compared to member contributions for fiscal year 2012. For fiscal year ended June 30, 2012, member contributions were approximately \$98.5 million or an increase of \$3.6 million (3.8%) compared to member contributions for fiscal year 2011. The increases in member contributions are primarily due to a greater number of active Plan members making voluntary contributions in addition to their required contributions and increases in the average annual pay of Plan members.

Employer contributions are made on a statutory basis determined by the actuarial valuations performed as of June 30, 2011, 2010 and 2009. Employer contributions for fiscal year 2013 totaled \$962.2 million, a reduction of \$14.7 million (1.5%) compared to employer contributions for fiscal year 2012 primarily due to the net result of acturaial gains and losses. Employer contributions for fiscal year 2012 totaled \$976.9 million, an increase of \$86.2 million (9.7%) over employer contributions for fiscal year 2011 due to changes in actuarial methods and assumptions for fiscal years beginning 2012.

For fiscal year ended June 30, 2013, the Plan had a net investment gain of \$961.2 million, this amount was an increase of 928.0% compared to the net investment gain of \$93.5 million recorded for fiscal year 2012. The gain for fiscal year 2013 can be attributed to the net appreciation in fair value of the Plan's investment portfolio, primarily the equity investments.

For fiscal year ended June 30, 2012, the Plan had a net investment gain of \$93.5 million, this amount was a decrease of 93.6% compared to the net investment gain of \$1,472.9 million recorded for fiscal year 2011. The

gain for fiscal year 2012 can be attributed to the excess of interest and dividends received over the net depreciation in fair value of the Plan's investment portfolio.

Benefit payments and withdrawals recorded were \$1,064.6 million for the period ended June 30, 2013; this was an increase of 2.6% over benefit payments and withdrawals recorded for fiscal year 2012. Benefit payments and withdrawals recorded were \$1,037.6 million for the period ended June 30, 2012; this was an increase of 5.5% over benefit payments and withdrawals recorded in fiscal year 2011. Increases in benefit payments and withdrawals are primarily due to changes in the number of new retirees and the amount of payments made to beneficiaries. In addition, legislatively enacted cost of living increase for certain retirees and beneficiaries also serves to increase benefit payments each year.

PLAN NET POSITION

For fiscal year 2013, FIRE's plan net position held in trust for benefits increased by 12.3% to \$9.1 billion, compared to plan net position of \$8.1 billion in fiscal year 2012. The growth for fiscal year 2013 can be attributed to the excess of total contributions and net investment income over pension benefits paid. Additionally, due to a net appreciation in the fair value of the Plan's investment portfolio, there was a significant increase in the amount of net investment income reported for the period.

For fiscal year 2012, FIRE's plan net position held in trust for benefits increased by 2.1% to approximately \$8.1 billion, compared to plan net position of \$8.0 billion in fiscal year 2011. The increase for fiscal year 2012 can be attributed to the excess of total contributions and net investment income over pension benefits paid. In addition, during the fiscal period a net depreciation in fair value of the Plan's investment portfolio, primarily the decrease in value of equity investments, served to reduce the amount net investment income reported.

Outstanding member loans for fiscal year 2013 totaled \$29.7 million, this amount was a decrease from member loans reported in fiscal year 2012. Outstanding member loans for fiscal year 2012 totaled \$32.4 million, a decrease from member loans reported in fiscal year 2011. Changes in member loans can be attributed to changes in the number and amounts of new loans disbursed and the amount of repayments received. Members are permitted to borrow up to 75% (for certain members up to 90%) of their required contributions, including accumulated interest.

Plan Net Position June 30, 2013, 2012 and 2011 (In thousands)

| | 2013 | 2012 | 2011 |
|--|-------------|-------------------------|--------------|
| Cash | \$ 2,1: | 55 \$ 9,929 | \$ 2,331 |
| Receivables | 385,63 | 27 243,784 | 213,733 |
| Investments — at fair value | 9,512,4 | 06 8,392,441 | 8,325,700 |
| Collateral from securities lending | 936,98 | 85 730,002 | 746,949 |
| Other assets | 4,80 | <u>07</u> <u>57,929</u> | 3,545 |
| Total assets | 10,841,9 | 9,434,085 | 9,292,258 |
| Accounts payable | 115,1 | 78 108,237 | 28,201 |
| Payables for investments purchased | 643,69 | 97 452,438 | 543,353 |
| Accrued benefits payable | 15,49 | 99 15,302 | 14,658 |
| Payables for securities | | | |
| lending transactions | 940,4 | <u>733,431</u> | 750,378 |
| Total liabilities | 1,714,7 | 1,309,408 | 1,336,590 |
| Plan net position held in trust for benefits | \$ 9,127,19 | 92 \$ 8,124,677 | \$ 7,955,668 |

The Plan's receivables and payables are primarily generated through the timing difference between the trade and settlement dates for investment securities purchased or sold.

INVESTMENT SUMMARY

Investment Summary June 30, 2013, 2012 and 2011 (In thousands)

| Type of Investment (Fair Value) | | 2013 | | 2012 | | 2011 |
|------------------------------------|----|------------|----|-----------|----|-----------|
| Short-term investments | \$ | 392,855 | \$ | 479,205 | \$ | 774,441 |
| U.S. debt securities | | 1,893,576 | | 2,144,762 | | 1,839,397 |
| Yankee bonds | | 8,918 | | 10,265 | | 6,634 |
| U.S. equity securities | | 3,440,857 | | 2,856,302 | | 3,271,136 |
| Mutual funds | | 2,318,759 | | 1,797,489 | | 1,677,960 |
| Collateral from securities lending | | 936,985 | | 730,002 | | 746,949 |
| Promissory notes | | 1,788 | | 3,320 | | 3,628 |
| Private equity | _ | 1,455,653 | - | 1,101,098 | _ | 752,504 |
| Total | \$ | 10,449,391 | \$ | 9,122,443 | \$ | 9,072,649 |

INVESTMENTS

The table above summarizes the Plan's investment portfolio including collateralized securities lending. Due to the long-term nature of the Plan's benefit obligations, the Plan's 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 posted gains of 21.5% in fiscal year 2013, compared to gains posted of 3.8% in fiscal year 2012. The Investment results for fiscal year 2013 were generally consistent with related benchmarks, within asset classes. Overall, the most significant gains were posted within the equity asset classes during the fiscal period. The Plan's investment portfolio posted gains of 11.9% for fiscal year 2013 compared to the gain of 1.1% for fiscal year 2012. For the three-year period ended June 30, 2013, the overall rate of return on the Plan's investment portfolio was 11.7%.

CONTACT INFORMATION

This financial report is designed to provide a general overview of the New York Fire Department Pension Fund's finances. Questions concerning any data provided in this report or requests for additional information should be directed to Chief Accountant, New York Fire Department Pension Fund, 9 Metrotech Center, 6W-07-K, Brooklyn, NY 11201-3751.

* * * * * *

NEW YORK FIRE DEPARTMENT PENSION FUND

STATEMENTS OF PLAN NET POSITION JUNE 30, 2013 AND 2012

(in thousands)

| | 2013 | 2012 |
|---|-----------------|---|
| ASSETS: | | |
| Cash | <u>\$ 2,155</u> | \$ 9,929 |
| Receivables: | | |
| Investment securities sold | 335,643 | 184,757 |
| Member Joans (Note 6) | 29,707 | 32,350 |
| Accrued interest and dividends | 20,277 | 26,677 |
| | 20,21 | 20,077 |
| Total receivables | 385,627 | 243,784 |
| Investments — at fair value (Notes 2 and 3): | | |
| Short-term investments: | | |
| Short-term investment fund | 184.694 | 172,383 |
| Commercial paper | 208,161 | 306,822 |
| Debt securities: | • | , |
| U.S. Government | 984,390 | 1,045,802 |
| Corporate | 909,186 | 1,098,960 |
| Yankee bonds | 8,918 | 10,265 |
| Equities: | | |
| Domestic | 3,440,857 | 2,856,302 |
| Private equity | 1,119,593 | 839,603 |
| Private equity real estate | 336,060 | 261,495 |
| Mutual fund: | | |
| International — equity | 1,698,801 | 1,555,269 |
| Fixed Investment | 337,426 | 26,233 |
| Domestic — equity | | 93 |
| Mortgage — debt security | 50,067 | 50,052 |
| Treasury inflation protected securities | 232,465 | 165,842 |
| Promissory notes Collateral from securities lending | 1,788 | 3,320 |
| Conateral from securities lending | 936,985 | 730,002 |
| Total investments | 10,449,391 | 9,122,443 |
| Other assets | 4,807 | 57,929 |
| Total assets | 10.041.000 | |
| i otal assets | 10,841,980 | 9,434,085 |
| LIABILITIES: | | |
| Accounts payable | 115,178 | 108,237 |
| Payables for investment securities purchased | 643,697 | 452,438 |
| Accrued benefits payable (note 1) | 15,499 | 15,302 |
| Securities lending (note 2) | 940,414 | 733,431 |
| Total liabilities | 1,714,788 | 1,309,408 |
| Plan net position held in trust for benefits | \$ 9,127,192 | \$ 8,124,677 |

NEW YORK FIRE DEPARTMENT PENSION FUND

STATEMENTS OF CHANGES IN PLAN NET POSITION YEARS ENDED JUNE 30, 2013 AND 2012

(In thousands)

| ADDITIONS: Contributions: | 2013 | 2012 |
|---|--------------------|--------------|
| Member contributions | Ø 104.016 | 6 00.101 |
| Employer contributions | \$ 104,816 | \$ 98,494 |
| Employer contributions | 962,173 | 976,895 |
| Total contributions | 1,066,989 | 1,075,389 |
| Investment income (Note 2): | | |
| Interest income | 109,000 | 97,567 |
| Dividend income | 128,031 | 122,806 |
| Net appreciation (depreciation) in fair | | |
| value of investments | 757,136 | (98,920) |
| Total investment income | 994,167 | 121,453 |
| Less: | | |
| Investment expenses | 38,482 | 32,928 |
| Net income | 955,685 | 88,525 |
| Securities lending transactions: | | |
| Securities lending income | 6,298 | 5,340 |
| Securities lending fees | (791) | , |
| | (731) | (317) |
| Net securities lending income | 5,507 | 5,023 |
| Net investment income | 961,192 | 93,548 |
| Other: | 701,172 | 23,340 |
| Net receipts from other retirement systems | 28.084 | |
| Litigation income | 37,976 | 35,470 |
| Engation income | 989 | 2,191 |
| Total additions | 2,067,146 | 1,206,598 |
| DEDUCTIONS | | |
| Benefit payments and withdrawals | | |
| Benefit payments and withdrawais | 1,064,631 | 1,037,589 |
| Total deductions | | |
| total deductions | 1,064,631 | 1,037,589 |
| INCREASE IN PLAN NET POSITION | | |
| MONTHOR ILA I PUM MET LOSITION | 1,002,515 | 169,009 |
| PLAN NET POSITION HELD IN TRUST FOR BENEFITS: | | |
| Beginning of year | Q 124 677 | 7.055.660 |
| O G | 8,124,677 | 7,955,668 |
| End of year | \$ 9,127,192 | \$ 8,124,677 |
| * | <i>Φ</i> 7,127,132 | \$ 8,124,677 |

See notes to financial statements.

NEW YORK FIRE DEPARTMENT PENSION FUND QUALIFIED PENSION PLAN

NOTES TO FINANCIAL STATEMENTS YEARS ENDED JUNE 30, 2013 AND 2012

1. PLAN DESCRIPTION

The City of New York ("The City") maintains a number of pension systems providing benefits for employees of its various agencies (as defined within New York State ("State") statutes and City laws). The City's five major actuarially-funded pension systems are the New York Fire Department Pension Fund (the "Plan"), the New York City Employees' Retirement System (NYCERS), the Teachers' Retirement System of the City of New York - Qualified Pension Plan (TRS), the New York City Board of Education Retirement System - Qualified Pension Plan (BERS) and the New York City Police Pension Fund (POLICE). Each pension system is a separate Public Employee Retirement System (PERS) with a separate oversight body and is financially independent of the others.

The New York Fire Department, Subchapter Two Pension Fund is generally being referred to herein as the New York Fire Department Pension Fund as set forth in Administrative Code of The City of New York Section 13-313.1.

The Plan is a single-employer PERS. The Plan provides pension benefits for full-time uniformed employees of the New York City Fire Department (the "Employer"). All full-time uniformed employees of the New York City Fire Department become members of the Plan upon employment.

The Plan functions in accordance with existing State statutes and City laws. It combines features of a defined benefit pension plan with those of a defined contribution pension plan. Contributions are made by the Employer and the members.

In June 1991, the Governmental Accounting Standards Board (GASB) issued Statement No. 14, *The Financial Reporting Entity*. The definition of the reporting entity is based primarily on the notion of financial accountability. In determining financial accountability for legally separate organizations, the Plan considered whether its officials appoint a voting majority of an organization's governing body and is either able to impose its will on that organization or if there is a potential for the organization to provide specific financial benefits to, or to impose specific financial burdens on, the Plan. The Plan also considered whether there are organizations that are fiscally dependent on it. It was determined that there are no component units of the Plan.

The Plan is included in the Pension and Other Employee Benefit Trust Funds section of The City's Comprehensive Annual Financial Report (CAFR).

At June 30, 2010 and June 30, 2009, the dates of the Plan's most recent actuarial valuations, the Plan's membership consisted of:

| | 2011 | 2010 |
|--|------------------------------|------------------------------|
| Retirees and beneficiaries receiving benefits Terminated vested members not yet receiving benefits Other inactives * Active members receiving salary | 17,017 30 16 10,650 | 17,140 33 23 11,080 |
| Total | 27,713 | 28,276 |

^{*} Represents members who are no longer on payroll but not otherwise classified.

Under the One-Year Lag Methodology (OYLM) in effect for Fiscal Years beginning 2006, the actuarial valuation determines the Employer Contribution for the second following Fiscal Year. June 30, 2011 and June 30, 2010 are the dates used for calculating Fiscal Year 2013 and Fiscal Year 2012 Employer Contributions, respectively.

For most Plan participants, there are two benefit structures: The Original Plan (old program) covering members hired prior to July 1, 1981 and the Improved Benefits Plan (new program) covering members hired on and after July 1, 1981 and members hired prior to July 1, 1981 who elected the Improved Benefits Plan. The Plan pays the benefits for both programs.

The Plan provides three main types of retirement benefits: service retirements, ordinary disability retirements (non job-related disabilities) and accident disability retirements (job-related disabilities). For Tier I (Tier 1) and Tier II (Tier 2) members, the Plan generally provides:

- A service retirement benefit, in both programs, provides an allowance of one-half of "final salary" after 20 years or 25 years of service (as elected), with additional benefits equal to a specified percentage per year of service (currently approximately 1.67%) of "average salary" times the number of years of service in excess of the 20-year or 25-year minimum. Under the new program, these additional benefits are increased, where applicable, by an annuity attributable to employee contributions accumulated with interest with respect to service over the 20-year or 25-year minimum and an annuity attributable to the Increased-Take-Home-Pay (ITHP) contributions accumulated after required member qualifying service. ITHP represents amounts contributed by The City in lieu of members' own contributions. These amounts reduce the contributions that the members would have to make to the Plan during their service and thereby increases their take-home pay. Members have the choice of waiving their ITHP reduction, which would reduce their take-home pay, but provide them with additional benefits upon retirement.
- An ordinary disability retirement benefit generally provides a pension equal to 1/40 of "final salary" times the number of years of service but not less than one-half of "final salary" if 10 or more years of service were completed, or one-third of "final salary" if less than 10 years of service were completed. Members of the Improved Benefits Plan with years of service in excess of 20 years receive the actuarial equivalent of their Annuity Savings Fund balance.
- An accident disability retirement 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-years or 25-years minimum plus; (i) under the Original Plan, accumulated employee contributions without interest as a lump sum or an actuarially equivalent annuity, (ii) under the Improved Benefits Plan, an annuity

based on the member's contributions and ITHP contributions both of which are accumulated with interest.

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

Chapter 659 of the Laws of 1999 reduced the amount of service credit needed for vesting purposes to five years, subject to certain conditions. In addition, the Plan includes provisions for death benefits.

During the Spring 2000 session, the State Legislature approved and the State Governor (Governor) signed laws that provide automatic Cost-of-Living Adjustments (COLA) for certain retirees and beneficiaries (Chapter 125 of the Laws of 2000), an increase of the ITHP contributions rate to 5.0% from 2.5% for certain Tier 1 and Tier 2 members (Chapter 373 of the Laws of 2000) and a revised definition of salary to be used for the computation of certain Tier 2 benefits (Chapter 372 of the Laws of 2000).

Finally, certain service retirees also receive supplemental benefits under the New York City Fire Department Variable Supplements Funds, which are not included in these financial statements.

The 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 Plan on or after the effective date of such amendments. These amendments, which affect employees who joined the Plan on or 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 Plan and Chapter 589 of the Laws of 2001 which eliminated the Tier 2 maximum 30 years of service limitation, have lessened these limitations.

Tier III (Tier 3) — During June 2009 the Governor vetoed legislation that would have extended Tier II (Tier 2) to members hired after June 30, 2009. As a result of the Governor's veto, FIRE members hired on and after July 1, 2009 are covered under Tier III (Tier 3).

Tier V1 (Tier 6) – During March 2012 the Governor signed Chapter 18 of the Laws of 2012 ("Chapter 18/12") that placed certain limitations on the Tier 3 and Tier 4 benefits available to participants hired on and after April 1, 2012 in most New York State PERS, including FIRE. These changes are sometimes referred to as Tier 6.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS

Basis of Accounting — The Plan uses the accrual basis of accounting where the measurement focus is on the flow of economic resources. Revenues are recognized in the accounting period in which they are earned and expenses are recognized in the period incurred. Contributions from members are recognized when the Employer makes payroll deductions from Plan members. Employer contributions are recognized when due and the Employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the Plan.

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 Plan. Fair value is determined by Plan management based on information provided by the various investment managers. The investment managers determine fair value using the last available quoted price for each security owned adjusted by any contributions to or withdrawals from the fund during the period. The ALTINVF are Investments for which exchange quotations are not readily available and are valued at estimated fair value as determined in good faith by the General Partner (GP). These investments are initially valued at cost with subsequent adjustments that reflect third party transactions, financial operating results and other factors deemed relevant by the GP. Fair value is determined by plan management based on information provided by the various GP's after review by an independent consultant and the custodian bank for the fund.

Purchases and sales of securities are reflected on the trade date. Dividend income is recorded on the exdividend date. Interest income is recorded as earned on an accrual basis.

No investment in any one security represents 5% or more of the Plan net position held in trust for benefits.

The Plan does not possess an investment risk policy statement nor does it actively manage Plan assets to specified risk targets. Rather, investment risk management is an inherent function of our asset allocation process. Plan assets are diversified over a broad range of asset classes and encompass multiple investment strategies aimed at limiting concentration risk.

Income Taxes — Income earned by the Plan is not subject to Federal income tax.

Accounts Payable — Accounts payable is principally comprised of amounts owed to the Plan's banks for overdrawn bank balances. The Plan's 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.

Securities Lending Transactions — State statutes and Board policies permit the Plan to lend its investments to broker-dealers and other entities for collateral, with a simultaneous agreement to return the collateral for the same securities in the future. The Plan's custodian lends the following types of securities: short-term securities, common stock, long-term corporate bonds, U.S. Government and U.S. Government agencies' bonds, asset-backed securities and international equities and bonds held in collective investment funds. In return, it receives collateral in the form of cash and U.S Treasury and U.S. Government agency securities at 100 percent to 105 percent of the principal plus accrued interest for reinvestment. At June 30, 2013, management believes the Plan had no credit risk exposure to borrowers because the amounts the Plan owed the borrowers equaled or exceeded the amounts the borrowers owed the Plan. The contracts with the Plan's custodian require borrowers to indemnify the Plan if the borrowers fail to return the securities and if the collateral is inadequate to replace the securities loaned or fail to pay the Plan for income distributions by the securities' issuers while the securities are on loan. All securities loans can be terminated on demand within a period specified in each agreement by either the Plan or the borrowers. Cash collateral is invested in the lending agents' shortterm investment pools, which have a weighted-average maturity of 90 days. The underlying fixed income securities in these pools have an average maturity of ten years.

During Fiscal Year 2003, the value of certain underlying securities became impaired because of the credit failure of the issuer. Accordingly, the carrying amount of the collateral reported in the Plan's statements of plan net position for fiscal year 2003 was reduced by \$10 million to reflect this impairment and reflect the net realizable value of the securities purchased with collateral from securities lending transactions. In fiscal years 2004 through 2007, the Plan received \$2.6 million from distribution in bankruptcy proceedings from the defaulted issuers. During the same period, the Plan also received

\$3.9 million from litigation settlements. For fiscal years 2008 and 2009, the Plan received securities totaling \$102.4 thousand from distributions in bankruptcy proceedings. There were no recoveries for the defaulted security in fiscal years 2013, 2012 and 2011.

The securities lending program in which the Plan participates 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 statements 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 Plan 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 market value and the value as of June 30, 2013 is \$1.028.7 billion. As of the balance sheet date the maturities of the investments made with cash collateral on average exceed the maturities of the securities loans by approximately 30 days.

New Accounting Standards Adopted — In fiscal year 2013, the Plan adopted Governmental Accounting Standards Board ("GASB") Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position. The Statement's objective is to provide a new statement of net position format to report all assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position (which is the net residual amount of the other elements). The Statement requires that deferred outflows of resources and deferred inflows of resources be reported separately from assets and liabilities. The Plan concluded that except for the change in nomenclature, the adoption of GASB Statement No. 63 had no impact on its financial position and results from operations.

The Plan has adopted GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities*. GASB Statement No. 65 reclassifies certain items currently being reported as assets and liabilities as deferred outflows of resources and deferred inflows of resources. In addition, this Statement recognizes certain items currently being reported as assets and liabilities as outflows of resources and inflows of resources. The Plan has determined that GASB Statement No. 65 had no impact on its financial position or results of operations and therefore it is not applicable to its operation at the present time.

New Accounting Standard Issued but Not Yet Effective — In June of 2012, GASB issued Statement No. 67, Financial Reporting for Pension Plans. This Statement establishes financial reporting standards for state and local governmental pension plans, defined benefit pension plans and defined contribution pension plans that are administered through trusts or equivalent arrangements in which: (1) contributions from employers and nonemployer contributing entities to the pension plan and earnings on those contributions are irrevocable (2) pension plan assets are dedicated to providing pensions to plan members in accordance with the benefit terms and (3) pension plan assets are legally protected from the creditors of employers, nonemployer contributing entities, and the pension plan administrator. If the plan is a defined benefit pension plan, plan assets are also legally protected from creditors of the plan members. For defined benefit pension plans, this statement establishes standards of financial reporting for separately issued financial reports and specifies the required approach to measuring the pension liability of employers and nonemployer contributing entities for benefits provided through the pension plan (the net pension liability), about which information is required to be presented. Distinctions are made regarding the particular requirements depending upon the type of pension plan administered. This Statement replaces the requirements of Statement No. 25, Financial Reporting for Defined Benefit

Pension Plans and Note Disclosures for Defined Contribution Plans, and Statement No. 50, Pension Disclosures, as they relate to pension plans that are administered through trusts or equivalent arrangements that meet certain criteria. The requirements of Statement No. 25 and Statement No. 50 remain applicable to pension plans that are not administered through trusts covered by the scope of this Statement and to defined contribution plans that provide postemployment benefits other than pensions. The provisions of Statement No. 67 are effective for financial statements for fiscal years beginning after June 15, 2013. Earlier application is encouraged. The Plan has not completed the process of evaluating the impact of Statement No. 67 on its financial statements.

3. INVESTMENTS AND DEPOSITS

The Comptroller of The City of New York (the "Comptroller") acts as an investment advisor to the Plan. In addition, the Plan employs an independent investment consultant as an investment advisor. The Plan utilizes several investment managers to manage the long-term debt and equity portfolios. The managers are regularly reviewed, with regard to both their investment performance and their adherence to investment guidelines.

Concentration of Credit Risk

The Plan does not have any investments in any one entity that represent 5% or more of plan net position.

The legal requirements for Plan investments are as follows:

- a. Fixed income, equity and other investments may be made as permitted by New York State RSSL §§ 176-178(a) and Banking Law § 235, the New York City Administrative Code, and the Legal Investments for New York Savings Banks list as published by The New York State Banking Department, subject to Note 3(b).
- b. Investments up to 25% of total pension fund assets may be made in instruments not expressly permitted by the State RSSL.

Bank of New York Mellon (BNYM) is the primary custodian for substantially all of the securities of the Plan.

Cash deposits are insured by the Federal Deposit Insurance Corporation for up to \$250,000 per Plan member and are, therefore, fully insured.

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

| investment Type* | | | | | S&P Qua | ality Ratings | i | | | |
|----------------------------|--------|----------|----------|----------|----------|---------------|----------------|---------------|--------------|----------|
| June 30, 2013 | AAA | AA | A | 888 | 88 | В | CCC & Below | Short term | Not Rated | Total |
| U.S. Government | - % | - % | - % | - % | - % | - % | - % | - % | - % | - % |
| Corporate bonds | 0.70 | 3.03 | 13.92 | 27.53 | 5.95 | 9.42 | 2.47 | - | 8.89 | 71.91 |
| Yankee bonds | 0.18 | 0.14 | • | 0.36 | 0.03 | | - | • | | 0.71 |
| Short-term: | | | | | | | | | | |
| Commercial paper | | - | • | • | - | • | • | 10.62 | - | 10.62 |
| Pooled fund | • | • | - | - | - | - | • | 10.92 | | 10.92 |
| U.S. Treasuries | 13 | - | • | • | - | • | - | 3.68 | | 3.68 |
| U.S. Agencies | - | <u>·</u> | <u>·</u> | <u> </u> | <u> </u> | <u>·</u> | | 2.16 | <u> </u> | 2.16 |
| Percent of rated portfolio | 088% | 3.17 % | 13.92 % | 27.89 % | 5.98 % | 9.42 % | 2.47 % | 27.38 % | 8.89 % | 100.00 % |
| Investment Type* | | | | | S&P Qua | ility Ratings | 1 | | | |
| | · | | | | | | CCC & | Short | Not | |
| June 30, 2012 | AAA | AA | Α | BBB | BB | В | Below | term | Rated | Total |
| U.S. Government | - % | - % | - % | - % | - % | - % | - % | - % | - % | - % |
| Corporate bonds | 1,16 | 3.64 | 13,42 | 20.74 | 13.51 | 12.88 | 3.20 | • | 4.70 | 73.25 |
| Yankee bonds | 0.02 | 0.05 | 0.17 | 0.29 | 0.04 | - | | | 0.11 | 0,68 |
| Short-term: | | | | | | | | | | |
| Commercial paper | - | - | - | | | • | | 14.58 | • | 14.58 |
| Pooled fund | 0 | • | • | • | • | - | - | • | 11.49 | 11.49 |
| U.S. Treasuries | | • | - | - | - | • | • | - | - | - |
| U.S. Agencies | • | • | | <u> </u> | <u> </u> | - | - | <u>·</u> | | |
| Percent of rated portfolio | 1.18 % | 3.69 % | 13.59 % | 21.03 % | 13.55 % | 12.88 % | 3.20 % | 14.58 % | 16.30 % | 100.00 % |

^{*}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 Plan 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 Plan and are held by either the counterparty or the counterparty's trust department or agent but not in the Plan's name.

Consistent with the Plan's investment policy, the investments are held by the Plan's custodian and registered in the Plan's name.

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

All of the Plan's securities are held by the Plan's custodial bank in the Plan's name.

Interest Rate Risk — Interest rate risk is the risk that the fair value of investments could be adversely affected by the change in interest rates. Duration limits are used to control the portfolios exposure to interest rate changes. In the investment grade core Fixed Income portfolios duration is limited to a range of one year shorter than the benchmark duration to 0.75 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 Plan has no formal risk policy. The lengths of investment maturities (in years), as shown by the percent of the rated portfolio, are as follows:

| | | tr | nvestment Mat | urities | |
|----------------------------|----------|-----------|---------------|------------|--------------|
| Years to Maturity | Fair | Less Than | One to Five | Six to Ten | More Than |
| June 30, 2013 | Value | One Year | Years | Years | Ten Years |
| U.S. Government | 43.77 % | 0.44 % | 1.68 % | 5.68 % | 35.07.07 |
| Corporate bonds | 40.43 | 2.19 | 11.30 | 17.10 | |
| Yankee bonds | 0.41 | 2.17 | 0.29 | 0.05 | 9.84 0.07 |
| Short-term: | 5111 | | 0.29 | 0.05 | 0.07 |
| Commercial paper | 5.97 | 5.97 | _ | | |
| Pooled fund | 6.14 | 6.14 | _ | • | • |
| U.S. Agencies | 1.21 | 1.21 | | • | • |
| U.S. Treasuries | 2.07 | 2.07 | - | _ | • |
| | | | | | |
| Percent of rated portfolio | 100.00 % | 18.02 % | 13.27 % | 22.83 % | 45.88 % |
| | | in | vestment Matu | ırities | |
| Years to Maturity | Fair | Less Than | One to Five | Six to Ten | More Than |
| June 30, 2012 | Value | One Year | Years | Years | Ten Years |
| U.S. Government | 39.70 % | 0.22 % | 1.27 % | 4.75 % | 22.46.04 |
| Corporate bonds | 41.73 | 0.79 | 11.71 | 20.20 | 33.46 % |
| Yankee bonds | 0.39 | 0.02 | 0.14 | 0.14 | 9.03 |
| Short-term: | 3: | 0.02 | 0.14 | 0.14 | 0.09 |
| Commercial paper | 8.30 | 8.30 | _ | | |
| Pooled fund | 6.54 | 6.54 | - | - | × 7 |
| U.S. Agencies | 3.34 | 3.34 | _ | - | - |
| U.S. Treasuries | - | 3,51 | _ | • | - |
| | | | | | |
| Percent of rated portfolio | 100.00 % | 19.21 % | 13.12 % | 25.09 % | 42.58 % |

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

In addition, the Plan has investments in foreign stocks and/or bonds denominated in foreign currencies. The Plan's foreign currency exposures as of June 30, 2013 and 2012 are as follows (amounts in U.S. dollars, in thousands):

| Trade Currency | | 2013 | | 2012 |
|----------------------|----|-----------|------|----------|
| Euro Currency | \$ | 168,424 | \$ | 171,473 |
| Hong Kong Dollar | • | 149,232 | • | 132,544 |
| British Pnd Sterling | | 138,859 | | 187,164 |
| Japanese Yen | | 133,401 | | 148,891 |
| South Korean Won | | 91,683 | | 84,875 |
| Swiss Franc | | 69,872 | | 63,515 |
| New Taiwan Dollar | | 69,376 | | 57,527 |
| Indian Rupee | | 51,492 | | 32,937 |
| Brazilian Real | | 46,286 | | 47,193 |
| Australian Dollar | | 37,941 | | 40,168 |
| South African Rand | | 35,861 | | 32,403 |
| Swedish Krona | | 25,222 | | 14,859 |
| Mexican Nuevo Peso | | 23,880 | | 20,054 |
| Malaysian Ringgit | | 23,715 | | 15,438 |
| Canadian Dollar | | 20,015 | | 31,830 |
| Singapore Dollar | | 19,377 | | 21,897 |
| Thai Baht | | 19,084 | | 18,613 |
| Indonesian Rupiah | | 16,779 | | 15,792 |
| Danish Krone | | 11,292 | | 8,898 |
| Polish Zloty | | 9,438 | | 8,547 |
| Other | | 6,453 | | 2,631 |
| Chilean Peso | | 6,389 | | 5,380 |
| Philippines Peso | | 5,087 | | 3,817 |
| Norwegian Krone | | 4,589 | | 8,494 |
| Turkish Lira | | 3,467 | | 1,820 |
| Hungarian Forint | | 3,446 | | 3,036 |
| Colombian Peso | | 3,292 | | 2,797 |
| Egyptian Pound | | 2,913 | | 2,474 |
| Czech Koruna | | 2,048 | | 2,102 |
| Qatar Rial | | 1,578 | | - |
| Kuwait Dinar | | 1,501 | | - |
| UAE Dirham | | 1,493 | | - |
| Pakistan Rupee | | 834 | | 690 |
| Israeli Shekel | | 723 | | 823 |
| Moroccan Dirham | | 700 | | 942 |
| Totals | \$ | 1,205,742 | \$ 1 | ,189,624 |

Securities Lending Transactions:

Credit Risk — The quality ratings of investments held as collateral for Securities Lending are as follows:

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

| | ; | | | | S&P Quali | S&P Quality Ratings | | | | |
|---|------------|------------|------------|---------|-----------|---------------------|----------------|------------|---------------------------------------|------------|
| June 30, 2013 | < | < | • | | | , | အ ၁၁၁ | Short | | |
| | { | { | ∢ | | 99 | m | Below | Term | Not Rated | Total |
| U.S. Government | ı Sə | ı 69 | • | ı S | , 9 | ا دم | · • | 69 | , , , , , , , , , , , , , , , , , , , | , |
| Corporate bonds | 119,006 | 273,517 | 143,014 | , | , | • | , | | 7 | 5/13 272 |
| Yankee bonds | • | , | • | • | | | 8.0 | | 2714 | 212,010 |
| Short-term: | | | | | | ı | • | • | 1 | ſ |
| Reverse repurchase agreements | 9 | | | , | • | | | | 000 | 6 |
| Certificate of deposits | ٠ | 9 | 72 040 | |) | • | , | · | 196,320 | 196,320 |
| Commercial naner | , | | 07775 | 200 | • | | 15 | 6. | • | 73,949 |
| Uninvected | , | | 700'+/ | | ı | • | , | | | 74,662 |
| I C Appropries | , | | • | | , | | • | ı | (3,755) | (3,755) |
| C.S. DECICES | , | • | , | | | 1 | , | | 52,537 | 52,537 |
| Total | \$ 119,006 | \$ 273,517 | \$ 291,625 | \$ - | · S | S | S | · S | \$ 252,837 | \$ 936,985 |
| Percent of securities lending portfolio | 12.70 % | 29.19 % | 31.12 % | % | % | % | % | \ | 76 00 %C | 700.001 |
| | | | | | | | | | 20.27 /8 | 100.00 |
| | 1 | | | , | S&P Quali | S&P Quality Ratings | | | | |
| June 30, 2012 | AAA | Ą | ∢ | 888 | 88 | m | CCC & Below | Short | Not Rated | Total |
| U.S. Government | УЭ | · con | | ý | J | ú | c | 6 | 6 | |
| Corporate bonds | 89 270 | 202 468 | 147 472 | n Ti | ı 9 | | · | ı A | | 1 |
| Yankee bonds | | 201,100 | C/1.'/1. | , | | 0,936 | ı | | 3,105 | 449,261 |
| Short-term: | | ı | ı | ŧ | | ı | • | | • | 1 |
| Reverse repurchase agreements | • | ı | , | , | , | , | , | , | 177 140 | 110 |
| Certificate of deposits | • | • | 70.827 | , | (| | ı | ı | 172,143 | 1 / 2, 149 |
| Commercial paper | , | • | 11.040 | | ı | 1 | 1 | 1 | t | 70,827 |
| Uninvested | |) | 11,047 | • | • | • | • | , | , | 11,049 |
| | ı | 1 | • | • | | • | 1 | • | (139) | (139) |
| O.S. Agencies | 1 | | • | | | | | | 26,855 | 26,855 |
| Total | \$ 89,279 | \$ 202,468 | \$ 229,349 | | 2 | \$ 6,936 | - S | - S: | \$ 201,970 | \$ 730,002 |
| Percent of securities lending portfolio | 12.23 % | 27.73 % | 31.42 % | . | . | 0.95 % | % | % | 27.67 % | 100.00 |

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

Years to Maturity Investment Type (In Thousands)

| (In Inousands) | | Inv | vestment Maturii | ties | |
|---|------------|------------|------------------|-------------|-------------|
| | Fair | Less Than | One to Five | Six to Ten | More Than |
| June 30, 2013 | Value | One Year | Years | Years | Ten Years |
| U.S Government | \$ - | \$ - | \$ - | \$ - | \$ - |
| Corporate bonds | 543,272 | 287,563 | 255,709 | | |
| Yankee bonds | - | 5 | - | _ | • |
| Short-term: | | | | | |
| Repurchase agreements | - | - | | - | - |
| Reverse repurchase agreements | 196,320 | 196,320 | 3.53 | - | - |
| Certificate of deposits | 73,949 | 73,949 | - | - | ~ |
| Commercial paper | 74,662 | 74,662 | • | - | - |
| Money market | - | | (1-1) | _ | |
| Bank notes | - | 144 | (v) | 41 | - |
| U.S. Agency | 52,537 | 38,755 | 13,782 | - | _ |
| Time deposits | | - | _ | - | - |
| Uninvested | (3,755) | (3,755) | | | |
| Total | \$ 936,985 | \$ 667,494 | \$ 269,491 | <u>\$ -</u> | <u>\$ -</u> |
| Percent of securities lending portfolio | 100.00 % | 71.24 % | 28.76 % | % | <u>-</u> % |
| | | lny | vestment Maturit | ties | |
| (In Thousands) | Fair | Less Than | One to Five | Six to Ten | More Than |
| June 30, 2012 | Value | One Year | Years | Years | Ten Years |
| U.S Government | \$ - | \$ - | \$ - | \$ - | \$ - |
| Corporate bonds | 449,261 | 317,814 | 131,447 | | |
| Yankee bonds | • | • | - | • | - |
| Short-term: | | | | | |
| Repurchase agreements | _ | _ | _ | - | • |
| Reverse repurchase agreements | 172,149 | 172,149 | - | - | • |
| Certificate of deposits | 70,827 | 70,827 | _ | | • |
| Commercial paper | 11,049 | 11,049 | - | - | • |
| Money market | · - | - | - | - | • |
| Bank notes | - | - | - | - | - |
| U.S. Agency | 26,855 | 10,535 | 16,320 | - | |
| Time deposits | - | _ | | _ | _ |
| Uninvested | (139) | (139) | | | |
| Total | \$ 730,002 | \$ 582,235 | \$ 147,767 | <u>s - </u> | <u>\$ -</u> |
| | | | | | |

4. DUE TO VARIABLE SUPPLEMENTS FUNDS ("VSFs")

The Administrative Code of The City of New York (ACNY) provides that the Plan transfer to the Firefighters' Variable Supplements Fund (FFVSF) and the Fire Officers' Variable Supplements Fund (FOVSF) amounts equal to certain excess earnings on equity investments of the Plan, if any. These excess earnings are defined as the amount by which earnings on equity investments of the Plan exceed what the earnings would have been had such funds been invested at a yield comparable to that available from fixed income securities, less any cumulative deficiencies of prior years' excess earnings that fell below the yield of fixed income investments. In addition, such transfers from the Plan to the FFVSF and FOVSF are limited to the unfunded Accumulated Benefit Obligation (ABO) of these VSFs.

For Fiscal Year 2013, the excess earnings of the Plan, inclusive of prior years' cumulative deficiencies, are estimated to be equal to zero and therefore, no transfers were due from the Plan to the VSFs as of June 30, 2013.

For Fiscal Year 2012, the excess earnings of the Plan, inclusive of prior years' cumulative deficiencies, are estimated to be equal to zero and therefore, no transfers were due from the Plan to the VSFs as of June 30, 2012.

5. CONTRIBUTIONS AND ACTUARIAL ASSUMPTIONS

The financial objective of the Plan 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 I (Tier I) and Tier II (Tier 2) members contribute by salary deductions on the basis of a normal rate of contribution which is assigned by the Plan at membership. This member normal rate, which is dependent upon age and actuarial tables in effect at the time of membership, is determined so as to provide approximately one-fourth of the service retirement allowance at the earliest age for service retirement. For Tier I, the average member normal rate is approximately 7.4%. For Tier 2, the average member normal rate is approximately 6.8%.

These member contributions are reduced by 5.0% under the ITHP program.

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 III (Tier 3) and Tier VI (Tier 6) members contribute 3.0% of salary until they have 25 years of credited service.

Employer Contributions — Statutory Contributions to the Plan, determined by the Plan's Chief Actuary of the Office of the Actuary (the "Actuary") in accordance with State statutes and City laws, are generally funded by the Employer within the appropriate fiscal year.

The June 30, 2011 (Lag) actuarial valuation was used to determine the Fiscal Year 2013 Employer Contribution. There were no changes in actuarial assumptions and methods from the prior (Lag) actuarial valuation.

The June 30, 2010 (Lag) actuarial valuation used to determine the Fiscal Year 2012 Employer Contribution was based on revised actuarial assumptions and methods proposed by the Actuary (the "2012 A&M"). The Board of Trustees of the Plan adopted those changes to the actuarial assumptions and methods that require Board approval during Fiscal Year 2012. The New York State Legislature and 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 expenses, the Entry Age Actuarial Cost Method and the amortization of Unfunded Actuarial Accrued Liabilities.

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

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

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

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

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

The obligations of the Plan to the FFVSF and the FOVSF are recognized through the Liability Valuation Method.

Under this method the APV of Future SKIM from the Plan to the FFVSF and FOVSF 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 FFVSF and FOVSF. The APV of Future SKIM is computed as the excess, if any, of the APV of benefits of the FFVSF and FOVSF offset by the AAV of the FFVSF and FOVSF, respectively. Under the EAACM, a portion of the APV of Future SKIM is reflected in the APV of Future Normal Costs and a portion is reflected in the UAAL.

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

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

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

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

Chapter 125 of the Laws of 2000 (Chapter 125/00) provided eligible retirees and eligible beneficiaries with increased Supplementation as of September 2000 and with automatic COLA beginning September 2001. Chapter 125/00 also provided for a five-year phase-in schedule for funding the additional actuarial liabilities created by the benefits provided by this law. Chapter 278 of the Laws of 2002 (Chapter 278/02) required the Actuary to revise the methodology and timing for determining the Statutory Contributions on account of the additional actuarial liabilities attributable to the benefits provided under Chapter 125/00 by extending the phase-in period for funding these liabilities from five years to ten years.

The impact of the ten-year phase-in of Chapter 278/02 was to postpone funding of the additional actuarial liabilities attributable to Chapter 125/00 resulting in greater Employer Contributions in later years.

Chapter 152 of the Laws of 2006 (Chapter 152/06) eliminated the ten-year phase-in. All actuarial liabilities attributable to Chapter 125/00 are now recognized in the actuarial valuation.

Chapter 85 of the Laws of 2000 (Chapter 85/00) reestablished the UAAL and eliminated the Balance Sheet Liability (BSL) for actuarial purposes as of June 30, 1999. The schedule of payments toward the reestablished UAAL provides that the UAAL be amortized over a period of 11 years beginning Fiscal Year 2000, where each annual payment after the first equals 103% of its preceding annual payment.

The Statutory Contributions for Fiscal Years 2013 and 2012 were equal to the Actuarial Contributions.

Funded Status and Funding Progress — One measure of the funded status of the Plan as of June 30, 2011, the most recent actuarial valuation date, based on the Entry Age Actuarial Cost Method, the plan's funding method, is as follows (dollar amounts in thousands):

| Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) (b) | Unfunded AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroli (c) | UAAL as a Percentage of Covered Payroll ((b-a)/c) |
|--|--|------------------------------------|--------------------------|---------------------------|---|
| \$ 7,955,668 | \$ 15,808,930 | \$7,853,262 | 50.3% | \$1,125,460 | 697.8 % |

The schedule of funding progress, presented as required supplementary information (RSI) following the notes to the financial statements, presents multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the AALs for benefits under the Plan's Actuarial Cost Method.

An additional schedule of funding progress, presented as supplementary information following the notes to the financial statements, presents multiyear trend information about whether actuarial values of plan assets are increasing or decreasing over time relative to AALs for benefits under the Entry Age Actuarial Cost Method.

Additional information as of the latest actuarial valuation follows:

Valuation Date June 30, 2011 (Lag)

Actuarial Cost Method Entry Age

Amortization Method

Initial Unfunded Increasing Dollar Post-2010 Unfundeds Level Dollar

Remaining Amortization Period

Initial Unfunded 21 Years (Closed)
Post-2010 Unfundeds 15 Years (Closed).

Actuarial Asset Valuation Method 6-Year Smoothed Market¹

Actuarial Assumptions

Projected Salary Increases² In general, merit and promotion increases plus

assumed General Wage Increases of 3.0% per annum.

Investment Rate of Return² 7.0% per annum, net of Investment Expenses

COLAs² 1.5% per annum for Tier I and Tier II, 2.5% per annum for

Tier III.

6. MEMBER LOANS

Members are permitted to borrow up to 90% (for certain members, the 75% has been increased to 90% effective July 20, 2004) of their own accumulated contributions including accumulated interest. The balance of member loans receivable at June 30, 2013 and 2012 is \$29.7 million and \$32.4 million, respectively. Upon termination of employment before retirement, certain members are entitled to refunds of their own contributions including, for new program members, accumulated interest less any loans outstanding. Certain prior year loans to retirees were removed from member loans receivables. Such balances should be reduced at the effective date of retirement as a result of payoff or future benefit reductions.

7. RELATED PARTIES

The Comptroller has been appointed by law as custodian for Fixed Annuity Program assets with revocable discretionary authority. Securities are held by certain banks under custodial agreements with the Comptroller. The Comptroller also provides cash receipt and cash disbursement services to the Plan. Actuarial services are provided to the Plan by the Office of the Actuary employed by the Boards of Trustees of The City's main pension systems. The City's Corporation Counsel provides legal services to the Plan. Other administrative services are also provided by The City. The cost of providing such services amounted to \$2,118,051 and \$1,894,451 in Fiscal Years 2013 and 2012, respectively.

8. ADMINISTRATIVE AND INVESTMENT EXPENSES

There are no administrative expenses paid out of the Plan because they are paid for by related parties. Investment expenses charged to the investment earnings of the Plan, exclusive of expenses relating to

¹ With the June 30, 2011 Actuarial Asset Value reset to Market Value of Assets.

² Developed assuming a long-term Consumer Price Inflation assumption of 2.5% per annum.

securities-lending transactions amounted to approximately \$38.5 and \$32.9 in 2013 and 2012, respectively.

9. CONTINGENT LIABILITIES AND OTHER MATTERS

Contingent Liabilities — The Plan has a number of claims pending against it and has been named as a defendant in a number of lawsuits. The Plan also has certain other contingent liabilities. Management of the Plan, on the advice of legal counsel, believes that such proceedings will not have a material effect on the Plan net position or changes in Plan net position. Under the existing State statutes and City laws that govern the functioning of the Plan, increases in the obligations of the Plan to members and beneficiaries ordinarily result in increases in the obligations of The City to the Plan.

Other Matters — During Fiscal Years 2013 and 2012, certain events described below took place which, in the opinion of Plan management, could have the effect of increasing benefits to members and/or their beneficiaries. The effect of such events has not been fully quantified. However, it is the opinion of Plan management that such developments would not have a material effect on the statements of Plan net position held in trust for pension benefits or cause changes in Plan net position held in trust for pension benefits.

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

The most recently completed study was published by the Hay Group (Hay) dated December 2011 and analyzed experience for Fiscal Years 2006 through 2009. Hay made recommendations with respect to the actuarial assumptions and methods based on their analysis.

The previously completed study was published by The Segal Company (Segal) dated November 2006 and analyzed experience for Fiscal Years 2002 through 2005. Segal made recommendations with respect to the actuarial assumptions and methods based on their analysis.

Currently, Gabriel Roeder Smith & Company (GRS) has been retained to study the actuarial assumptions for Fiscal Years 2010 through 2013.

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

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

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

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

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

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

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

Chapter 654 of the Laws of 2006 expanded presumptive eligibility for Line-of-Duty accidental disability and accidental death benefits to include strokes effective from January 1, 2002.

Chapter 713 of the Laws of 2006 provides that FIRE members retired from the Fire Marshall title who are appointed to the Office of NYC Marshall will have no reduction or suspension of retirement allowance.

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

Chapter 637 of the Laws of 2007 deems prior EMT service and service in certain other job titles as qualifying time for all pension purposes.

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

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

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

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

Tier III (Tier 3) – During June 2009 the Governor vetoed legislation that would have extended Tier II (Tier 2) to members hired after June 30, 2009. As a result of the Governor's veto, FIRE members hired on and after July 1, 2009 are covered under Tier III (Tier 3).

Chapter 18 of the Laws of 2012 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 PERS, including FIRE. These changes are sometimes referred to as Tier 6.

Chapter 3 of the Laws of 2013 ("Chapter 3/13") implemented changes in the actuarial procedures for determining Employer Contributions beginning Fiscal Year 2012. In particular, Chapter 3/13 continued the OYLM, employed the Entry Age Actuarial Cost Method (EAACM), an Actuarial Interest Rate (AIR) assumption of 7.0% per annum, net of expenses and defined the amortization of Unfunded Actuarial Accrued Liabilities (UAAL).

* * * * * *

NEW YORK FIRE DEPARTMENT PENSION FUND QUALIFIED PENSION PLAN

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF FUNDING PROGRESS (IN CONFORMITY WITH THE PLAN'S FUNDING METHOD)

(In Thousands)

| Actuarial Valuation Date June 30 | (1) Actuarial Asset Value (AAV) | (2) Actuarial Accrued Liability (AAL) ¹ | (3) Unfunded AAL (UAAL) | (4) Funded Ratio | (5) Covered Payroll | (6) UAAL as a Percentage of Covered Payroll |
|---|---|--|----------------------------------|------------------------|---------------------------|---|
| | (A) | (A) & (B) | (C) (2) - (1) | (1) ÷ (2) | | (3) ÷ (5) |
| 2011 (Lag) ² | \$ 7,955,668 | \$ 15,808,930 | \$ 7,853,262 | 50.3 % | \$ 1,125,460 | 697.8 % |
| 2010 (Lag)2 | 7,392,656 | 15,349,598 | 7,956,942 | 48.2 | 1,138,188 | 699.1 |
| 2009 (Lag) | 7,304,758 | 7,327,560 | 22,802 | 99.7 | 1,079,682 | 2.1 |
| 2008 (Lag) | 6,942,992 | 6,986,243 | 43,251 | 99.4 | 1,051,592 | 4.1 |
| 2007 (Lag) | 6,459,130 | 6,520,670 | 61,540 | 99.1 | 1,000,383 | 6.2 |
| 2006 (Lag) | 6,174,111 | 6,251,960 | 77,849 | 98.8 | 932,730 | 8.3 |

Effective June 30, 2010, based on Entry Age Actuarial Cost Method (EAACM). Previously, based on the Frozen Initial Liability Actuarial Cost Method.

Includes the Accrued Liabilities attributable to the Variable Supplements Funds, net of their Actuarial Asset Values, if any.

Reflects revised actuarial assumptions and methods based on experience review.

Notes:

A. For the June 30, 2011 (Lag) actuarial valuation, the AAV was reset to the MVA (i.e., "Market Value Restart").

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

The Actuarial Asset Valuation Method (AAVM) in use for actuarial valuations after the June 30, 2011 (Lag) actuarial valuation is unchanged from the AAVM in use for the June 30, 2009 (Lag) actuarial valuation.

Beginning with the June 30, 2004 (Lag) actuarial valuation, the Actuarial Asset Valuation Method (AAVM) was changed to a method which reset the AAV to Market Value (i.e., "Market Value Restart") as of June 30, 1999. As of each June 30 thereafter the AAVM recognizes investment returns greater or less than expected over a period of six years.

Under this revised AAVM, any Unexpected Investment Returns (UIR) for Fiscal Years 2000 and later are phased into the AAV beginning June 2000 at rates of 15%, 15%, 15%, 15%, 20% and 20% per year (i.e., cumulative rates of 15%, 30%, 45%, 60%, 80% and 100% over a period of six years).

The UIR for Fiscal Years 2000 to 2004 was set equal to the UIR under the prior AAVM.

The prior AAVM was changed as of June 30, 1999 to reflect a market basis for investments held by the Plan.

- B. To effectively assess the funding progress of the Plan, it is necessary to compare the AAV and the AAL calculated in a manner consistent with the Plan's funding method over a period of time. The AAL is the portion of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Employer normal costs and future Member Contributions.
- C. The UAAL is the excess of the AAL over the AAV. Under the EAACM, actuarial gains (losses), as they occur, reduce (increase) the UAAL and are explicitly identified and amortized. Increases (decreases) in obligations due to benefit changes, actuarial assumption changes and/or actuarial method changes are also explicitly identified and amortized.

(Schedule of Funding Progress Concluded)

NEW YORK FIRE DEPARTMENT PENSION FUND QUALIFIED PENSION PLAN

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF EMPLOYER CONTRIBUTIONS (in thousands)

| Fiscal Years Ended June 30 | Annual Required Contribution (ARC) | Percentage of ARC Contributed | Net Pension Obligation |
|-------------------------------|------------------------------------|----------------------------------|---------------------------|
| 2013 | \$962,173 | 100.0 % | \$ 178,300 |
| 2012 | 976,895 | 100.0 | 185,834 |
| 2011 | 890,706 | 100.0 | 185,874 |
| 2010 | 874,331 | 100.0 | 193,030 |
| 2009 | 843,751 | 100.0 | 199,928 |
| 2008 | 780,202 | 100.0 | 206,676 |

Under the requirements of Governmental Accounting Standards Board Statement No. 25 (GASB25), as amended by GASB Statement No. 50 (GASB50), the Annual Required Contribution (ARC) is determined through an actuarial valuation reflecting all liabilities of the Plan. The Employer Contribution to the Plan is determined in accordance with statute (i.e., Statutory Contribution).

NEW YORK FIRE DEPARTMENT PENSION FUND QUALIFIED PENSION PLAN

REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED) SCHEDULE OF ACTUARIAL METHODS AND ASSUMPTIONS

The information presented in the required supplementary schedules was determined as part of the actuarial valuations as of June 30, 2011 (Lag) and June 30, 2010 (Lag). These actuarial valuations were used to determine Employer Contributions for Fiscal Years 2013 and 2012, respectively. Additional information as of the last two actuarial valuations follows:

| | June 38, 2011 (Lag) ¹ | June 30, 2010 (Lag) ¹ |
|--|---|---|
| Actuarial cost method | Entry Age. | Entry Age. |
| Amortization Method for Unfunded Actuarial Accrued Liabilities Initial Unfunded Post-2010 Unfundeds Remaining amortization period | increasing Dollar. Level Dollar. | Increasing Dollar. Level Dollar. |
| Initial Unfunded Post-2010 Unfundeds | 21 Years (Closed). 15 Years (Closed). | 22 Years (Closed). N/A |
| Actuarial Asset Valuation Method Actuarial assumptions: | Modified 6-year moving average of market values with a "Market Value Restart" as of June 30, 2011. ² | Modified 6-year moving average of market values with a "Market Value Restart" as of June 30, 2011. |
| Investment rate of return | 7.0% per annum, net of Investment Expenses. | 7.0% per annum,3 net of Investment Expenses. |
| Post-retirement mortality Active service: withdrawal, death, | Tables adopted by Board of Trustees during Fiscal Year 2012. | Tables adopted by Board of Trustees during Fiscal Year 2012. |
| disability, service retirement | Tables adopted by Board of Trustees during Fiscal Year 2012. | Tables adopted by Board of Trustees during Fiscal Year 2012. |
| Salary increases | In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per annum. ³ | In general, merit and promotion increases plus assumed General Wage Increases of 3.0% per annum. ³ |
| Cost-of-Living adjustments ³ | 1.5% per annum for Tier t and Tier II, 2.5% per annum for Tier III. | 1.5% per annum for Tier I and Tier II, 2.5% per annum for Tier III. |

- 1. Under the One-Year Lag Methodology, the actuarial valuation determines the Employer Contribution for the second following Fiscal Year.
- 2. With the June 30, 2010 Actuarial Asset Value defined to recognize Fiscal Year 2011 investment performance.
- 3. Developed assuming a long-term Consumer Price Inflation assumption of 2.5% per annum.

Additional Supplementary Information Schedule of Investment Expenses

For Fiscal year ended June 30,2013

| | Average assets under management (\$MMS) | Total Fees |
|--|---|---------------|
| Small Cap Active | management (awiyis) | rees |
| Brown AM | 27.7 | 220.061 |
| Perimeter | [2/./] | 238,861 |
| Ceredex | 62.5 | 172,233 |
| Dalton Greiner | 40.9 | 230,726 |
| Total Small Cap active | | 359,413 |
| Small/Mid Cap | 131.1 | 1,001,233 |
| Security Global Inv SMDV | 65.05 | 000440 |
| Total small Mid Cap | 65.95 65.95 | 332,112 |
| Mid Cap Active | 65,55 | 332,112 |
| Timessquare Capital MCG | 12467 | 700 455 |
| Iridian Asset MCV | 134.67 | 790,157 |
| Wellington Mgmt MCC | 75.16 | 376,943 |
| | 78.98 | 345,732 |
| Total Mid Cap Active | 288.81 | 1,512,832 |
| Mid Cap Passive State Street GA S&P 400 | 1 222 62 | |
| | 223.08 | 10,161 |
| Total Mid Cap Passive | 223.08 | 10,161 |
| Large Cap | | |
| Profit Investment Mgmt | 42.77 | 157,936 |
| Zevenbergen | 153.95 | 296,155 |
| Aronson Johnson | - [] | 135,215 |
| Seizert Cap Ptnrs | 44.64 | 133,856 |
| Total Large Cap | 241.36 | 723,163 |
| Emerging Managers | | |
| Attucks | 21.17 | 152,063 |
| Capital Prospects | 31.70 | 218,166 |
| Cotal Progress Trust | 80.58 | 458,827 |
| Total Emerging Managers | 133.45 | 829,056 |
| Passive | | |
| Russell 3000 | | |
| BlackRock | 1,359.63 | 39,495 |
| State Street | 962.59 | 60,338 |
| Total Passive Russell 3000 | 2,322.22 | 99,833 |
| AFE Markets Equities | | |
| Active | | |
| Baillie | 163.33 | 104,477 |
| Pyramis Global Advisors | 0.19 | 283,241 |
| Valter Scott | 99.22 | 98,750 |
| Causeway EAFE Large Cap MTA | 105.09 | 77,091 |
| prucegrove | 176.76 | 392,864 |
| hiladelphia | 2.41 | 308,116 |
| hornburg Investment MNGT | 105.30 | 832,919 |
| cadian EAFE Small Cap MTA | 57.29 | 38,780 |
| yramis EAFE Small Cap MTA | 55.87 | 36,500 |
| assive | | |
| 6GA | 74.52 | 11,216 |
| Total EAFE Market Equities Active | 839.98 | 2,183,954 |
| pportunistic Equity Strategies | | ,,_ |
| ON-U.S. Activist | | |
| overnance For Owners | 21.30 | 120,740 |
| Total EAFE Market Equities Active | 21.30 | 120,740 |
| Opportunistic Equity Strategies | | 120,740 |

Additional Supplementary Information Schedule of Investment Expenses

For Fiscal year ended June 30,2013

| | | Schedule 4 |
|--|---|---------------|
| | Average assets under management (\$MMS) | Total Fees |
| | management (#initio) | rees |
| Emerging Markets Active Acadian | 10100 | |
| Acadian Baillie Gifford | 101.99 | 396,861 |
| DFA | 148.40 | 852,020 |
| | 74.19 | 162,857 |
| Eaton Vance | 88.63 | 322,577 |
| Blackrock Account EM | 167.01 | 135,571 |
| Total Emerging Markets Active | 580.22 | 1,869,885 |
| Hedge Funds | | |
| Permal Hedge Fund of Funds | 53.25 | 967,608 |
| Blue Trend Fd | 20.41 | 466,124 |
| Brevan Howard | 41.88 | 823,711 |
| Brigade Lev Cap Str | 23.43 | 327,704 |
| Carlson Blk DIA fd | 27.00 | - |
| Caspian Select CF | 17.88 | 212,090 |
| CCP Quant Fd | 17.63 | 138,120 |
| D.E. Shaw | 50.22 | 1,147,128 |
| fir Tree Val Fd | 13.91 | 59,282 |
| Perry Capital | 21.38 | -] |
| Pharo Macro Fd Ltd | 16.00 | - |
| Total Hedge Funds | 302.99 | 4,141,767 |
| Real Estate Equity Securities | | |
| Adelante Capital Management | 58.61 | 188,967 |
| Suropean REIT MTA | 104.66 | 461,226 |
| MS REIT MTA | 161.53 | 638,265 |
| Total Real Estate Equity Securities | 324.80 | 1,288,458 |
| rivate Equity Investments | | 1 |
| ACON Equity Ptnrs III | 0.15 | - 1 |
| Aisling Capital II | 0.69 | 10,813 |
| isling Capital III | 1.60 | 61,101 |
| lldus New York Fire Fund | 36.44 | 581,952 |
| American Sec Ptnrs VI | 4.47 | 208,518 |
| Ampersand 2009 | 3.64 | 100,000 |
| pollo Investment Fd V | 2.33 | • |
| pollo investment Fd VT | 18.04 | - |
| Apollo Investment Fd VII | 21.53 | 232,002 |
| res Corp Opp | 1.00 | 8,556 |
| Ares Corp Opp Fd II | 2.29 | 18,659 |
| res Corp Opp Fd III | 7.25 | 51,542 |
| Ares Corp Opp Fd IV | 0.62 | 194,233 |
| Aurora Equity Capital Partners III | 3.20 | 3,736 |
| Avista Capital Partners | 4.01 | 31,250 |
| Avista Capital Partners II | 9.29 | 62,500 |
| XXA Secondary Fd V | 24.55 | 400,000 |
| C EUR Cap IX | 8.01 | 53,896 |
| DCM Opportunity Fd III | 4.41 | 149,793 |
| lackstone Capital Ptnrs IV | 8.17 | 143,/33 |
| lackstone Capital Ptnrs V | 9.35 | 20.554 |
| lackstone Capital Ptirts VI | | 20,774 |
| Blackstone Capital Perrs VI | 2.72 | 96,277 |
| | 0.79 | 10,916 |
| ridgepoint Europe III | 3.11 | - |
| ridgepoint Europe IV | 5.73 | - (Con |

Additional Supplementary Information

Schedule of Investment Expenses

For Fiscal year ended June 30,2013

| | | Ochequie 4 | |
|--------------------------------------|---|------------------|--|
| | Average assets under management (\$MMS) | Total Fees | |
| Carlyle Ptnrs III | 0.04 | 1 003 | |
| Carlyle Ptnrs IV | 3.09 | 15,020 | |
| Carlyle Ptnrs V | 8.27 | | |
| Catterton Partners VI | 7.12 | 106,462 | |
| CCMP Capital Investors !! | 4.86 | 88,562 | |
| Clayton, Dubilier and Rice Fund VII | 2.33 | 66,007 | |
| Clayton, Dubilier and Rice Fund VIII | 2.81 | * | |
| Celtic Pharm Hldgs, LP | 3.84 | 20.700 | |
| Coller International Ptnrs V | 3.12 | 38,792 | |
| Comvest Investment Ptnrs IV | 7.09 | 49,262 | |
| Constellation Ventures III | 4.54 | 145,899 | |
| Credit Suisse EM Fd | 0.98 | 100,000 | |
| Credit Suisse EM Co/Inv Fd | 4.05 | 85,104 | |
| Crestview Ptnrs II | 6.40 | 5,570 | |
| CVC Euro Eq Ptnrs III | 2.25 | 92,512 | |
| CVC Euro Eq Ptnrs V | 9.54 | | |
| Cypress Merch Bk Ptnrs II | | 122,798 | |
| EQT VI | 2.14 | 15,248 | |
| Erasmus NYC Growth FD A | 5.63 | 267,262 | |
| Fairview Emerging Mgrs Fd | 0.39 | | |
| FdG Capl Ptnrs | 4.09 | 41,021 | |
| FdG Capl Ptnrs II | 5.17 | - | |
| Fenway Ptnrs Capital III | 1.75 | 29,209 | |
| First Mark Fd IV | 2.24 | 33,503 | |
| First Reserve Fd XI | 3.45 | 24,877 | |
| First Reserve Fd XII | 4.50 | 27,784 | |
| ourth CINVEN Fd | 3.84 2.49 | 66,633 | |
| S Equity Ptnrs V | 3.52 | 18,625 | |
| S Equity Ptnrs VI | 8.59 | 10,299 | |
| T Ventures Fd III | 2.96 | 153,326 | |
| II Ptnrs Fd II | 2.46 | 56,252 | |
| Il Partners Fund III | 7.45 | 7 | |
| ireen Eq Inv VI | 2.31 | 85,079 | |
| SO Capital Opportunities Fd | 3.64 | 189,964 | |
| lighland Consumer Fd I | 1.21 | 84,999 | |
| CV Ptnrs III | 0.46 | 50,230 | |
| ntermedia Ptnrs VII | 3.28 | 25,041 | |
| PM Strategic Prop Fd | 2.15 | 36,336 | |
| M Special Sit Fd | 1 | 276,084 | |
| andmark Equity Ptnrs XI | 0.87 | 65,442 10,141 | |
| andmark Equity Ptnrs XIV | 8.60 | · • | |
| ee Equity Ptnrs | 5.88 | 136,300 | |
| evine Leichtman Cap Ptnrs IV | 5.53 | 36,315 | |
| exington Capital Ptnrs VII | 6.40 | 33,468 | |
| ncolnshire Eq Fd II | 0.81 | 100,000 | |
| ncolnshire Eq Fd III | 3.33 | 1844 | |
| ncolnshire Eq Fd IV | | 18,164 | |
| ODH Euro Choice II | 1.09 | 13,326 | |
| DDH Euro Choice III | 4.77 | 56,344 | |
| DDH Euro Choice IV | 4.00 | 48,319 | |
| arkstone Capital Pturs | 3.29 | 64,164 | |
| • | 2.07 | 29,036 | |
| docean Eq Ptnrs III | 9.14 | 86,045 (Continu | |

Additional Supplementary Information Schedule of Investment Expenses

For Fiscal year ended June 30,2013

| | Average assets under management (\$MMS) | Total Fees | |
|---|---|------------------------------|--|
| entreux Eq Ptnrs IV | 4.29 | 84,630 | |
| iberger Berman Emg Mgr | 3.10 | • | |
| w Mountain Ptnrs | 0.95 | | |
| v Mountain Ptnrs II | 1.23 | 1,771 | |
| / Mountain Ptnrs III | 8.96 | 105,169 | |
| vspring Venture II | 2.39 | • | |
| N Blomed Opportunity II | 2.96 | 94,263 | |
| mpus Capital Asia III | 3.46 | 100,000 | |
| ex Ptnrs III | 4.17 | 82,916 | |
| adin Homeland Security Fd | 3.41 | 56,412 | |
| adin Fund III | 4.99 | 150,000 | |
| adium Eq Ptnrs III | 9.26 | 44,052 | |
| ladium Eq Ptnrs IV | 1.33 | 180,000 | |
| AM Clean Energy & Tech Fund | 5.09 | 45,000 | |
| asus Partners IV | 6.86 | 87,169 | |
| asus Partners V | 3.11 | 130,846 | |
| mira Fd IV | 4.61 | 35,984 | |
| eus Ptnrs VII | 1.96 | 47,715 | |
| Brook Capital Ptnrs | 5.36 | 146,114 | |
| inum Eq Cap Ptnrs III | 2.29 | - | |
| m Venture Ptnrs IV | 0.02 | 15,458 | |
| m Venture Ptnrs V-A | 3.29 | 158,562 | |
| s Group Partners III | 1.98 | 50,578 | |
| rstone/Carlyle GLB EP IV | 5.93 | 20,436 | |
| E Ventures IV | 2.80 | 62,500 | |
| Venture Ptnrs III | 6.23 | 126,140 | |
| Priv Eq Ptnrs II | 6.15 | 64,921 | |
| Vitalife Partners II | 3.77 | 115,507 | |
| w Phipps Group | 3.47 | 62,062 | |
| Phipps II | 3.37 | 143,884 | |
| nit Partnern Gr EQ VIII | 4.00 | 225,000 | |
| rind Capital Partners | 0.31 | • | |
| Firma Cap III | 2.69 | 43,530 | |
| ent V | 7.42 | 225,000 | |
| itic Capital Ptnrs | 0.93 | | |
| ntic Capital Ptnrs III | 0.26 | 9,675 | |
| ntic Capitai Ptnrs IV | 5.38 | 55,013 | |
| ower Fund II | 4.18 | • | |
| ower Fund III | 3.84 | 75,310 | |
| a Equity Ptnrs III | 7.30 | 150,000 | |
| a Equity Ptnrs IV | 14.22 | 375,000 | |
| uvian Ptnrs | 2.13 | 373,000 | |
| A Comm Ptmrs III | 0.88 | - | |
| Comm Ptnrs IV | 1.45 | 16,202 | |
| burg Pincus XI | 6.75 | 426,684 | |
| spring Capital Ptnrs V | 1.32 | 116,256 | |
| th, Carson, Anderson & Stowe XI | 5.93 | 106,335 | |
| aipa American Alliance Fd | 3.25 | | |
| aipa American Alliance Fd II | 20.16 | 10,590 | |
| | 20.10 | 121,908 | |
| • | 744 | 20 24- | |
| pa Corp Initiative II Total Private Equity Investments | 2.66 5 95.07 | 35,308 9,6 05,24 2 | |

Additional Supplementary Information Schedule of Investment Expenses For Fiscal year ended June 30,2013

| | Average assets under management (\$MMS) | Total Fees |
|--|---|---------------|
| PRIVATE REAL ESTATE | | |
| AG Realty Fd VII | 12.85 | 106,877 |
| Amer Value Ptnrs I | 2.42 | 32,108 |
| Apollo Europe III | 13.46 | 173,393 |
| ARA Asia Dragon Fd | 13.44 | 98,942 |
| Blackrock Carbon III | 3.79 | 87,331 |
| Blackstone Real Estate Ptnrs EU III | 4.09 | 75,000 |
| Blackstone Real Estate Ptnrs IV | 2.72 | 36,930 |
| Blackstone Real Estate Ptnrs VI | 12.91 | 127,862 |
| Blackstone Real Estate Ptnrs VII | 15.98 | 370,783 |
| Brookfield Strategic RE Ptnrs | 1.90 | 122,882 |
| Canyon Johnson Urban Fd II | 4.86 | 111,002 |
| Canyon Johnson Urban Fd III | 3.81 | 245,032 |
| Cariyle R.P. Fd V | 3.68 | 106,461 |
| Carlyle Realty VI | 7.81 | 79,881 |
| Colony Investors VIII | 6.26 | 173,522 |
| Colony Realty Ptnrs II | 2.10 | 58,369 |
| Divco West Fd III | 28.25 | 318,750 |
| Emmes Asset Mgmt Co | 0.38 | - |
| H/2 Spec Opportunity Fd II | 5.96 | 30,223 |
| Heitman America Fd | 11.62 | 43,201 |
| PM Strategic Prop Fd | 29.27 | 266,896 |
| PM Special Sit Fd | 4.35 | 63,836 |
| KTR Ind Fd III | 1.05 | |
| Lasalle US Property Fd Metro Workforce Housing Fd | 23.75 | 119,784 |
| PRISA PRISA II | 7.07 | 53,986 |
| Prologis Targeted US Logistics Fd | 19.62 | 169,345 |
| RREEF Amer. II | 4.22 | 29,770 |
| REEF Amer. III | 7.16 | 30,640 |
| Silverpeak RE Ptnrs Fd III | 2.13 | 17,868 |
| Stockbridge Real Estate Fd | 0.87 | 18,984 |
| l'aconic NY Inv Fd | 13.10 | 135,561 |
| The City Investment Fd | 5.89 | 58,813 |
| Thor Urban Property Fd II | 15.75 | 172,619 |
| JBS Trumbull Property Fd | 4.21 | 47,774 |
| Valton St RE Fd VI | 32.58 | 204,829 |
| Valton St RE Fd VIII | 5.04 | 55,068 |
| Total PRIVATE REAL ESTATE | 4.69 | 68,220 |
| ixed Income Advisors | 340.94 | 3,801,540 |
| tructured Program | | |
| overnment Treas/Agency Sector | 1 | |
| ischer Francis | | |
| inco | 57.55 | 54,115 |
| anco tate Street | 97.66 | 117,197 |
| | 56.11 | 36,804 |
| Total Fixed Income Advisors lortgage Sector | 211.32 | 208,115 |
| lackrock | 220.62 | 104,910 |
| oldman Sachs | 87.24 | 27,041 |
| leuberger Berman | 110.02 | 62,168 |
| Imco | 225.90 | |
| Total Mortgage Sector | 4 1 1 | 151,994 |
| s over sant feder perint | 643.78 | 346,113 (Co |

Additional Supplementary Information Schedule of Investment Expenses

For Fiscal year ended June 30,2013

| | Average assets under management (\$MMS) | Total Fees |
|--|--|---------------|
| | | |
| Investment Grade Credit Sector | | |
| Blackrock | 129.80 | 59,548 |
| rudential | 127.68 | 95,048 |
| rudential Privest | 39.57 | 9,268 |
| aplin Canida | 218.99 | 186,891 |
| '. Rowe Price | 201.84 | 270,992 |
| Total Investment Grade Credit Sector | 717.88 | 621,747 |
| ilobal Fixed Income M CAPITAL -MTA | 10.46 | 20.600 |
| M CAFIIAL -MIA | 10.46 | 39,680 |
| rogress Fixed Emerging Managers | 10.46 | 39,680 |
| mbassador -Core Plus | 6.52 | 22.02 |
| indassador -core Pius A | 5.32 | 22,926 |
| A illswick | 2.60 | 18,706 |
| | 1 1 | 9,277 |
| ew Century Advisors -Core Plus | 6.58 | 23,204 |
| igh Capital Mgmt -Core | 5.22 | 18,442 |
| Total Progress Fixed Emerging Managers | 26.24 | 92,555 |
| ctive TIPS Managers ackrock | 07.75 | 10.550 |
| тсо | 87.25 | 48,729 |
| | 87.32 | 44,657 |
| Total Active TIPS Managers | 174.57 | 93,386 |
| ssive TIPS Managers | | |
| ite Street | 57.89 | 2,452 |
| Total Passive TIPS Managers | 57.89 | 2,452 |
| pportunisitc Fixed Income Strategies stressed | | |
| ve Euro Special Situations Fd | 0.46 | |
| e Special Situations Fd V | 0.13 | |
| e Special Situations Fd VI | 16.95 | 170,076 |
| rchlight Investors | 12.11 | 188,804 |
| gelo Gordon Ptnrs LP | 24.72 | 119,911 |
| ollo Prtnrshp LP | 19.74 | 75,387 |
| rtress Ptnrs LP | 8.52 | 94,696 |
| ldentree OD MTA | 27.90 | 189,483 |
| rathon OD MTA | 36.25 | 220,626 |
| k Hill Ptnrs LP | 18.13 | 50,940 |
| ktree Opp Fd IX LP | 2.96 | 9,551 |
| Total Opport. Fixed Inc. Strategies Dist. | 167.87 | 1,119,474 |
| hanced Yield | | |
| nn | 112.70 | 452,934 |
| omis Sayles | 108.82 | 399,888 |
| Rowe MTA | 175.81 | 627,635 |
| Total Enhanced Yield | 397.33 | 1,480,457 |
| nk Loans | | _, , , |
| bson BL MTA | 67.96 | 186,749 |
| ggenheim BL MTA | 67.65 | 276,092 |
| Total Bank Loans | 135.61 | 462,841 |
| nvertible Bonds | | Trujuri |
| lvent | 47.42 | 230,607 |
| rd Abbett | | 71,191 |
| | | , 2,272 |

Additional Supplementary Information Schedule of Investment Expenses

For Fiscal year ended June 30,2013

| | Average assets under management (\$MMS) | Total Fees |
|--|--|---------------|
| Internal Management | | |
| Access RBC | 8.16 | 77.420 |
| AFL-CIO Housing Inv Trust | 39.77 | 22,438 |
| CFSB-PPAR | 0.39 | 154,337 |
| CCD-PPAR | 0.97 | • |
| LHF-PPAR | 0.52 | - |
| NCBCI-PPAR | 0.25 | • |
| GNMA | 0.01 | - |
| CPC-Term Loan | 1.97 | - |
| Total Internal Management | 52.04 | 176,775 |
| Consultants | 92.01 | 170,773 |
| Abel Noser | 1 1 | 106,051 |
| Capital Analytics | | 2,025 |
| Courtlandt Partners | | 25,059 |
| Ernst & Young (SR Batliboi & Co) | | |
| Nat'l Instit on Retirement Sec | | 2,881 525 |
| New England Pension Con | | 346,796 |
| Rodriguez Velazquez | | 340,796 48 |
| Stepstone Group | | 511,000 |
| Townsend Group | 1 1 | 57,486 |
| Total Consultats Fees | | 1,051,871 |
| Legal Fees | | 1,031,071 |
| Cox, Castle & Nicholson | | 4,524 |
| Davis Polk & Wardwell | | 1,285 |
| Foster Pepper | | 3,773 |
| Kirkland & Ellis | | 1,862 |
| Morgan Lewis & Backius | | 29,418 |
| Pillsbury Winthrop Shaw Pittman | ! | 18,164 |
| Nixon Peabody | | 14,120 |
| Reinhart Boerner VanDeuren | | 4,845 |
| Schute Roth & Zabel | | 1,580 |
| Weil Gotshal & Manges | 1 1 | 651 |
| Total Legal Fees | | 80,222 |
| Investment Expenses Mutual funds-Fixed | i i | 19,255 |
| Investment Expenses Real Estate | | 939,600 |
| Misc. Expenses International Equity | | 360,770 |
| Misc. Expenses Bonds | | 116,924 |
| Misc. Expenses Hedge Fund | | 5,442 |
| Operating Enpense Private equity | | 3,016,605 |
| Misce. Charges Private Equities | | 105,118 |
| Misc. charges Bony | | 320,535 |
| Total Other Misc. expenses paid-BNY | | 4,884,249 |
| Total Investment Expenses F/Y 2013 | 9,053.69 | 38,481,716 |

New York City Fire Pension Fund

Comprehensive Annual Financial Report

A Pension Trust Fund of the City of New York



Investment Section

Part III

Fiscal Year Ended June 30, 2013

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]

INVESTMENT REPORT

This report is prepared by management on the basis of information provided by the investment managers of the New York City Fire Pension Fund and the Comptroller of the City of New York. The Comptroller administers the Funds' investment portfolio subject to the direction and control of the Board of Trustees. The Board of Trustees is responsible for ensuring that assets of the Plan are managed efficiently and prudently, in full compliance with the Administrative code of the City of New York (ACNY) and the State Retirement and Social Security Laws, for the benefit of the Fund's membership.

Investment Policy

The Fund's primary purpose is to provide retirement benefits for members and their beneficiaries. These benefits are financed through the accumulation of employer and member contributions and investment earnings. The Board of Trustees therefore sets investment objectives to assure adequate accumulation of reserves and to protect the long term value of the assets. The Board's overall philosophy on strategic factors, i.e. risk tolerance, returns, diversification and liquidity requirements determines the objectives of the investment policy adopted. Listed below is a brief outline of key objectives and philosophy:

- To assure that members and beneficiaries receive benefits now and in the future, the level of investment risk in the portfolio will be prudent and not exceed levels that may jeopardize objectives.
- To enhance portfolio returns moderate risk levels are assumed, since over the long term there is a relationship between the level of risk taken and the rate of return realized.
- Diversification through investing in a broad array of investments reduces portfolio risk. This is achieved by allocating funds among many asset categories, industries and geographic locations.
- Liquidity requirements are maintained through the structuring of cash flows from contributions, investment income and short term investments; this assures timely payment of benefits.

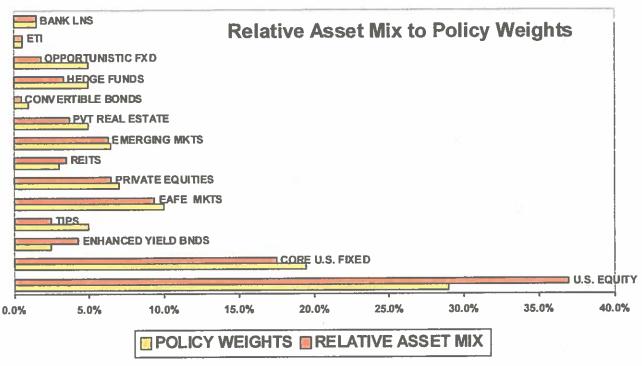
The overall policy adopted is therefore one that minimizes credit and market risks while maintaining a competitive yield on the investment portfolio. The Fund utilizes several investment managers to manage the long term debt and equity portfolios. In addition, the Fund employs an independent investment consultant as an investment advisor. Fund managers are periodically reviewed for ongoing performance and adherence to investment guidelines.

Investment Criteria and Asset Allocation

The Board's investment policy is implemented using a strategic allocation of assets that meet the objectives of the Fund, while working within the confines of the legislative guidelines. The guidelines dictate that Fixed income, equity and other investments may be made as permitted by The New York State Retirement and Social Security Laws (RSSL) §§ 176-178(a) and State Banking Law § 235, the New York City Administrative Code, and the Legal Investments for New York Savings Banks list as published by The New York State Banking Department, subject to Note 3(b).

Additionally, up to 25% of total pension fund assets may be made in instruments not specifically covered by RSSL. The largest share of the portfolio is invested in equities, since equity investments provide superior returns over the long term, despite historical volatility.

The Fund's asset allocation policy is constructed to meet both short-term funding requirements and long-term pension obligations. Investments are therefore made in a broad array of financial instruments including domestic stocks, bonds and international securities through a collective fund investment vehicle. The percentages assigned each category of assets held in the Fund are determined based on the results of a study, which indicates the expected rates of return and levels of risk for various asset allocations. These allocations are reviewed periodically to address fluctuating market events and new investment opportunities.



The current policy mix implemented is comprised of items in the following major categories: U.S equity, Core U.S. fixed income, Enhanced yield bonds, Treasury inflation protected securities (TIPS), International equity(EAFE Markets), Private equity, Real estate investments trusts (REITS), Emerging markets, Private Real Estate investments, Convertible Bonds, Hedge Funds, Opportunistic Fixed, Economically Targeted Investments(ETI) and Bank Loans. The chart above shows a comparison of relative asset mix to policy weights as at June 30, 2013.

Although the Fund's assets are periodically re-balanced to keep in line with long term asset allocation objectives, actual allocation may vary from policy weights as market values shift and investments are added or terminated. As indicated in the chart, the Fund exceeded targeted allocations of U.S. equity, Enhanced Yield bonds and Real Estate Investments Trusts by 8.0, 1.8 and .5 percentage points respectively. While Core U.S. Fixed, TIPS, EAFE Markets, Private Equity, Emerging Markets, Private Equity Real Estate, Convertible bonds, Hedge Funds and Opportunistic fixed investments fell below the current targeted allocations by approximately 2.0, 2.5, .6, .5, .2, 1.3, .5,1.7 and 3.2 percentage points respectively. Investments in Bank loans and ETI closely matched targeted allocations. Actual asset allocation in effect on 6/30/2013 is presented in the chart titled "Asset Allocation" (Exhibit 1). Changes in actual asset allocation over a period of ten years covering June 2004 through June 2013 are presented in an area graph showing the major categories and amount of assets held at the end of each fiscal period (also Exhibit 1).

Summary of Investment Results for fiscal year 2013

The Fund's investment portfolio posted an overall return of 11.9 % during fiscal year ended June 2013, ranking in the third quartile of the BNY Mellon Public Master Trust Universe. This return far exceeded the actuarial assumed rate of return at 7.0% and was modestly ahead of the 11.8% gain posted by the Fund's policy benchmark for the period. The Fund closed fiscal year 2013 with net position held in trust for pension benefits totaling \$9.1 billion, due to the strong return posted by the portfolio.

The portfolio's gain for fiscal year ended June 30, 2013 was boosted by strong performances in the equity markets during the period. U.S. equities, the largest segment in the portfolio, were among the top performers, posting overall gains of 23.2%. This result was well above the Russell 3000 index, a broad measure of the U.S stock market, which posted gains of 21.5%. For the quarter ended June 30, 2013, returns posted across asset classes were mostly negative except for U.S equity securities, which posted 2.9% overall gains.

International equities as a group were also among the better performers, all categories posted gains for the fiscal period. Investments from the developed international markets in the portfolio grew by 15.8%, underperforming the benchmark, the MSCI Europe, Australia and Far East (EAFE) Index which grew by 18.6%. While active emerging markets equities, among the lowest performers in the group grew by 4.1%. This result was well ahead of its benchmark, the MSCI Emerging Markets Free index which grew by 3.2% over the same period. However, for the quarter ended June 30, 2013, the group declined by 4.1%.

Overall, the domestic fixed income composite portfolio was among the worst performers of the asset classes, closing fiscal year 2013 with modest gains of 2.3%. The largest segment within this category, the structured or core investment grade fixed income group was among the lowest performers, posting gains of .3%. This return was just ahead of the I% decline posted by its benchmark the New York City core plus 5 index. Treasury Inflation Protected securities, the worst performer in this category declined by 4.6%, slightly ahead of its benchmark the Barclays Capital US TIPS index which declined by 4.8% for the period. The Opportunistic Fixed Income group were the best performers in this category, posting gains of 15.1%, outperforming its benchmark the JP Morgan Global High Yield plus 3%, which posted gains of 12.5%.

For the five-year period ended June 30, 2013, the Fund's annualized returns stood at 5.4 %, compared to the portfolio policy benchmark return at 6.7%.

Schedule 1A presents our Consolidated Performance Report, displaying the percentage of portfolio market value and returns for each major investment asset class along with the returns for corresponding benchmarks through June 30, 2013.

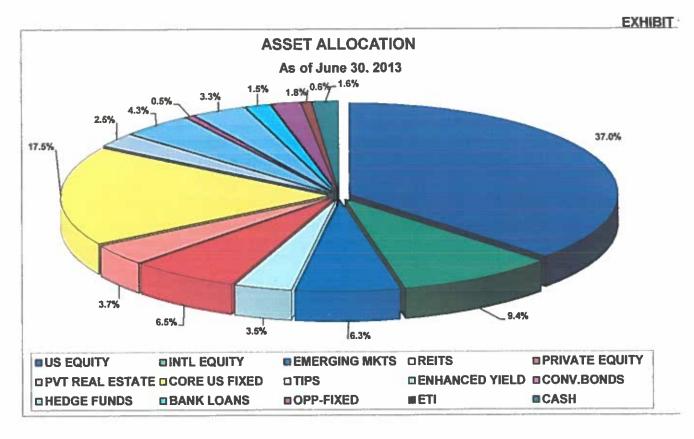
Total investments including Collateral from securities lending rose from \$9,122.4 million to \$10,449.4 million, during fiscal year 2013. This change is depicted in **Exhibit 2**, a chart showing changes in total investment at market value over the ten fiscal periods between 2004 and 2013. Listings of the Fund's largest bonds, stocks and Alternative Investment holdings are presented in **Schedule 2A**, **3A** & **4A** respectively.

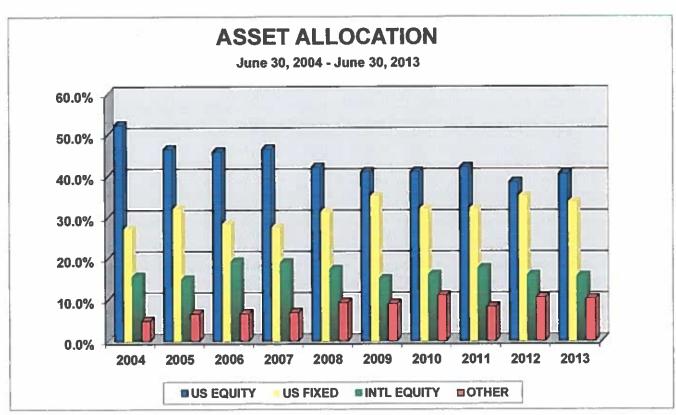
Portfolio assets invested during fiscal year 2013 returned net gains of \$961.2 million. The overall gain was due mainly to the net appreciation in fair value of investments. Exhibit 3 shows a summary of the changes in investment income over the ten-year period 2004 through 2013.

Fees and Brokers' commissions are calculated based on total assets under management for the period. Summaries of Brokers' commissions for investments traded are presented in schedule 5A.

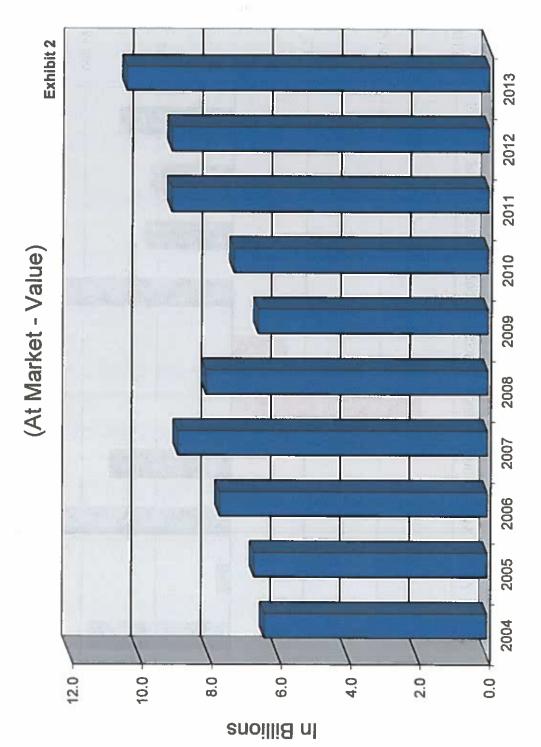
The Summary of investments presented in Schedule 6A shows the overall market values of each major investment asset class in the portfolio, including short-term holdings and collateral from securities lending. The schedule also shows the percentage value of each category in relation to total investments for fiscal year 2013.

¹ Calculations on the rate of return for investments were prepared using a time-weighted rate of return, based on the market rate of return consistent with Global Investment Performance Standards (GIPS).

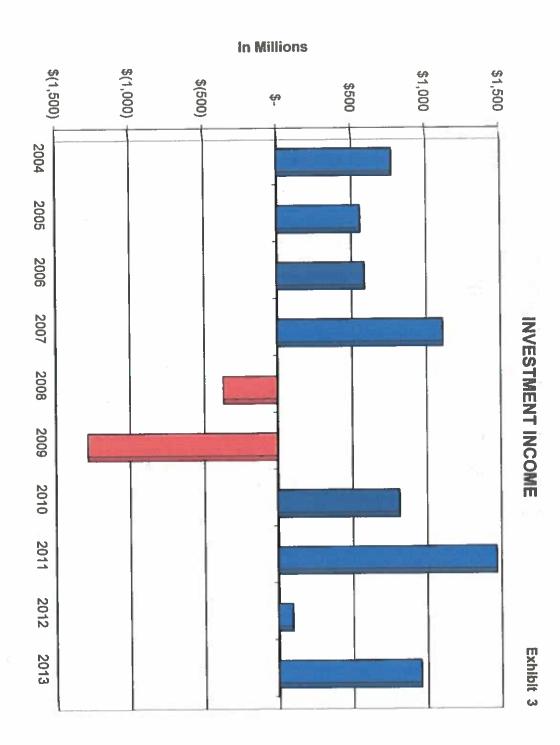




TOTAL INVESTMENTS



FISCAL YEARS



Fiscal Years

Schedule of Portfolio Returns* June 30, 2013

| oune 50, 2015 | | | | | | | | |
|------------------|------------|--|---------------------------|-------------------------|--------------------------|---------------------------|---------------------------|----------------------------|
| Assets (\$MM) | % Total | Asset Class | 3 Mos Apr-13 Jun-13 | YTD Jan-13 Jun-13 | 1 YR Jul-12 Jun-13 | 3 YRS Jul-10 Jun-13 | 5 YRS Jul-08 Jun-13 | 10 YRS Jul-03 Jun-13 |
| 3,405.97 | 37.03 | U.S. Equities | 2.85 | 14.84 | 23.16 | 18.47 | 7.16 | 7.73 |
| 131.11 | 1.42 | | 1.31 | 13.54 | 22.79 | 16.94 | 6.60 | 7.13 |
| | | Russell 2000 | 3.08 | 15.86 | 24.21 | 18.67 | 8.77 | 9.53 |
| 65.95 | 0.72 | Total Small/Mid Cap | 0.54 | 15.75 | 29.19 | n/a | n/a | n/a |
| | | Russell 2500 Value | 1.54 | 15.10 | 26.88 | n/a | п/а | n/a |
| 511.90 | 5.57 | Total Mid Cap | 1.86 | 15.64 | 27.05 | 19.09 | 7.91 | 8.67 |
| | | Russell Mid Cap | 2.21 | 15.45 | 25.41 | 19.53 | 8.28 | 10.65 |
| 241.36 | 2,62 | | 7.86 | 20.03 | 27.25 | 18.04 | 6.69 | 7.41 |
| | | Russell 1000 | 2.65 | 13.91 | 21.24 | 18.63 | 7.12 | 7.67 |
| 133.44 | 1.45 | Total Emerging Managers | 3.55 | 16.29 | 25.90 | 18.83 | 6.99 | 8.32 |
| | | Russell 2000 | 3.08 | 15.86 | 24.21 | 18.67 | 8.77 | 9.53 |
| 2,322.21 | 25.25 | Total Russell 3000 | 2.69 | 14.05 | 21.47 | 18.62 | 7.34 | 7.87 |
| 1,443.46 | 15.69 | Russeli 3000 Total International Equity | 2.69 | 14.06 | 21.46 | 18.63 | 7.25 | 7.81 |
| 841.94 | 9.15 | Total Developed Markets | -4.13 -1.64 | -1.97 | 10.93 | 7.44 | -0.95 | 8.95 |
| | 0 | MSCI EAFE(Net dividend) Benchmark | -0.98 | 2.20 4.10 | 15.84 18.62 | 9.76 | -0.02 | 8.06 |
| | | International Equity Median Benchmark | -0.79 | 3.70 | 18.04 | 10.04 10.72 | -0.63 0.85 | 7.67 9.13 |
| 21.30 | 0.23 | Non US Activist | 2.54 | 6.74 | 27.47 | 11.83 | | |
| | | MSCI Europe SMID Cap | 1.10 | 5.49 | 25.26 | 12.96 | n/a n/a | n/a n/a |
| 413,21 | 4.49 | Total Active Emerging Markets | -7.77 | -7.22 | 4.13 | 3.86 | -0.91 | n/a |
| | | MSCI Emerging Markets Free-Benchmark | -7.95 | -9.40 | 3.23 | 3.72 | -0.11 | n/a |
| 167.01 | 1.82 | Total Passive Emerging Markets | -7.84 | -9.31 | 3.21 | n/a | n/a | п/а |
| | | MSCI Emerging Markets Free-Benchmark | -7.95 | -9.40 | 3.23 | n/a | n/a | n/a |
| 302.99 | 3.28 | Total Hedge Funds | -1.66 | 1.73 | 8.58 | n/a | n/a | n/a |
| | | 1 Year Treasury Bill Yield + 4% | 1.03 | 2.09 | 4.32 | n/a | n/a | n/a |
| 324.80 | 3.53 | Total Real Estate Equity Sec.(REITS) | -1.24 | 3.39 | 8.71 | 18.09 | 7.12 | n/a |
| 505.00 | | DJ US Select Real Estate Securities Index | -1.28 | 5.68 | 7.67 | 17.97 | 6.82 | n/a |
| 595.08 | 6.45 | Private Equity | n/a | n/a | n/a | n/a | n/a | n/a |
| 340.95 | 3.70 | Private Real Estate | n/a | n/a | n/a | n/a | n/a | n/a |
| 2,776.72 | 30.17 | Total Fixed Income | -2.29 | -1.36 | 2.34 | 5.58 | 6.61 | 5.69 |
| 1,572.98 | 17.10 | Total Structured Program | -2.85 | -2.79 | 0.32 | 4.85 | 6.54 | 5.39 |
| 207.55 | | NYC Core Plus Five Index | -2.91 | -3.21 | -0.95 | 4.10 | 6.01 | 5.09 |
| 397.33 | 4.32 | Enhanced Yield | -1.68 | 1.03 | 8.30 | 9.99 | 9.55 | 8.13 |
| 40.40 | 0.44 | Citigroup BB & B | -1.53 | 0.34 | 7.61 | 10.17 | 8.09 | 7.28 |
| 10.46 | 0.11 | Total Core plus Fixed income | -2.83 | -2.38 | 0.57 | 4.68 | n/a | n/a |
| 26.22 | 0.00 | Barclays Capital Aggregate bond index | -2.32 | -2.44 | -0.69 | 3.51 | n/a | n/a |
| 26.23 | 0.29 | Total Progress Fixed income | -2.42 | -2.29 | n/a | n/a | n/a | n/a |
| 000.40 | | Barclays Capital Aggregate | -2.32 | -2.44 | -0.69 | n/a | n/a | n/a |
| 232.46 | 2.53 | Total Tips Managers | -7.03 | -7.28 | -4.56 | 4.65 | 4.59 | n/a |
| | | Barclays Capital US Tips index | -7.05 | -7.39 | -4.78 | 4.63 | 4.42 | n/a |
| 135.61 | 1.47 | Total Bank Loans | 0.39 | 2.75 | n/a | п/а | n/a | п/а |
| | | Credit Suisse Leveraged Loan index | 0.43 | 2.81 | п/a | n/a | n/a | n/a |
| 47.42 | 0.52 | Total Convertible Bonds | 0.87 | 6.63 | 13.39 | 10.18 | 6.77 | n/a |
| | | BofA ML All Conv. Ex mandatory index | 1.76 | 9.78 | 17.48 | 12.35 | 7.55 | n/a |
| 167.87 | 1.80 | Total Opportunistic Fixed | 4.48 | 9.53 | 15.10 | 9.91 | 12.54 | n/a |
| F0 55 | | NYC 10% Annual return | 2.41 | 4.88 | 10.00 | 10.00 | 10.00 | n/a |
| 52.05 | | Total Targeted- ETI (with cash) | -2.13 | -2.12 | -0.48 | 3.43 | 5.07 | 4.45 |
| 404.04 | | Barclays Capital Aggregate | -2.32 | -2.44 | -0.69 | 3.51 | 5.19 | 4.52 |
| 134.31 | | State Street Short Term | 0.06 | 0.12 | 0.29 | 0.34 | 0.93 | 2.22 |
| 13.32 | | Securities Lending | n/a | n/a | п/а | n/a | n/a | n/a |
| 0.69 | | Bank of New York -CD | n/a | n/a | n/a | п/а | n/a | n/a |
| 9,203.98 | 100.00 | Total Portfolio | -0.07 | 5.00 | 11.90 | 11.68 | 5.36 | 7.62 |
| | | Policy Benchmark | 0.07 | 4.97 | 11.77 | 13.17 | 6.73 | 8.08 |

^{*}Calculations on the rate of return for investments were prepared using a time weighted rate of return, based on the market rate of return-consistent with Global Investment Performance Standards (GIPS).

List of 50 Largest Bond Holdings as of June 30, 2013

| Cusip | | Interest | Maturity | Par/Face | Market |
|-----------|---|--------------|------------------------|------------------------|--------------------------|
| number | Security description | rate | date | value | value |
| S86826400 | MORGAN STANLEY ONE LINE | | | 100 | 161,534,018 |
| S99993000 | NYC CUSTOM STIF | - | | 136,710,608 | 136,720,982 |
| S86253430 | TIPS POSITION HELD AT PIMCO | | | 1 | 87,324,362 |
| S86253410 | TIPS POSITION HELD AT BLACKROCK | | | 1 | 87,253,125 |
| 01F032674 | FNMA TBA 30YR SFM 03.50% JUL | 3.5% | 01-Jul-42 | 71,320,000 | 72,429,799 |
| S86882070 | BL MTA NIB BABSON | | | 100 | 67,957,527 |
| S86881940 | BL MTA NIB GUGGENHEIM | - | | 100 | 67,650,678 |
| S86924920 | AFL-CIO HOUSING INV TRUST | - | | 35,431 | 39,773,058 |
| S86881270 | PRIVEST | _ | | 1,570 | 39,570,159 |
| 01F022477 | FNMA TBA 15YRS SFM 02.50% JULY | 2.5% | 01-Jul-27 | 29,445,000 | 29,622,312 |
| 912796AZ2 | UNITED STATES TREAS BILLS | | 05-Sep-13 | 24,000,000 | 23,999,112 |
| 912796AX7 | U S TREASURY BILLS | _ | 15-Aug-13 | 23,000,000 | 22,999,310 |
| 01F030678 | FNMA TBA 30YRS SFM 03.0% JULY | 3.0% | 01-Jul-42 | 16,990,000 | 16,601,044 |
| 01F030686 | FNMA TBA 30YRS SFM 03.0% AUGUST | 3.0% | 01-Aug-42 | 16,000,000 | 15,590,000 |
| 21H032670 | GNMA II TBA JUMBO 3.5% 30YR JUL | 3.5% | 01-Jul-42 | 14,995,000 | 15,398,623 |
| 36179MK82 | GOV'T NATL MTG ASSN II POOL# MA0319 | 4.0% | 20-Aug-42 | 17,535,500 | 15,337,612 |
| 36179NDP0 | GOV'T NATL MTG ASSN II POOL# MA1010 | 2.5% | 20-Арг-43 | 15,020,087 | 14,038,780 |
| 313385LG9 | FEDERAL HOME LOAN BANK DISCOUNT | 2.070 | 04-Sep-13 | 13,100,000 | 13,099,083 |
| 912828LJ7 | UNITED STATES TREAS NTS | 3.6% | 15-Aug-19 | 10,860,000 | 12,244,094 |
| 912810QZ4 | UNITED STATES TREAS BDS | 3.1% | 15-Feb-43 | 12,852,000 | 12,147,425 |
| S86885060 | VANGUARD TOTAL BOND MKT INDEX FUND | 5.176 | 10-1 cn-40 | 1,132,610 | 12,084,953 |
| 21H030674 | GNMA II TBA 30YRS JUMBO 03.0% JULY | 3.0% | 01-Jul-43 | 11,735,000 | 11,611,815 |
| 01F040677 | FNMA TBA 30YRS SFM 04.0% JULY | 4.0% | 01-Jul-43 | 10,600,000 | |
| 912828VE7 | UNITED STATES TREAS NTS | 1.0% | 31-May-18 | 11,120,000 | 11,045,456 |
| 01N040678 | GNMA I TBA SFM 4.00% 30YR JULY | 4.0% | 01-Jul-42 | 10,000,000 | 10,938,242 10,494,083 |
| 912810EL8 | U S TREASURY BONDS | 8.0% | 15-Nov-21 | 7,100,000 | 10,454,063 |
| 36295CHE4 | GOV'T NAT'L MTGE ASSN POOL # 666329 | 2.5% | 15-Nov-21 15-Mar-43 | 11,066,176 | 10,308,458 |
| 912828SW1 | UNITED STATES TREAS NTS | 0.3% | 31-May-14 | 10,000,000 | 10,308,458 |
| 36297DE37 | GOV'T NAT'L MTGE ASSN POOL # 708554 | 5.0% | 15-Apr-39 | 30,160,438 | |
| 912810FE3 | U S TREASURY BOND | 5.5% | 15-Apr-39 15-Aug-28 | | 9,601,008 |
| 313589WS8 | FEDERAL NATL MTGE ASSN DISCOUNT NT | 5.578 | 12-May-14 | 7,220,000 9,000,000 | 9,544,212 |
| 01N032675 | GNMA I TBA SFM 3.50% 30YR JULY | 3.5% | 01-Jul-42 | | 8,989,020 |
| 02R032679 | FHLMC TBA 30YRS GOLD SFM 03.50% JULY | 3.5% | 01-Jul-42 | 8,540,000 8,585,000 | 8,766,705 |
| 01F030488 | FNMA TBA 15YR SFM 03.00% AUG | 3.0% | 01-Jul-42 01-Aug-26 | 8,400,000 | 8,700,984 |
| 02R030673 | FHLMC TBA 30YRS GOLD SFM 03.0% JULY | 3.0% | 01-Jul-42 | | 8,625,496 |
| 36179MX21 | GOV'T NATL MTG ASSN II POOL# MA0697 | 2.5% | 20-Jan-43 | 7,915,000 8,256,090 | 7,714,652 |
| 912828KQ2 | UNITED STATES TREAS NTS | 3.1% | 15-May-19 | 6,985,000 | 7,642,188 |
| 912828UN8 | UNITED STATES TREAS NTS | 2.0% | 15-May-19 | 7,800,000 | 7,608,210 |
| 3137EADB2 | FEDERAL HOME LN MTG CORP | | | | 7,565,484 |
| 36179NF52 | GOV'T NATL MTG ASSN II POOL# MA1088 | 2.4% 2.5% | 13-Jan-22 | 7,330,000 | 7,204,388 |
| 912828LY4 | UNITED STATES TREAS NTS | 3.4% | 20-Jun-43 | 7,578,075 | 7,097,196 |
| 01N042674 | GNMA I TBA 30YRS SFM 04.50% JULY | | 15-Nov-19 | 6,180,000 | 6,826,570 |
| S86842280 | PIM FI MTA NIB NC | 4.5% | 01-Jul-43 | 6,200,000 | 6,584,285 |
| 36178WF61 | GOV'T NAT'L MTGE ASSN POOL # AB9189 | 2.50/ | 45 Nov. 40 | 1 | 6,576,771 |
| S86842350 | PIM FI MTA NIB AC | 2.5% | 15-Nov-42 | 7,147,735 | 6,561,468 |
| 01F052680 | FNMA TBA 30YR SFM 05,50% AUG | - | 04 4 40 | 1 | 6,516,728 |
| 3128M73B0 | | 5.5% | 01-Aug-42 | 6,000,000 | 6,512,813 |
| 02R040680 | FED'L HOME LN MTGE CORP GRP # G05894 FHLMC TBA 30YR GOLD SFM 4.00% | 4.5% | 01-Apr-40 | 15,770,808 | 6,334,533 |
| 912828NT3 | UNITED STATES TREAS NTS | 4.0% | 15-Aug-39 | 6,000,000 | 6,226,200 |
| S86837570 | PIM FI MTA NIB | 2.6% | 15-Aug-20 | 5,100,000 | 5,379,796 |
| 912810EE4 | U S TREASURY BONDS | Q 59/ | 45 Ech 20 | 2 646 000 | 5,317,829 |
| 31201UEE4 | U 3 IREAGURT DUNDO | 8.5% | 15-Feb-20 | 3,645,000 | 5,302,249 |

List of 50 Largest Stock Holdings as of June 30, 2013

Schedule 3A

| Cusip | | Number | |
|-----------|--------------------------------|------------|---------------|
| number | Security description | of shares | Market value |
| S86749770 | GRP TR EAFE SSGA | 1,000 | 74,518,053.81 |
| 30231G102 | EXXON MOBIL CORP | 575,424 | 51,989,558.40 |
| 037833100 | APPLE INC COM | 125,362 | 49,653,380.96 |
| 594918104 | MICROSOFT CORP COM | 1,115,012 | 38,501,364.36 |
| 478160104 | JOHNSON & JOHNSON COM | 379,185 | 32,556,824.10 |
| 38259P508 | GOOGLE INC CL A | 35,843 | 31,555,101.91 |
| 369604103 | GENERAL ELECTRIC CO | 1,338,408 | 31,301,427.17 |
| 166764100 | CHEVRON CORPORATION | 261,400 | 30,934,076.00 |
| 084670702 | BERKSHIRE HATHAWAY INC DEL | 246,581 | 27,597,345.52 |
| 742718109 | PROCTER & GAMBLE CO COM | 354,747 | 27,311,971.53 |
| 46625H100 | JPMORGAN CHASE & CO | 517,121 | 27,298,817.59 |
| S99993000 | NYC CUSTOM STIF | 26,739,240 | 26,742,201.30 |
| 717081103 | PFIZER INC COM | 921,554 | 25,812,727.54 |
| 949746101 | WELLS FARGO & CO NEW | 624,920 | 25,790,448.40 |
| 459200101 | INTL BUSINESS MACHINES CORP | 134,694 | 25,741,370.34 |
| 00206R102 | AT&T INC | 696,312 | 24,649,444.80 |
| 172967424 | CITIGROUP INC | 419,548 | 20,125,717.56 |
| 92343V104 | VERIZON COMMUNICATIONS INC | 399,693 | |
| 191216100 | COCA-COLA CO | 495,079 | 20,120,545.62 |
| 58933Y105 | MERCK & CO INC NEW | 412,318 | 19,999,799.05 |
| 060505104 | BANK OF AMER CORP | | 19,329,499.23 |
| S86968860 | COINVESTMENTSLLC | 1,487,182 | 19,125,160.52 |
| 718172109 | PHILIP MORRIS INTL INC | 2 | 18,957,017.01 |
| 17275R102 | CISCO SYS INC | 211,724 | 18,529,450.93 |
| S86849230 | CASPIAN SELECT CREDIT FUND, LP | 747,748 | 18,177,753.88 |
| 458140100 | INTEL CORPORATION | 1 200 000 | 17,884,046.63 |
| 713448108 | PEPSICO INC COM | 703,375 | 17,035,742.50 |
| 931142103 | WAL MART STORES INC | 200,214 | 16,375,503.06 |
| 254687106 | DISNEY (WALT) COMPANY. | 216,285 | 16,111,069.65 |
| 68389X105 | ORACLE CORPORATION | 233,565 | 14,749,629.75 |
| 437076102 | HOME DEPOT INC USD 0.05 | 478,112 | 14,687,600.64 |
| 20030N101 | COMCAST CORP NEW CL A | 189,061 | 14,646,555.67 |
| 747525103 | QUALCOMM INC | 339,589 | 14,221,987.32 |
| 023135106 | AMAZON COM INC | 223,868 | 13,673,857.44 |
| 580135101 | MC DONALDS CORPORATION COMMON | 47,481 | 13,184,998.89 |
| 674599105 | COMMON | 129,780 | 12,848,220.00 |
| 828806109 | SIMON PPTY GROUP INC NEW | 142,721 | 12,828,210.83 |
| 806857108 | SCHLUMBERGER LIMITED COM | 79,609 | 12,571,853.28 |
| 92826C839 | VISA INC | 173,077 | 12,457,205.95 |
| 913017109 | UNITED TECHNOLOGIES CORP | 67,918 | 12,412,014.50 |
| S86927510 | FUNDIII,LLC | 119,257 | 11,083,745.58 |
| 031162100 | AMGEN INC | 1 | 11,039,582.00 |
| 375558103 | GILEAD SCIENCES INC | 111,588 | 11,009,272.08 |
| S86911560 | GR TR EAFE POS HELD AT LM | 214,930 | 11,006,565.30 |
| 097023105 | BOEING COMPANY | 1 | 10,459,400.03 |
| 126650100 | CVS CAREMARK CORP | 98,258 | 10,065,549.52 |
| 022098103 | | 175,817 | 10,053,216.06 |
| 88579Y101 | ALTRIA GROUP INC 3M CO | 280,303 | 9,933,836.89 |
| 20825C104 | - | 89,898 | 9,830,346.30 |
| · · · | CONOCOPHILLIPS | 158,278 | 9,575,819.00 |
| 110122108 | BRISTOL MYERS SQUIBB CO COM | 212,629 | 9,502,390.01 |
| 907818108 | UNION PACIFIC CORP | 60,410 | 9,362,752.69 |

A Complete listing of the portfolio holdings is available from our office upon request

List of 50 Largest International Investment Holdings as of June 30, 2013

Schedule 4A

| | | | Scriedule 4A |
|-----------|-------------------------------------|--------------------|--------------|
| Curin | | Number | |
| Cusip | Security Description | of shares | Market value |
| number | | 17,642,299 | 17,644,170 |
| X9USDCUST | NYC CUSTOM STIF | 189,343 | 13,597,366 |
| H5820Q150 | NOVARTIS AG CHF 0.5 | 57,309 | 8,949,606 |
| K7314N152 | NOVO NORDISK A/S DKK 1.0 | 129,498 | 8,579,349 |
| H57312466 | NESTLE SA CHF 0.1 | 74,802 | 8,133,167 |
| D0065L101 | ADIDAS AG NPV | 375,041 | 8,118,192 |
| G84228157 | STANDARD CHARTERED PLC USD 0.5 | 19,774 | 7,795,799 |
| H84140112 | SYNGENTA AG CHF 0.1 | 47,243 | 7,753,700 |
| F58149133 | L'OREAL SA EUR 0.2 | 60,975 | 7,517,716 |
| E6282J109 | INDITEX SA EUR 0.15 | 1,732,624 | 7,338,313 |
| Y002A1105 | AIA GROUP LTD | 415,965 | 7,155,289 |
| G76225104 | ROLLS-ROYCE HOLDINGS PLC 20P | 1,105,442 | 7,044,537 |
| E19790109 | BANCO SANTANDER SA EUR 0.5 | 6,476,085 | 6,476,085 |
| FCB432897 | FORWARD USD/JPY | 24,918 | 6,233,331 |
| H69293217 | ROCHE HOLDING AG NPV | 582,584 | 6,161,189 |
| 40428K980 | HSBC HOLDINGS HONGKONG REG | 64,636 | 6,110,018 |
| 056752108 | BAIDU COM INC USD 0.00005 ADR | 602,356,094 | 6,064,997 |
| FCB432903 | FORWARD JPY/USD | 161,710 | 6,032,390 |
| J22302111 | HONDA MOTOR CO LTD NPV | 116,189 | 5,935,113 |
| G1510J102 | BRITISH AMERICAN TOBACCO P GBP 0.25 | 363,701 | 5,930,760 |
| G72899100 | PRUDENTIAL PLC ORD GBP 0.05 | 1,146,517 | 5,928,051 |
| G87621101 | TESCO PLC | 80,744 | 5,926,464 |
| D66992104 | SAP AG NPV | 125,565 | 5,897,733 |
| J53032116 | DENSO CORP NPV | 65,420 | 5,790,758 |
| H25662158 | CIE FINANCIERE RICHEMONT SA CHF 1.0 | 46,204 | 5,698,362 |
| F01764103 | AIR LIQUIDE SA EUR 5.5 | 96,268 | 5,611,954 |
| J75963108 | SOFTBANK CORP NPV | | 5,611,556 |
| G4634U169 | HSBC HOLDINGS PLC USD 0.5 | 530,801 233,157 | 5,597,844 |
| W10020118 | ATLAS COPCO AB NPV RFD | 89,663 | 5,407,587 |
| J92676113 | TOYOTA MOTOR CORP NPV | 445,803 | 5,376,099 |
| G0483X122 | ARM HOLDINGS PLC 0P | 502,902 | 5,252,005 |
| Y14965100 | CHINA MOBILE LTD HKD 0.1 | 158,549 | 5,233,359 |
| G7690A118 | ROYAL DUTCH SHELL PLC-B SHS | 442,482 | 5,225,846 |
| J64264104 | RAKUTEN INC | 103,117 | 5,027,615 |
| F92124100 | TOTAL SA EUR 2.5 | 46,511 | 4,942,329 |
| F31668100 | ESSILOR INTL SA CIE GEN D'OPTIQUE | 141,913 | 4,929,652 |
| G19081101 | CARNIVAL PLC USD 1 | 74,240 | 4,918,411 |
| J72810120 | SHIN-ETSU CHEMICAL CO LTD NPV | 68,596 | 4,836,431 |
| G74079107 | RECKITT BENCKISER GROUP PLC 10P | 23,729 | 4,759,154 |
| J75734103 | SMC CORP/JAPAN NPV | 23,729 14,115 | 4,498,116 |
| J32491102 | KEYENCE CORP | 20,587 | 4,179,056 |
| F7269R105 | PPR EUR 4.0 | | 4,036,614 |
| G87572148 | TENCENT HOLDINGS LTD HKD 0.0001 | 102,920 | 3,993,652 |
| J35759125 | KOMATSU LTD NPV | 172,983 | 3,973,648 |
| Q09504137 | AUSTRALIA AND NZ BANKING GROUP | 148,081 | 3,953,443 |
| G1245Z108 | BG GROUP PLC 10P | 233,014 | 3,950,539 |
| Y1660Q104 | CLP HOLDINGS LTD HKD 5.0 | 488,299 | 3,945,569 |
| 796050888 | SAMSUNG ELECTERS | 6,768 | 3,861,774 |
| D12096109 | BAYERISCHE MOTOREN WERKE AG EUR 1.0 | 43,750 | 3,818,266 |
| J44497105 | MITSUBISHI UFJ FINANCIAL GROUP NPV | 619,657 | 3,775,058 |
| FCB430671 | FORWARD USD/EUR | 3,775,058 | 3,759,734 |
| N0026A102 | ASML HOLDING NV EUR 0.09 | 47,709 | 3,135,134 |
| | | | |

A Complete listing of the portfolio holdings is available from our office upon request

| Brokerage Firm | Investment Type | Number of shares traded | Commissions paid | Average cost per share |
|--------------------------------|--------------------|-------------------------|---------------------|------------------------|
| AQUA SECURITIES L.P. | Equity | 7,100 | | |
| AVIAN SECURITIES INC | Equity | 200 | 142 | 0.02 |
| AVONDALE PARTNERS, LLC | Equity | 13,300 | 4 | 0.02 |
| B.RILEY AND CO,LLC | Equity | • | 512 | 0.04 |
| BAIRD ROBERT W & CO INC | Equity | 19,910 | 871 | 0.04 |
| BARCLAYS CAPITAL INC/LE | Equity | 273,099 | 10,513 | 0.04 |
| BARCLAYS CAPITAL LE | Equity | 40,542 | 1,239 | 0.03 |
| BAYPOINT TRADING LLC | Equity | 859,146 | 18,956 | 0.02 |
| BB&T SECURITIES LLC | Equity | 257,115 | 11,475 | 0.04 |
| BLAIR WILLIAM & COMPANY LLC | Equity | 17,869 | 855 | 0.05 |
| BLAYLOCK & CO INC | Equity | 404,468 | 13,507 | 0.03 |
| BLOOMBERG TRADEBOOK | • • | 7,705 | 231 | 0.03 |
| BMO NESBITT BURNS CORP | Equity | 40,902 | 626 | 0.02 |
| ABEL NOSER CORPORATION | Equity | 21,715 | 1,066 | 0.05 |
| ACADEMY SECURITIES INC | Equity | 52,147 | 423 | 0.01 |
| ADJUSTMENT REORGANIZATION | Equity | 4,640 | 179 | 0.04 |
| AMERICAN PORTFOLIOS FINANCIAL | Equity | 4,171 | 0 | 0.00 |
| BNP PARIBAS SECURITIES CORP | Equity | 418 | 17 | 0.04 |
| BNY BROKERAGE INC | Equity | 7,840 | 314 | 0.04 |
| BNY/MELLON TR OF NEW ENGLAND | Equity | 58,942 | 1,854 | 0.03 |
| BOE SECS INC/BROADCORT CAP | Equity | 8,800 | 0 | 0.00 |
| | Equity | 744 | 27 | 0.04 |
| BREAN MURRAY CARRET& CO. LLC | Equity | 9,520 | 469 | 0.05 |
| BROWN BROTHERS HARRIMAN & CO. | Equity | 1,600 | 0 | 0.00 |
| BUCKINGHAM RESEARCH GROUP INC | Equity | 68,260 | 3,139 | 0.05 |
| BURKE & QUICK PARTNERS LLC | Equity | 820 | 33 | 0.04 |
| CABRERA CAPITAL MARKETS | Equity | 963,646 | 21,094 | 0.02 |
| CANACCORD GENUITY INC | Equity | 6,935 | 306 | 0.04 |
| CANACCORO ADAMS INC | Equity | 500 | 25 | 0.05 |
| CANTOR FITZGERALD & CO | Equity | 64,969 | 2,613 | 0.04 |
| CANTOR FITZGERALD/CASTLEOAK | Equity | 17,862 | 536 | 0.03 |
| CANTOR FITZGERALD/CLEARING SVC | Equity | 86,200 | 1,161 | 0.01 |
| CAP INSTL SVCS INC-EQUITIES | Equity | 41,200 | 809 | 0.02 |
| CARIS AND COMPANY INC. | Equity | 10,700 | 535 | 11 |
| CASH ELECTION | Equity | 3,335 | 0 | 0.05 |
| CASH MERGER | Equity | 453,045 | 0 | 0.00 |
| CHEEVERS & CO INC | Equity | 811,597 | | 0.00 |
| CITATION GROUP/BCC CLRG | Equity | 293,687 | 23,378 | 0.03 |
| CITIGROUP GLOBAL MARKETS INC | Equity | 1,529,618 | 10,975 | 0.04 |
| CJS SECURITIES INC. | Equity | 23,000 | 13,497 | 0.01 |
| DAVIDSON D.A & CO INC NSCC | Equity | 75,071 | 826 | 0.04 |
| DEUTSCHE BANC SECURITIES INC. | Equity | | 3,442 | 0.05 |
| DIRECT ACCESS PARTNERS LLC | Equity | 1,287,690 | 21,481 | 0.02 |
| DIVIDEND REINVESTMENT | Equity | 15,034 | 752 | 0.05 |
| DOUGHERTY COMPANY | Equity | 8,788 | 0 | 0.00 |
| DOWLING & PARTNERS | Equity | 135,935 | 5,820 | 0.04 |
| DREXEL HAMILTON LLC | Equity | 36,250 | 1,812 | 0.05 |
| EVERCORE GROUP LLC | | 1,480 | 52 | 0.04 |
| EXERCISING WARRANTS | Equity | 2,480 | 97 | 0.04 |
| FIDELITY CAPITAL MARKETS | Equity | 2,219 | 0 | 0.00 |
| FIG PARTNERS LLC | Equity | 66,200 | 1,193 | 0.02 |
| | Equity | 1,660 | 70 | 0.04 |
| FIRST ANALYSIS SECURITIES CORP | Equity | 17,859 | 893 | 0.05 |
| FRED, ALBERT & COLLC | Equity | 8,675 | 298 | 0.03 |
| FRIEDMAN, BILLINGS & RAMSEY | Equity 95 | 50,100 | 2,056 | 0.04 |
| | _ | | · | 07 |

Schedule of Broker's Commissions

For Fiscal Year Ended June 30, 2013

| | Investment | Number of | Commissions | Average cost |
|---|------------------|------------------|----------------|--------------|
| Brokerage Firm | Туре | shares traded | paid | per share |
| GLOBAL HUNTER SECURITIES | Equity | 46,128 | 2,149 | 0.05 |
| GLOBAL HUNTER SECURITIES, LLC | Equity | 3,400 | 153 | 0.05 |
| GOLDMAN SACHS AND CO | Equity | 3,274,468 | 15,226 | 0.00 |
| GOLDMAN SACHS EXECUTION & CL | Equity | 101,510 | 843 | 0.01 |
| GREEN STREET ADVISORS | Equity | 157,511 | 5,756 | 0.04 |
| GREENTREE BROKERAGE SERVICES | Equity | 2,499 | 75 | 0.03 |
| CONVERGEX EXECUTION SOLUTIONS | Equity | 801,222 | 30,146 | 0.04 |
| COWEN & CO LLC | Equity | 86,650 | 2,848 | 0.03 |
| CRAIG - HALLUM | Equity | 54,089 | 1,633 | 0.03 |
| CREDIT AGRICOLE SEC USA | Equity | 42,010 | 1,643 | 0.04 |
| CREDIT RESEARCH TRADING L.L.C | Equity | 24,330 | 714 | 0.03 |
| CREDIT SUISSE SECS (USA) LLC | Equity | 1,097,734 | 8,085 | 0.01 |
| CROWELL WEEDON & CO | Equity | 2,790 | 112 | 0.04 |
| CUTTONE & CO. INC | Equity | 3,700 | 44 | 0.01 |
| DAHLMAN ROSE & COMPANY, LLC | Equity | 27,660 | 1,349 | 0.05 |
| DAVENPORT AND COMPANY LLC | Equity | 23,066 | 1,001 | 0.04 |
| GUGGENHEIM CAPITAL MARKETS LLC | Equity | 68,670 | 2,579 | 0.04 |
| GUZMAN & COMPANY | Equity | 148,000 | 2,960 | 0.02 |
| HEIGHT SECURITIES, LLC | Equity | 1,430 | 50 | 0.04 |
| HIBERNIA SOUTHCOAST CAPITAL | Equity | 95,597 | 4,425 | 0.05 |
| HNGTN NATL BK/FBO SC EMP RE SY | Equity | 5,000 | 0 | 0.00 |
| HOWARD WEIL INCORPORATED | Equity | 165 | 7 | 0.04 |
| INSTINET CLEARING SER, INC. | Equity | 373,476 | 5,044 | 0.01 |
| INSTINET, LLC | Equity | 118,847 | 298 | 0.00 |
| INVESTMENT TECHNOLOGY GROUP | Equity | 2,968,407 | 37,783 | 0.01 0.04 |
| ISI GROUP, INC. | Equity | 301,266 | 12,179 | 0.04 |
| ISLAND TRADER SECURITIES INC | Equity | 309,767 | 11,404 | 0.04 |
| ITG INC | Equity | 3,800 | 96 | 0.03 |
| IVY SECURITIES, INC | Equity | 589,339 | 21,990 | 0.03 |
| J.P MORGAN SECURITIES INC. | Equity | 685,847 | 21,636 379 | 0.03 |
| J.P. MORGAN CLEARING CORP. | Equity | 132,371 | 853 | 0.05 |
| JANNEY MONTGOMERY SCOTT INC. | Equity | 18,880 | 25,007 | 0.04 |
| JEFFERIES LLC | Equity | 654,931 | 3,333 | 0.05 |
| JMP SECURITIES | Equity | 70,135 19,051 | 953 | 0.05 |
| JNK SECURITIES INC | Equity | | | 0.05 |
| JOHNSON RICE & CO | Equity | 50,672 | 2,385 4,189 | 0.03 |
| JONESTRADING INST SVCS LLC | Equity | 129,663 | 4,103 | 0.00 |
| JPMORGAN CHASE BANK | Equity | 1,900 73,776 | 3,201 | 0.04 |
| KEEFE BRUYETTE & WOODS INC. | Equity | 153,117 | 6,507 | 0.04 |
| KEYBANC CAPITAL MARKETS INC. | Equity | 186,140 | 8,304 | 0.04 |
| KING, CL, & ASSOCIATES | Equity | 7,566 | 71 | 0.01 |
| KNIGHT CLEARING SERVICES LLC | Equity | 268,571 | 12,238 | 0.05 |
| KNIGHT EQITY MARKETS L.P. | Equity Equity | 61,266 | 2,766 | 0.05 |
| LAZARD FRERES & COMPANY LEERINK SWANN AND COMPANY | Equity | 57,280 | 2,453 | 0.04 |
| | | 1,147,361 | 35,389 | 0.03 |
| LIQUIDNET INC | Equity | 35,010 | 1,579 | 0.05 |
| LONGBOW SECURITIES LLC | Equity | 438,786 | 14,033 | 0.03 |
| LOOP CAPITAL MARKETS | Equity | 2,808,238 | 18,772 | 0.01 |
| LYNCH JONES & RYAN INC | Equity | | 908 | 0.03 |
| M. RAMSEY KING SECURITIES | Equity | 30,250 | 1,404 | 0.05 |
| MACQUARIE SECS USA INC | Equity | 29,360 | • | 0.00 |
| MERGER | Equity 96 | 232,511 | 0 | 0.04 |
| MERRILL LYNCH BROADCOURT CAP | Equity | 8,740 | 350 | 0.04 |

| Brokerage Firm | Investment Type | Number of shares traded | Commissions paid | Average cost per share |
|--------------------------------|-----------------|-------------------------|---------------------|------------------------|
| MERRILL LYNCH PIERCE FENNER | Equity | 4,813,951 | 12,717 | 0.00 |
| MERRILL LYNCH PROFESSIONAL | Equity | 137,020 | 5,397 | 0.04 |
| MIDWOOD SECURITIES | Equity | 3,526 | 141 | 0.04 |
| MILLER, TABAK, HIRSCH & CO | Equity | 2,360 | 94 | 0.04 |
| MISCHLER FINANCIAL GROUP, INC | Equity | 32,407 | 1,198 | 0.04 |
| MIZUHO SECURITIES USA INC | Equity | 18,445 | 692 | 0.04 |
| MKM PARTNERS LLC | Equity | 188,570 | 7,018 | 0.04 |
| MOGAVERO LEE & CO.,INC | Equity | 11,030 | 441 | 0.04 |
| MONNESS CRESPI HARDT & CO INC | Equity | 76,163 | 3,808 | 0.05 |
| MONTROSE SECURITIES EQUITIES | Equity | 1,390,424 | 39,561 | 0.03 |
| MORGAN KEEGAN AND COMPANY INC | Equity | 7,850 | 393 | 0.05 |
| MORGAN STANLEY & CO LLC | Equity | 594,369 | 16,297 | 0.03 |
| MR BEAL & COMPANY | Equity | 387,216 | 8,752 | |
| NATL FINANCIAL SERVICES LLC | Equity | 659,179 | 14,905 | 0.02 |
| NEEDHAM & CO | Equity | 98,176 | 4,064 | 0.02 0.04 |
| NOMURA SECURITIES INTL INC | Equity | 1,100 | 44 | |
| NORTHERN TRUST BROKERAGE INSTN | Equity | 9,308 | 93 | 0.04 |
| NORTHERN TRUST CO-TRUST | Equity | 47,600 | 0 | 0.01 |
| NORTHLAND SECURITIES INC. | Equity | 67,672 | 2,127 | 0.00 |
| OPPENHEIMER AND CO INC | Equity | 225,252 | 9,967 | 0.03 |
| PACIFIC CREST SECURITIES | Equity | 199,470 | 9,416 | 0.04 |
| PENSERRA SECURITIES | Equity | 274,756 | 11,163 | 0.05 0.04 |
| PENSON FINANCIL SER INC./RIDGE | Equity | 1,000 | 0 | 0.04 |
| PERCIVAL FINANCIAL PARTNERS | Equity | 22,140 | 664 | 0.00 |
| PERSHING LLC | Equity | 881,213 | 3,425 | 0.00 |
| PICKERING ENERGY PARTNERS INC | Equity | 12,180 | 476 | 0.04 |
| PIPER JAFFRAY & CO | Equity | 282,493 | 7,939 | |
| PULSE TRADING LLC | Equity | 65,982 | 1,235 | 0.03 |
| PURCHASE OFFER | Equity | 201,557 | 0 | 0.02 |
| RAYMOND, JAMES & ASSOC., INC. | Equity | 329,883 | 13,213 | 0.00 |
| RBC CAPITAL MARKETS LLC | Equity | 619,387 | 17,541 | 0.04 |
| RIGHTS SUBSCRIPTION | Equity | 1,113 | 0 | 0.03 |
| ROSENBLATT SECURITIES LLC | Equity | 59,560 | 1,195 | 0.00 |
| ROTH CAPITAL PARTNERS, LLC | Equity | 9,078 | · | 0.02 |
| SANDLER O'NEILL & PARTNERS LP | Equity | 21,240 | 363 | 0.04 |
| SANFORD C BERNSTEIN & CO.,LLC | Equity | 76,049 | 1,053 | 0.05 |
| SCOTIA CAITAL (USA) INC. | Equity | 247 | 3,047 | 0.04 |
| SG AMERICAS SECURITIES LLC | Equity | 469,700 | 10 | 0.04 |
| SIDOTI & COMPANY, LLC | Equity | 70,466 | 4,651 | 0.01 |
| SIMMONS & CO | Equity | 32,220 | 3,051 | 0.04 |
| STATE ST BK AND TR CO | Equity | 600 | 1,289 | 0.04 |
| STATE ST GLOBAL MARKETS LLC | Equity | 14,430 | 0 | 0.00 |
| STATE STREET BANK & TRUST CO. | Equity | 375,300 | 545 | 0.04 |
| STEPHEN M. FERRETTI INC. | Equity | 25,025 | 0 | 0.00 |
| STEPHENS, INC. | Equity | • | 751 | 0.03 |
| STERNE AGEE & LEACH INC | Equity | 107,134 | 4,409 | 0.04 |
| STIFEL NICHOLAUS & CO, INC | Equity | 81,108 | 3,588 | 0.04 |
| STOCK ELECTION | Equity | 313,416 | 12,485 | 0.04 |
| STRATEGAS SECURITIES LLC | | 5,062 | 0 | 0.00 |
| STURDIVANT AND CO., INC. | Equity | 5,620 | 281 | 0.05 |
| SUNTRUST CAPITAL MARKETS, INC | Equity | 38,250 | 1,913 | 0.05 |
| THE BANK OF NEW YORK | Equity | 34,646 | 1,671 | 0.05 |
| THE BENCHMARK COLLC | Equity | 3,000 | 0 | 0.00 |
| JEHOLIMANN COLLO | Equity | 2,810 | 120 | 0.04 |

Schedule of Broker's Commissions

For Fiscal Year Ended June 30, 2013

| Brokerage Firm | Investment Type | Number of shares traded | Commissions paid | Average cost per share |
|-------------------------------------|--------------------|-------------------------|------------------|------------------------|
| THE WILLIAMS CAPITAL GROUP LP | Equity | 346,314 | 6,634 | 0.02 |
| TOPEKA CAPITAL MARKETS INC. | Equity | 68,679 | 1,636 | 0.02 |
| U S BANK N A | Equity | 1,400 | 0 | 0.00 |
| UBS SECURITIES LLC | Equity | 1,044,193 | 15,237 | 0.01 |
| WEDBUSH SECURITIES INC | Equity | 87,653 | 4,132 | 0.05 |
| WEEDEN & CO | Equity | 796,675 | 27,266 | 0.03 |
| WELLS FARGO SECS LLC | Equity | 172,793 | 6,325 | 0.04 |
| WESTMINSTER RESEARCH | Equity | 31,909 | 957 | 0.03 |
| WUNDERLICH SECURITIES INC. | Equity | 14,241 | 712 | 0.05 |
| ABG SECURITIES, OSLO | International | 378 | 193 | 0.51 |
| BANCO PACTUAL SA, RIO DE JANEIRO | International | 19 | 2 | 0.11 |
| BANCO SANTANDER CENTRAL HISP. | International | 1,520 | 45 | 0.03 |
| BANK VONTOBEL AG, ZURICH | International | 14,667 | 2,119 | 0.14 |
| BARCLAYS CAPITAL INC LE | International | 108,199 | 1,897 | 0.02 |
| BARCLAYS CAPITAL SECS LONDON | International | 707,239 | 16,910 | 0.02 |
| BERENBERG BANK, HAMBURG | International | 5,461 | 480 | 0.09 |
| BLAIR WILLIAM and COMPANY LLC | International | 1,965 | 57 | 0.03 |
| BLOOMBERG TRADEBOOK LLC | International | 4,883 | 61 | 0.01 |
| BNP PARIBAS PEREGRINE SECS HK | International | 10,744 | 1,216 | 0.11 |
| BNP PARIBAS SECS SERVICES, LDN | International | 445,335 | 3,745 | 0.01 |
| BNP PARIBAS SECURITIES SVCS | International | 532 | 29 | 0.05 |
| BNY CONVERGEX EXEC SOLUTION | International | 763 | 6 | 0.01 |
| BROCKHOUSE AND COOPER MONT. | International | 29,022 | 520 | 0.02 |
| BTIG LLC | International | 15,067 | 566 | 0.04 |
| CABRERA CAPITAL MARKETS LLC | International | 39,552 | 333 | 0.01 |
| CANADIAN DEPOSITORY FOR SEC T. | International | 4,325 | 173 | 0.04 |
| CANTOR FITZGERALD MIS BROKERS | International | 35 | 1 | 0.02 |
| CIBC WORLD MARKETS - TORONTO | International | 12,647 | 506 | 0.04 |
| CIBC WORLD MARKETS INC | International | 6,081 | 243 | 0.04 |
| CICC US SECURITIES INC | International | 16,053 | 1,381 | 0.09 |
| CITIBANK NA, LONDON | International | 1,725 | 186 | 0.11 |
| CITIC CAPITAL SECURITIES LTD HK | International | 2,763 | 304 | 0.11 |
| CITIGROUP GLOBAL MARKETS INC | International | 285,527 | 12,582 | 0.04 |
| CITIGROUP GLOBAL MARKETS KO. | International | 1 | 551 | 918.87 |
| CITIGROUP GLOBAL MARKETS LTD, | International | 901,370 | 10,604 | 0.01 |
| CITIGROUP GLOBAL MARKETS UK EQ | International | 1,089,814 | 4,396 | 0.00 |
| CLEARSTREAM BANKING SA, LUXE | International | 547,960 | 351 | 0.00 |
| CLSA AUSTRALIA PTY LTD | International | 158,163 | 1,352 | 0.01 |
| CLSA LTD, HONG KONG | International | 44,455 | 706 | 0.02 |
| CLSA SECURITIES KOREA | International | 1 | 650 | 560.00 |
| CLSA SECURITIES MALAYSIA SDN. | International | 105,359 | 2,228 | 0.02 |
| CLSA SINGAPORE PTE LTD | International | 2,455 | 3,572 | 1.45 |
| CONCORDIA SA CVMCC | International | 55 | 5 | 0.09 |
| CREDIT AGRICOLE | International | 118 | 5 0 2 0 | 0.01 |
| CREDIT AGRICOLE CHEUVREUX | International | 369,938 | 5,920 | 0.02 |
| CREDIT AGRICOLE INDOSUEZ LN | International | 31,832 | 184 | 0.01 |
| CREDIT AGRICOLE INDOSUEZ, MADRID | International | 47 | 2 | 0.05 |
| CREDIT AGRICOLE SEC USA INC | International | 89,082 | 1,847 | 0.02 |
| CREDIT AGRICOLE SECURITIES USA | International | 1,066,162 | 10,740 | 0.01 |
| CREDIT SUIS FST BOSTON (EUR), SEOUL | International | 4 | 2,847 | 642.58 |
| CREDIT SUISSE 1ST BOSTON CORP,NY | International | 216,178 | 3,843 | 0.02 |
| | 98 | | | |

| Brokerage Firm | investment Type | Number of shares traded | Commissions paid | Average cost per share |
|-------------------------------------|---|----------------------------|---------------------|------------------------|
| CREDIT SUISSE FIRST BOSTON | International | 933,035 | | |
| CREDIT SUISSE FIRST BOSTON HK | International | 4,240 | 12,830 1,370 | 0.01 |
| CREDIT SUISSE FIRST BOSTON, LDN | International | 262,201 | • | 0.32 |
| CS FIRST BOSTON INDIA SEC PTE LTD | International | • | 6,765 | 0.03 |
| CSFB (EUROPE) LTD, LONDON | International | 900 | 156 | 0.17 |
| DAIWA SECURITIES AMERICA | International | 7 | 128 | 18.71 |
| DAIWA SECURITIES SMBC HK LTD | International | 3,895 | 3,466 | 0.89 |
| DANSKE BANK AS COPENHAGEN | International | 55,884 | 1,783 | 0.03 |
| DAVY STOCKBROKERS, DUBLIN | International | 2,732 | 307 | 0.11 |
| DBS VICKERS (HONG KONG) LIMITED | International | 70,377 | 690 | 0.01 |
| DBS VICKERS SECURITIES (S) PTE LTD | International | 67,659 64,574 | 2,551 | 0.04 |
| DEUTSCHE BANC SECURITIES INC | International | 61,574 | 2,335 | 0.04 |
| DEUTSCHE BANK AG | International | 11,312 111 | 452 | 0.04 |
| DEUTSCHE BANK AG, LONDON | International | 508,625 | 14 | 0.12 |
| DEUTSCHE BANK SECURITIES INC | International | 469,510 | 4,937 | 0.01 |
| DEUTSCHE EQUITIES INDIA PRIVATE LIM | International | · | 8,144 | 0.02 |
| DSP MERRILL LYNCH LTD | | 568 | 462 | 0.81 |
| EXANE PARIS | International International | 63 | 58 | 0.93 |
| EXECUTION (HONG KONG) LIMITED | International | 461,436 | 6,487 | 0.01 |
| EXECUTION LIMITED | International | 61,956 | 788 | 0.01 |
| GOLDMAN SACHS (ASIA) L.L.C. SEOUL | International | 104,045 | 1,334 | 0.01 |
| GOLDMAN SACHS AND CO | International | 0 | 809 | 3519.26 |
| GOLDMAN SACHS CO CUST ISCC PO, NY | *************************************** | 71,128 | 2,453 | 0.03 |
| GOLDMAN SACHS CO, NY | international International | 78,497 | 2,713 | 0.03 |
| · | international | 771,604 | 16,462 | 0.02 |
| GOLDMAN SACHS EXECUTION AND CL | International | 19,541 | 293 | 0.02 |
| GOLDMAN SACHS INTL LONDON | international | 361,062 | 3,435 | 0.01 |
| GOODBODY STOCKBROKERS DUBLIN | International | 58,951 | 479 | 0.01 |
| GOODMORNING SHINHAN SECS SEOUL | International | 0 | 87 | 665.69 |
| G-TRADE SERVICES LTD | International | 362,870 | 4,631 | 0.01 |
| HSBC BANK PLC (JC HIB SETTLEMENT) | International | 43,897 | 1,311 | 0.03 |
| HSBC BROKERAGE USA | International | 4,802 | 192 | 0.04 |
| HSBC SEC INC NY USA | International | 19 | 2 | 0.12 |
| HSBC SECS BROKERS(ASIA) LTD | international | 18,137 | 457 | 0.03 |
| HSBC SECURITIES USA INC | International | 13,383 | 144 | 0.01 |
| INSTINET AUSTRALIA CLEARING SERV | International | 9,363 | 54 | 0.01 |
| INSTINET CLEARING SERVICES INC | international | 16,776 | 336 | 0.02 |
| INSTINTET CLEARING LIMITED LONDON | International | 110,471 | 6,031 | 0.05 |
| INSTINET PACIFIC LTD | International | 56,732 | 906 | 0.02 |
| INSTINET SINGAPORE SERVICES PTE. | International | 197,965 | 1,574 | 0.01 |
| INSTINET US EUROPE | International | 442 | 89 | 0.20 |
| INVESTEC SECURITIES, LONDON (331) | International | 161,666 | 1,531 | 0.01 |
| INVESTMENT TECHN GROUP, DUBLIN | International | 360,364 | 2,942 | 0.01 |
| ITG AUSTRALIA LIMITED | International | 9,567 | 16 | 0.00 |
| ITG CANADA CORP, TORONTO | International | 42,374 | 530 | 0.01 |
| ITG HOENIG LIMITED, HONG KONG | International | 1,656 | 9 | 0.01 |
| ITG INC | International | 33,973 | 340 | 0.01 |
| IXIS SECURITIES | International | 1,987 | 358 | 0.18 |
| J.P. MORGAN CLEARING CORP. | International | 383,080 | 3,454 | 0.18 |
| J.P.MORGAN SECURITIES (FAR EAST) LT | International | 4 | 2,586 | |
| JEFFERIES AND COMPANIES INC JERSEY | International | • | - | 675.10 |
| | Q Q | 34,273 | 4,552 | 0.13 |

| Brokerage Firm | Investment Type | Number of shares traded | Commissions paid | Average cost per share |
|--------------------------------------|--------------------|----------------------------|------------------|------------------------|
| JEFFERIES LLC | International | 16,423 | 657 | 0.04 |
| JEFFRIES INTERNATIONAL LTD LONDON | International | 188,201 | 1,674 | 0.01 |
| JP MORGAN INDIA PRIVATE LTD, MUMBAI | International | 3,074 | 1,650 | 0.54 |
| JP MORGAN SECS AUST LTD PID 2972 | International | 41,433 | 542 | 0.01 |
| JP MORGAN SECS INC NEW YORK | International | 53,094 | 222 | 0.00 |
| JP MORGAN SECS LTD LONDON | International | 720,852 | 12,583 | 0.02 |
| JP MORGAN SECURITIES (TAIWAN) LTD | International | 128 | 27 | 0.21 |
| JP Morgan Securities Inc | International | 70,027 | 1,665 | 0.02 |
| JPMORGAN SECURIT (ASIA PACIFIC), HK | International | 256,447 | 11,399 | 0.04 |
| KEMPEN AND CO NV AMSTERDAM | International | 6,164 | 547 | ₩ 0.09 |
| KEPLER EQUITIES, PARIS | International | 68,862 | 2,368 | 0.03 |
| KEYBANC CAPITAL MARKETS INC | International | 225 | 9 | 0.04 |
| KNIGHT CLEARING SERVICES LLC | International | 4,484 | 84 | 0.02 |
| KOTAK SECURITIES MUMBAI | International | 331 | 300 | 0.90 |
| LIQUIDNET ASIA LIMITED | International | 4,835 | 202 | 0.04 |
| LOOP CAPITAL MARKETS LLC | International | 59,632 | 435 | 0.01 |
| M RAMSEY KING SECURITIES, INC | International | 75,608 | 2,912 | 0.04 |
| MACQUARIE BANK LIMITED | International | 433,575 | 12,026 | 0.03 |
| MACQUARIE CAPITAL USA INC | International | 141,599 | 1,950 | 0.01 |
| MACQUARIE CAPITAL USA INC | International | 71 | 2 | 0.03 |
| MACQUARIE EQUITIES LTD SYDNEY | International | 184,318 | 2,845 | 0.02 |
| MACQUARIE SECURITIES LTD, HK | International | 54,622 | 1,622 | 0.03 |
| MACQUARIE SECURITIES NEW ZEALAND | International | 98,977 | 385 | 0.00 |
| MACQUARIE SECURITIES, MUMBAI | International | 1,221 | 992 | 0.81 |
| MAINFIRST BANK AG | International | 22,773 | 1,763 | 0.08 |
| MERRILL LYNCH AND CO INC NEW YORK | International | 187 | 22 | 0.12 |
| MERRILL LYNCH INTERNATIONAL | International | 47,824 | 2,050 | 0.04 |
| MERRILL LYNCH INTERNATIONAL LTD, | International | 802 | 158 | 0.20 |
| MERRILL LYNCH INTERNATIONAL LTD, | International | · 1,445 | 414 | 0.29 |
| MERRILL LYNCH INTL LTD EQUIT SETTL | International | 1,702,798 | 17,308 | 0.01 |
| MERRILL LYNCH PIERCE FENNER Smith I | International | 35,034 | 1,022 | 0.03 |
| MERRILL LYNCH, PIERCE, FENNER, SMITH | International | 46,040 | 3,801 | 0.08 |
| MITSUBISHI UFJ SECURITIES (USA) IN | International | 322 | 726 | 2.26 |
| MIZUHO SECURITIES USA INC, NY | International | 9,064 | 9,332 | 1.03 |
| MORGAN STANLEY | International | 102,738 | 2,074 | 0.02 |
| MORGAN STANLEY AND CO LLC | International | 60,900 | 2,274 | 0.04 |
| MORGAN STANLEY CO INC NEW YORK | International | 1,239,362 | 22,025 | 0.02 |
| MORGAN STANLEY SECURITIES, LONDON | International | 56,145 | 553 | 0.01 |
| National Financial Services LLC | International | 10,740 | 430 | 0.04 |
| NMAS1 EQUITIES SV SA | International | 1,760 | 34 | 0.02 |
| NOMURA FINANCIAL ADVISORY AND SEC. | International | 284 | 255 | 0.90 |
| NOMURA INTERNATIONAL PLC LONDON | International | 31,355 | 743 | 0.02 |
| NOMURA SECURITIES INTL INC NY | International | 75,314 | 8,237 | 0.11 |
| ODDO ET CIE, PARIS | International | 2,988 | 259 | 0.09 |
| OPPENHEIMER AND CO INC | International | 3,004 | 120 | 0.04 |
| PERSHING LLC | International | 885,322 | 8,722 | 0.01 |
| PERSHING SECURITIES LONDON | International | 82,967 | 5,905 | 0.07 |
| RABO SECURITIES NV, AMSTERDAM, NL | International | 2,129 | 49 | 0.02 |
| RAYMOND JAMES and ASSOC INC | Internationa() | 100 2,549 | 102 | 0.04 |

| Brokerage Firm | investme | nt Number of shares traded | Commissions paid | Average cost per share |
|---|---------------|----------------------------|---------------------|------------------------|
| RBC CAPITAL MARKETS CORP | Internationa | 13,356 | 534 | 0.04 |
| RBC DOMINION SECURITIES TORONTO | internationa | | 622 | |
| REDBURN PARTNERS LLP | Internationa | - | _ | 0.03 |
| ROYAL BANK OF CANADA EUROPE LTD | Internationa | | 1,034 | 0.01 |
| SANFORD C BERNSTEIN AND CO INC | Internationa | 01,200 | 1,379 | 0.02 |
| SANFORD C. BERNSTEIN LONDON | Internationa | | 108 | 0.04 |
| SANTANDER CENTRAL HISPANO BOLSA | Internationa | 132,010 | 9,383 | 0.01 |
| SG ASIA SECURITIES (INDIA) PVT LTD | Internationa | | 1,472 | 0.00 |
| SG SECURITIES (HK) LIMITED | Internationa | 7,002 | 1,194 | 0.25 |
| SKANDINAVISKA ENSKILDA BANKEN | Internationa | 201 | 347 | 1.33 |
| SMBC NIKKO SECURITIES HONG KONG LI | | 0,211 | 570 | 0.18 |
| SOCIETE GENERALE LONDON BRANCH, | International | 100 | 124 | 1.15 |
| SOCIETE GENERALE PARIS, ZURICH | International | | 1,734 | 0.01 |
| STIFEL NICHOLAUS + CO, INC | International | *1702 | 384 | 0.16 |
| | international | 1,040 | 66 | 0.04 |
| SVENSKA HANDELSBANKEN NEW YORK | International | 117,700 | 1,897 | 0.02 |
| SVENSKA HANDELSBANKEN, ST THE BANK OF NEW YORK | International | 100 | 670 | 0.88 |
| | International | 4,027 | - | 0.00 |
| TORONTO DOMINION SECURITIES | International | 26,109 | 1,044 | 0.04 |
| U.S. GLEARING CORROLATION | international | 842 | 34 | 0.04 |
| U.S. CLEARING CORPORATION | International | 689 | 28 | 0.04 |
| UBS (APOLLO NOMINEES) | International | 4,822 | 86 | 0.02 |
| UBS AG | International | 901 | 10 | 0.01 |
| UBS AG LONDON EQUITIES | International | 533,306 | 8,813 | 0.02 |
| UBS SECURITIES ASIA LTD | International | 553,314 | 12,959 | 0.02 |
| UBS SECURITIES AUSTRALIA LTD UBS SECURITIES LLC | International | 12,480 | 28 | 0.00 |
| | International | 10,224 | 371 | 0.04 |
| UBS SECURITIES LTD, SEOUL BRANCH | International | 0 | 30 | 168.39 |
| UBS SECURITIES SINGAPORE PTE. | International | 26 | 5 | 0.18 |
| WEEDEN AND CO NEW YORK | International | 24,805 | 337 | 0.01 |
| WOORI INVESTMENT+SECURITIES CO | International | 1 | 1,592 | 3120.82 |
| XP INVESTIMENTOS CCTVM SA | International | 186 | 7 | 0.04 |
| 40054 005 | | | | n/a |
| AGORA COR DE TITUL E VAL MOB | EAFE | 15,459 | 315 | 0.02 |
| BARCLAYS CAPITAL SECS Ln | EAFE | 151,969 | 356 | 0.00 |
| BERENBERG BANK, HAMBURG | EAFE | 25,072 | 182 | 0.01 |
| BNP PARIBAS EQUITIES | EAFE | 5,603 | 20 | 0.00 |
| BNP PARIBAS PEREGRINE SECS H | EAFE | 2,385 | 337 | 0.14 |
| BNY CONVERGEX EXEC SOLUTION | EAFE | 18,160 | 91 | 0.00 |
| CANTOR FITZGERALD EUROPE | EAFE | 33,894 | 53 | 0.00 |
| CARNEGIE AS OSLO | EAFE | 4,079 | 53 | 0.01 |
| CARNEGIE BANK A S COPENHAGEN | EAFE | 162 | 6 | 0.04 |
| CIMB SECURITIES HK LTD | EAFE | 10,834 | 84 | 0.01 |
| CITIGROUP GLOBAL MARKETS INC | EAFE | 253,062 | 801 | 0.00 |
| CITIGROUP GLOBAL MARKETS K | EAFE | 11 | 216 | 19.08 |
| CITIGROUP GLOBAL MARKETS | EAFE | 392,345 | 1,728 | 0.00 |
| CITIGROUP GLOBAL MARKETS UK | EAFE | 35,798 | 81 | 0.00 |
| CLSA AUSTRALIA PTY LTD | EAFE | 19,540 | 102 | 0.01 |
| CLSA LTD, HONG KONG | EAFE | 28,460 | 212 | 0.01 |
| CLSA SINGAPORE PTE LTD | EAFE | 36,913 | 47 | 0.00 |
| CREDIT AGRICOLE CHEUVREUX | EAFE | 19,697 | 80 | 0.00 |
| CREDIT SUIS FST BOSTON (EUR), | EAFE | 101 0 | 46 | 307.13 |

| Brokerage Firm | Investment Type | Number of shares traded | Commissions paid | Average cost per share |
|-----------------------------------|--------------------|-------------------------|------------------|------------------------|
| CREDIT SUISSE 1ST BOSTON CORP, | EAFE | 129,603 | 992 | 0.01 |
| CREDIT SUISSE FIRST BOSTON | EAFE | 34,211 | 209 | 0.01 |
| CREDIT SUISSE FIRST BOSTON. LDN | EAFE | 92 | 105 | 1.14 |
| CSFB AUSTRALIA SECURITIES LTD, | EAFE | 39,612 | 308 | 0.01 |
| D. CARNEGIE AB FINLAND BR,H | EAFE | 18,964 | 236 | 0.01 |
| DAEWOO SECURITIES CO., LTD. | EAFE | 1 | 60 | 53.22 |
| DAIWA SECURITIES AMERICA | EAFE | 1,352 | 54 | 0.04 |
| DAIWA SECURITIES SMBC HK LTD | EAFE | 15,503 | 1,242 | 80.0 |
| DANSKE BANK AS COPENHAGEN | EAFE | 85 | 9 | 0.11 |
| DAVY STOCKBROKERS, DUBLIN | EAFE | 24,970 | 146 | 0.01 |
| DEUTSCHE BANK AG, LONDON | EAFE | 6,457 | 805 | 0.12 |
| DEUTSCHE BANK SECURITIES INC | EAFE | 305,730 | 3,080 | 0.01 |
| DEUTSCHE SECURITIES ASIA LTD, | EAFE | 14,889 | 165 | 0.01 |
| DEUTSCHE SECURITIES AUST LTD, | EAFE | 296,555 | 687 | 0.00 |
| DEUTSCHE SECURITIES KOREA CO, | EAFE | 13 | 348 | 26.52 |
| DNB NOR BANK ASA, OSLO | EAFE | 122 | 7 | 0.06 |
| EUROZ SECURITIES LIMITED, AUST | EAFE | 27,106 | 125 | 0.00 |
| EXANE PARIS | EAFE | 63,949 | 461 | 0.01 |
| FOKUS BK A S, TRONDHEIM | EAFE | 1,652 | 28 | 0.02 |
| GOLDMAN SACHS AND CO | EAFE | 17,593 | 150 | 0.01 |
| GOLDMAN SACHS CO, NY | EAFE | 422,818 | 1,351 | 0.00 |
| GOLDMAN SACHS INTL LONDON | EAFE | 162,652 | 945 | 0.01 |
| Goldman Sachs Securities (Nomine) | EAFE | 7,096 | 55 | 0.01 |
| HSBC BANK PLC (ALL U.K. OFFICES) | EAFE | 3,281 | 24 | 0.01 |
| HSBC BANK PLC (JC HIB SETTLEMENT) | EAFE | 2,246 | 94 | 0.04 |
| HSBC LTD SEOUL SECURITIES BR | EAFE | 0 | 7 | 18.94 |
| ICHIYOSHI SECURITIES CO LTD TOKYO | EAFE | 3 | 73 | 28.08 |
| INSTINET CLEARING SERVICES INC | EAFE | 14,457 | 105 | 0.01 |
| Instinet Europe Limited Londo | EAFE | 3,787 | 276 | 0.07 |
| INSTINET US EUROPE | EAFE | 50 | 20 | 0.40 |
| INVESTEC SECURITIES, LONDON (331) | EAFE | 18,009 | 175 | 0.01 |
| INVESTMENT TECHN GROUP, DUBLIN | EAFE | 12,215 | 82 | 0.01 |
| ITG HOENIG LIMITED, HONG KONG | EAFE | 87,377 | 196 | 0.00 |
| IXIS SECURITIES | EAFE | 16,158 | 102 | 0.01 |
| J.P. MORGAN CLEARING CORP. | EAFE | 1,831 | 20 | 0.01 |
| | | | | |
| J.P.MORGAN SECURITIES (FAR EAST) | EAFE | 26 | 164 | 6.41 |
| JP MORGAN SECS AUST LTD PID 2972 | EAFE | 45,925 | 163 | 0.00 |
| JP MORGAN SECS INC NEW YORK | EAFE | 42,327 | 628 | 0.01 |
| JP MORGAN SECS LTD LONDON | EAFE | 590,131 | 1,733 | 0.00 |
| JP MORGAN SECURITIES (TAIWAN) | EAFE | 4,991 | 52 | 0.01 |
| JP Morgan Securities Inc | EAFE | 24,995 | 101 | 0.00 |
| JPMORGAN SECURIT (ASIA PACIFIC), | EAFE | 2,281 | 510 | 0.22 |
| KAS ASSOCIATIE AMSTERDAM | EAFE | 328 | 37 | 0.11 |
| LIQUIDNET ASIA LIMITED | EAFE | 5,454 | 20 | 0.00 |
| MACQUARIE BANK LIMITED | EAFE | 71,224 | 206 | 0.00 |
| MACQUARIE BANK LIMITED SYDNEY | EAFE | 18,218 | 62 | 0.00 |
| MACQUARIE EQUITIES LTD SYDNEY | EAFE | 32,571 | 212 | 0.01 |
| MACQUARIE SECURITIES LTD - SEOUL | EAFE | 9 | 176 | 18.72 |
| MERRILL LYNCH CO INC (AGS), NY | EAFE | 15,838 | 118 | 0.01 |
| MERRILL LYNCH INTL LTD EQUIT | EAFE | 25,654 | 189 | 0.01 |
| | | 2,384 | 26 | 0.01 |
| MERRILL LYNCH PIERCE FENNER Smith | EAFE | 4,304 | 20 | 0.01 |

| Brokerage Firm | Investment Type | Number of shares traded | Commissions paid | Average cost per share |
|------------------------------------|--------------------|-------------------------|------------------|------------------------|
| MERRILL LYNCH, PIERCE, FENNER, SMI | EAFE | 1,906 | 105 | 0.00 |
| MITSUBISHI UFJ SECURITIES (USA) IN | EAFE | 56 | 116 | 0.06 |
| MIZUHO SECURITIES USA INC. NY | EAFE | 501 | · | 2.06 |
| MORGAN STANLEY | EAFE | 59,147 | 1,189 507 | 2.37 |
| MORGAN STANLEY AND CO INTL, SEO | EAFE | 0 | | 0.01 |
| MORGAN STANLEY AND CO LLC | EAFE | 7,991 | 22 | 145.33 |
| MORGAN STANLEY CO INC NEW YORK | EAFE | 659,297 | 20 | 0.00 |
| MORGAN STANLEY CO INTL LTD TAIP | EAFE | • | 1,469 | 0.00 |
| MORGAN STANLEY SECURITIES, LON | EAFE | 3,472 | 37 | 0.01 |
| NOMURA FINANCIAL AND INVEST. | EAFE | 85,530 | 73 | 0.00 |
| NOMURA SECURITIES INTL INC NY | EAFE | 4 14 | 121 | 31.53 |
| NORDEA BANK DENMARK A S | EAFE | 6,593 | 44 | 3.13 |
| PANMURE GORDON AND CO. LIMITED | | • | 49 | 0.01 |
| PERSHING SECURITIES LONDON | EAFE | 3,235 | 57 | 0.02 |
| SAMSUNG SECURITIES CO LTD | EAFE EAFE | 103,445 | 253 | 0.00 |
| SG AMERICAS SECURITIES LLC | | 3 | 73 | 22.72 |
| SG COWEN SECURITIES CORP, NY | EAFE | 4,695 | 12 | 0.00 |
| SG SECURITIES (HK) LIMITED | EAFE | 27,126 | 159 | 0.01 |
| SOCIETE GENERALE LONDON BRANCH, | EAFE | 80,541 | 1,110 | 0.01 |
| STANDARD BANK LONDON LTD | EAFE | 25,351 | 792 | 0.03 |
| | EAFE | 3,621 | 246 | 0.07 |
| SVENSKA HANDELSBANKEN LONDON | EAFE | 8,575 | 251 | 0.03 |
| UBS AG LONDON EQUITIES | EAFE | 289,045 | 1,066 | 0.00 |
| UBS SECURITIES ASIA LTD | EAFE | 160 | 116 | 0.72 |
| UBS SECURITIES AUSTRALIA LTD | EAFE | 508 | 3 | 0.01 |
| YUANTA SECURITIES (HONG KONG) | EAFE | 6,779 | 12 | 0.00 |
| ADP COSI/SANTANDER | Emerging Mkts | 16,916 | 677 | 0.04 |
| AGORA COR DE TITUL E VAL MOB | Emerging Mkts | 280,951 | 6,210 | 0.02 |
| AS LHV PANK | Emerging Mkts | 20,423 | 87 | 0.00 |
| BANCO PACTUAL SA, RIO DE JANEIRO | Emerging Mkts | 46,076 | 2,082 | 0.05 |
| BANCO SANTANDER CENTRAL HISPANO. | Emerging Mkts | 169,840 | 3,733 | 0.02 |
| BARCLAYS BANK PLC, NY | Emerging Mkts | 318,811 | 7,223 | 0.02 |
| BARCLAYS CAPITAL SECS LONDON | Emerging Mkts | 191,676 | 668 | 0.00 |
| BNP PAR SECURITIES SERV, FKFT | Emerging Mkts | 4,587 | 4 | 0.00 |
| BNP PARIBAS PEREGRINE SECS HK | Emerging Mkts | 156,406 | 8,611 | 0.06 |
| BNY CONVERGEX EXEC SOLUTION | Emerging Mkts | 84,102 | 421 | 0.01 |
| BROCKHOUSE AND COOPER MONTREAL C. | Emerging Mkts | 2,405 | 1,409 | 0.59 |
| CANTOR FITZGERALD EUROPE | Emerging Mkts | 42,239 | 60 | 0.00 |
| CAPITAL MARKETS BROKERS LIMITED | Emerging Mkts | 699 | 148 | 0.21 |
| CASABLANCA FINANCE MARKETS | Emerging Mkts | 1,195 | 573 | 0.48 |
| CELFIN S.A., SANTIAGO | Emerging Mkts | 2 | 29 | 12.05 |
| CHINA INTL CAP CORP HK SEC LTD | Emerging Mkts | 592,557 | 10,922 | 0.02 |
| CHINA INTL CAP CORP LIMITED | Emerging Mkts | 2,899 | 18 | 0.02 |
| CITIBANK N.A. NAIROBI | Emerging Mkts | 32 | 190 | 5.89 |
| CITIGROUP GLOBAL MARKETS INC | Emerging Mkts | 376,719 | 2,666 | 0.01 |
| CITIGROUP GLOBAL MARKETS INDIA PRV | Emerging Mkts | 3,237 | 325 | 0.10 |
| CITIGROUP GLOBAL MARKETS LTD, LDN | Emerging Mkts | 71,205 | 649 | 0.01 |
| CLSA LTD, HONG KONG | Emerging Mkts | 26,004 | 208 | |
| CLSA SECURITIES KOREA | Emerging Mkts | 2 | 847 | 0.01 |
| CLSA SINGAPORE PTE LTD | F | 03 11,269 | 9,174 | 553.61 |
| | - • I(| 0.0 | J, 17-4 | 0.81 |

| Parkage Firm | Investment | Number of shares traded | Commissions paid | Average cost per share |
|-------------------------------------|----------------------|----------------------------|------------------|------------------------|
| Brokerage Firm | Туре | | | |
| CREDIT AGRICOLE CHEUVREUX | Emerging Mkts | 18,192 | 283 | 0.02 |
| CREDIT AGRICOLE SEC USA INC | Emerging Mkts | 11,314 | 453 | 0.04 |
| CREDIT LYON SECS ASIA LTD, TAIPEI | Emerging Mkts | 51,675 | 3,868 | 0.07 |
| CREDIT LYONNAIS SECURITIES INDIA | Emerging Mkts | 2,806 | 5,801 | 2.07 |
| CREDIT SUIS FST BOSTON (EUR), SEOUL | Emerging Mkts | 3 | 22 | 7.65 |
| CREDIT SUISSE 1ST BOSTON CORP,NY | Emerging Mkts | 610,755 | 5,626 | 0.01 |
| CREDIT SUISSE FIRST BOSTON | Emerging Mkts | 30,523 | 3,318 | 0.11 |
| CREDIT SUISSE FIRST BOSTON HK | Emerging Mkts | 102,198 | 733 | 0.01 |
| CREDIT SUISSE FIRST BOSTON, LDN | Emerging Mkts | 60,344 | 1,170 | 0.02 |
| CREDIT SUISSE FIRST BOSTON, TAIPEI | Emerging Mkts | 27,064 | 1,236 | 0.05 |
| CREDIT SUISSE SECS (MALAYSIA) | Emerging Mkts | 71,216 | 136 | 0.00 |
| CS FIRST BOSTON INDIA SEC PTE LTD | Emerging Mkts | 5,795 | 1,492 | 0.26 |
| CSFB (EUROPE) LTD, LONDON | Emerging Mkts | 153 | 1,378 | 9.04 |
| DAIWA SECURITIES SMBC HK LTD | Emerging Mkts | 3,639 | 417 | 0.11 |
| DAVY STOCKBROKERS, DUBLIN | Emerging Mkts | 123,306 | 769 | 0.01 |
| DBTC AMERICAS DEUTSCHE BANK AG LDN | Emerging Mkts | 48,769 | 1,703 | 0.03 |
| DEUTSCHE BANC SECURITIES INC | Emerging Mkts | 26,212 | 368 | 0.01 |
| DEUTSCHE BANK AG, LONDON | Emerging Mkts | 23,815 | 2,655 | 0.11 |
| DEUTSCHE BANK SECURITIES INC | Emerging Mkts | 320,657 | 4,189 | 0.01 |
| DEUTSCHE EQUITIES INDIA PRIVATE LIM | Emerging Mkts | 3,614 | 10,094 | 2.79 |
| DEUTSCHE SECURITIES ASIA LTD, HK | Emerging Mkts | 146,983 | 1,169 | 0.01 |
| DEUTSCHE SECURITIES KOREA CO, SEOUL | Emerging Mkts | 8 | 1,978 | 254.19 |
| DSP MERRILL LYNCH LTD | Emerging Mkts | 11,229 | 3,494 | 0.31 |
| GOLDMAN SACHS AND CO | Emerging Mkts | 166,621 | 1,107 | 0.01 |
| GOLDMAN SACHS CO CUST ISCC PO, NY | Emerging Mkts | 155,191 | 3,163 | 0.02 |
| GOLDMAN SACHS CO, NY | Emerging Mkts | 454,558 | 4,780 | 0.01 |
| GOLDMAN SACHS EXECUTION AND CLEAR | Emerging Mkts | 59,880 | 251 | 0.00 |
| GOLDMAN SACHS INTL LONDON | Emerging Mkts | 3,954 | 342 | 0.09 |
| G-TRADE SERVICES LTD | Emerging Mkts | 316,347 | 6,891 | 0.02 |
| HSBC BANK BRASIL, SAO PAULO | Emerging Mkts | 64,184 | 1,226 | 0.02 |
| HSBC BANK PLC (JC HIB SETTLEMENT) | Emerging Mkts | 5,651,975 | 37,467 | 0.01 |
| HSBC BROKERAGE USA | Emerging Mkts | 51,771 | 340 | 0.01 |
| HSBC LTD SEOUL SECURITIES BRANCH | Emerging Mkts | 62 | 1,398 | 22.68 |
| HSBC LTD,HGKH (ALL HK OFFICES + HO) | Emerging Mkts | 20,000 | 53 | 0.00 |
| HSBC MEXICO S A INSTITUCION | Emerging Mkts | 1,889 | 121 | 0.06 |
| HSBC SEC INC NY USA | Emerging Mkts | 108,422 | 2,652 | 0.02 |
| HSBC SECS BROKERS(ASIA) LTD | Emerging Mkts | 835,101 | 2,760 | 0.00 |
| HSBC SECURITIES ASIA LTD, TAIPEI | Emerging Mkts | 14,839 | 741 | 0.05 |
| HSBC SECURITIES INDIA HLDGS, MUMBAI | Emerging Mkts | 1,067 | 641 | 0.60 |
| HSBC SECURITIES USA INC | Emerging Mkts | 54,820 | 4,342 | 80.0 |
| ING BANK NV LONDON | Emerging Mkts | 3,601 | 55 | 0.02 |
| INSTINET CLEARING SERVICES INC | Emerging Mkts | 318,804 | 4,342 | 0.01 |
| Instinet Europe Limited Londo | Emerging Mkts | 138,801 | 1,549 | 0.01 |
| INSTINET EUROPE LIMITED LONDON | Emerging Mkts | 1,270 | 14 | 0.01 |
| INSTINET EUROPE LTD | Emerging Mkts | 17,741 | 84 | 0.00 |
| INSTINET PACIFIC LTD | Emerging Mkts | 475,227 | 1,573 | 0.00 |
| INTERACCIONES CASA DE BOLSA MEXICO | Emerging Mkts | 2,595 | 98 | 0.04 |
| INVESTMENT TECHN GROUP, DUBLIN | Emerging Mkts | 185,031 | 2,237 | 0.01 |
| ITG CANADA CORP, TORONTO | Emerging Mkts | 482 | 2 | 0.00 |
| ITG HOENIG LIMITED, HONG KONG | Emerging Mkts | 104 526,370 | 3,263 | 0.01 |

| Brokerage Firm | Investment Type | Number of shares traded | Commissions paid | Average cost per share |
|---------------------------------------|----------------------|-------------------------|---------------------|------------------------|
| ITG INC | Emerging Mkts | 52,558 | 325 | 0.01 |
| J.P. MORGAN CLEARING CORP. | Emerging Mkts | 210,570 | 506 | 0.01 |
| J.P. MORGAN SECURITES SINGAP PV LTD | Emerging Mkts | 12,696 | 172 | |
| J.P.MORGAN SECURITIES (FAR EAST) LT | Emerging Mkts | 38 | 82 | 0.01 |
| JEFFERIES AND COMPANIES INC JERSEY | Emerging Mkts | | | 2.15 |
| JEFFERIES LLC | Emerging Mkts | 45,478 224,349 | 749 | 0.02 |
| JEFFRIES INTERNATIONAL LTD LONDON | Emerging Mkts | | 1,560 | 0.01 |
| JP MORGAN CHASE BANK | Emerging Mkts | 156,888 116,330 | 2,559 | 0.02 |
| JP MORGAN SECS INC NEW YORK | Emerging Mkts | 43,179 | 3,789 2,433 | 0.03 |
| JP MORGAN SECS LTD LONDON | Emerging Mkts | 8,571 | 106 | 0.06 0.01 |
| JP MORGAN SECURITIES (TAIWAN) LTD | Emerging Mkts | 35,185 | 395 | 0.01 |
| JP Morgan Securities Inc | Emerging Mkts | 278,311 | 2,444 | 0.01 |
| JPMORGAN CHASE BANK NA | Emerging Mkts | 1,773 | 318 | 0.18 |
| JPMORGAN SECURIT (ASIA PACIFIC), HK | Emerging Mkts | 196,583 | 374 | 0.00 |
| KB SECURITIES N.V. ANTWERPEN | Emerging Mkts | 478 | 52 | 0.11 |
| KESTREL CAPITAL LTD NAIROBI | Emerging Mkts | 18,946 | 2,843 | 0.15 |
| KIM ENG SECS PTE LTD SINGAPORE | Emerging Mkts | 24,640 | 478 | 0.02 |
| KINGSWAY FINANCIAL SERVICES GP LTD | Emerging Mkts | 34,040 | 120 | 0.00 |
| KOTAK SECURITIES MUMBAI | Emerging Mkts | 1,945 | 3,414 | 1.76 |
| LARRAIN VIAL, SANTIAGO | Emerging Mkts | 268 | 553 | 2.07 |
| LIQUIDNET ASIA LIMITED | Emerging Mkts | 38,158 | 229 | 0.01 |
| MACQUARIE BANK LIMITED | Emerging Mkts | 259,746 | 3,034 | 0.01 |
| MACQUARIE CAPITAL USA INC | Emerging Mkts | 33,975 | 124 | 0.00 |
| MACQUARIE SECS (SINGAPORE) PTE LTD | Emerging Mkts | 782 | 121 | 0.15 |
| MACQUARIE SECURITIES LTD - SEOUL | Emerging Mkts | 25 | 1,417 | 55.86 |
| MACQUARIE SECURITIES LTD, HONG KONG | Emerging Mkts | 614,926 | 4,547 | 0.01 |
| MACQUARIE SECURITIES, MUMBAI | Emerging Mkts | 5,471 | 9,418 | 1.72 |
| MERRILL LYNCH AND CO INC NEW YORK | Emerging Mkts | 68,358 | 1,003 | 0.01 |
| MERRILL LYNCH CO INC (AGS), NY | Emerging Mkts | 86,448 | 2,586 | 0.03 |
| MERRILL LYNCH INTERNATIONAL | Emerging Mkts | 6 | 29 | 5.15 |
| MERRILL LYNCH INTL LTD EQUIT SETTL | Emerging Mkts | 1,801,706 | 9,226 | 0.01 |
| MERRILL LYNCH PIERCE FENNER Smith I | Emerging Mkts | 146,865 | 2,165 | 0.01 |
| MERRILL LYNCH, PIERCE, FENNER, SMITH | Emerging Mkts | 141,042 | 2,387 | 0.02 |
| MIRAE ASSET SECURITIES MORGAN STANLEY | Emerging Mkts | 10 | 1,469 | 145.85 |
| | Emerging Mkts | 44,154 | 4,125 | 0.09 |
| MORGAN STANLEY AND CO INTL LTD,LDN | Emerging Mkts | 10,719 | 762 | 0.07 |
| MORGAN STANLEY AND CO INTL, SEOUL | Emerging Mkts | 27 | 3,767 | 141.61 |
| MORGAN STANLEY AND CO LLC | Emerging Mkts | 412,381 | 2,575 | 0.01 |
| MORGAN STANLEY CO INC NEW YORK | Emerging Mkts | 2,329,467 | 25,517 | 0.01 |
| MORGAN STANLEY CO INTL LTD TAIPEI | Emerging Mkts | 70,468 | 4,592 | 0.07 |
| MORGAN STANLEY INDIA COMPANY PVT | Emerging Mkts | 50 | 59 | |
| MORGAN STANLEY SECURITIES, LONDON | Emerging Mkts | 1,252 | | 1.18 |
| NESBITT BURNS INC TORONTO | Emerging Mkts | 103,638 | 2 1,852 | 0.00 |
| NOMURA FINANCIAL ADVISORY AND S. | Emerging Mkts | 10,601 | 2,543 | 0.02 |
| NOMURA FINANCIAL AND INVESTMENT K. | Emerging Mkts | 27 | 2,543 890 | 0.24 |
| NOMURA INTERNATIONAL LTD TAIPEI | Emerging Mkts | 84,487 | | 32.55 |
| NOMURA INTERNATIONAL PLC LONDON | Emerging Mkts | | 479 | 0.01 |
| NOMURA SECURITIES INTL INC | Emerging Mkts | 30,805 | 124 | 0.00 |
| | 10 | 225,572 5 | 1,302 | 0.01 |

Schedule 5A

| Brokerage Firm | Investment Type | Number of shares traded | Commissions paid | Average cost per share |
|---|--------------------------------|----------------------------|---|------------------------|
| NOMURA SECURITIES INTL INC NY | Emerging Mkts | 111,444 | 1,600 | 0.01 |
| PERSHING LLC | Emerging Mkts | 67,598 | 742 | 0.01 |
| RBC DOMINION SECURITIES TORONTO | Emerging Mkts | 73,263 | 2,512 | 0.03 |
| RESULT OF RIGHTS SALE | Emerging Mkts | 58,078 | 108 | 0.00 |
| ROYAL BANK OF CANADA EUROPE LTD. | Emerging Mkts | 465,356 | 155 | 0.00 |
| SAMSUNG SECURITIES CO LTD SEOUL | Emerging Mkts | 64 | 3,497 | 54.32 |
| SANFORD C BERNSTEIN AND CO LLC | Emerging Mkts | 286,494 | 549 | 0.00 |
| SG AMERICAS SECURITIES LLC | Emerging Mkts | 30,152 | 401 | 0.01 |
| | Emerging Mkts | 3,129 | 540 | 0.17 |
| SG ASIA SECURITIES (INDIA) PVT LTD | 2 4 | · | | |
| SG COWEN SECURITIES CORP, NEW YORK SG SECURITIES (HK) LIMITED | Emerging Mkts Emerging Mkts | 82,367 352,519 | 1,373 5,005 | 0.02 0.01 |
| • • | | - | 301 | |
| SG SECURITIES (LONDON) LTD, TAIPEI | Emerging Mkts | 21,611 | | 0.01 |
| SHENYIN AND WANGUO SECS CO LTD | Emerging Mkts | 3,141 | 65 | 0.02 |
| SOCIETE GENERALE LONDON BRANCH, | Emerging Mkts | 128,153 | 1,497 | 0.01 |
| STOCKBROKERS BOTSWANA LTD, GAB. | Emerging Mkts | 14,131 | 710 | 0.05 |
| TAIWAN DEPOSITORY AND CLEARING C. | Emerging Mkts | 31,819 | 3,311 | 0.10 |
| TERA MENKUL DEGERLER A.S. | Emerging Mkts | 112,052 | 553 | 0.00 |
| TROIKA DIALOG (UK) LIMITED | Emerging Mkts | 702 | 126 | 0.18 |
| TUNISIE VALEURS, TUNIS | Emerging Mkts | 39,570 | 1,765 | 0.04 |
| UBS AG | Emerging Mkts | 116,642 | 981 | 0.01 |
| UBS AG LONDON EQUITIES | Emerging Mkts | 1,214,517 | 15,520 | 0.01 |
| UBS SECURITIES ASIA LTD | Emerging Mkts | 302,526 | 3,371 | 0.01 |
| UBS SECURITIES CANADA INC | Emerging Mkts | 63,475 | 194 | 0.00 |
| UBS SECURITIES INDIA PVT | Emerging Mkts | 1,457 | 767 | 0.53 |
| UBS SECURITIES LLC | Emerging Mkts | 204,901 | 1,604 | 0.01 |
| UBS SECURITIES LTD, SEOUL BRANCH | Emerging Mkts | 0 | 51 | 195.42 |
| UBS SECURITIES SINGAPORE PTE. LTD | Emerging Mkts | 16,508 | 701 | 0.04 |
| WINTERFLOOD SECURITIES LTD | Emerging Mkts | 35,164 | 58 | 0.00 |
| BARCLAYS CAPITAL INC FIXED | Fixed Income | 4,700,000 | - | 0.00 |
| BARCLAYS CAPITAL INC/LE | Fixed Income | 3,623,735 | 485 | 0.00 |
| BARCLAYS CAPITAL LE | Fixed Income | 8,932,113 | - | 0.00 |
| BLAIR WILLIAM & COMPANY LLC | Fixed Income | 37,000 | • | 0.00 |
| BMOCM/BONDS BNP PARIBAS SEC CORP/BOND | Fixed Income Fixed Income | 225,000 75,000 | • | 0.00 0.00 |
| BNP PARIBAS SEC CORP/BONDS | Fixed Income | 170,000 | • | 0.00 |
| BNP PARIBAS SECURITIES CORP | Fixed Income | 1,081,450 | • | 0.00 |
| BNP SECURITIES (U.S.A.) INC | Fixed Income | 1,522,000 | • | 0.00 |
| BNY/SUNTRUST CAPITAL MARKETS | Fixed Income | 1,755,000 | - | 0.00 |
| BTIG LLC | Fixed Income | 66,000 | • | 0.00 |
| CANTOR FITZGERALD & CO. | Fixed Income | 752,000 | • | 0.00 |
| CIBC WORLD MARKETS CORP | Fixed Income | 75,000 | - | 0.00 |
| CITIGROUP GLOBAL MARKETS INC | Fixed Income Fixed Income | 18,083,253 | 376 | 0.00 0.00 |
| CITIGROUP GLOBAL MKTS/SALOMON CONVERSION | Fixed Income | 4,830,000 100,000 | • | 0.00 |
| CREDIT SUISSE SECS (USA) LLC | Fixed Income | 13,462,830 | 11 | 0.00 |
| CRT CAPITAL GROUP LLC | Fixed Income | 100,000 | • | 0.00 |
| DAIWA CAP MKTS AMERICA INC | Fixed Income | 4,634,000 | • | 0.00 |
| DEUTSCHE BANC SECURITIES INC. | Fixed Income | 14,903,138 | 190 | 0.00 |
| | 1 | .06 | | |

106

Schedule of Broker's Commissions For Fiscal Year Ended June 30, 2013

Schedule 5A

| Brokerage Firm | Investment Type | Number of shares traded | Commissions paid | Average cost per share |
|--|--------------------|----------------------------|------------------|------------------------|
| FRIEDMAN, BILLINGS & RAMSEY | Fixed Income | 18,000 | | 0.00 |
| GOLDMAN SACHS AND CO | Fixed Income | 19,091,867 | 59 | 0.00 |
| GREENWICH CAPITAL MARKETS INC | Fixed Income | 325,000 | | 0.00 |
| J.P MORGAN SECURITIES INC. | Fixed Income | 7,176,054 | • | 0.00 |
| J.P. MORGAN CLEARING CORP. | Fixed Income | 6,071,595 | 132 | 0.00 |
| J.P. MORGAN SECURITIES LLC | Fixed Income | 11,100,000 | - | 0.00 |
| JEFFERIES LLC | Fixed Income | 4,414,996 | 15 | 0.00 |
| LAZARD FRERES & COMPANY | Fixed Income | 929,381 | 1.006 | 0.00 |
| MERRILL LYNCH PIERCE FENNER | Fixed Income | 34,417,475 | 461 | 0.00 |
| MILLER TABAK ROBERTS SEC LLC | Fixed Income | 113 | | |
| MITSUBISHI UFJ SECS (USA) INC | Fixed Income | 645,000 | - | 0.00 |
| MIZUHO SECURITIES USA INC | Fixed Income | 313,000 | - | 0.00 |
| MORGAN STANLEY & CO LLC | Fixed Income | 5,096,362 | - 51 | 0.00 |
| NATL FINANCIAL SERVICES LLC | Fixed Income | 75,000 | 51 | 0.00 |
| NOMURA SECURITIES INTL INC | Fixed Income | 3,629,859 | • | 0.00 |
| NOMURA SECURITIES/FIX INCOME | Fixed Income | 570.000 | • | 0.00 |
| OPPENHEIMER AND CO INC | Fixed Income | 1,497,000 | • | 0.00 |
| PERSHING LLC | Fixed Income | 1,938,000 | • | 0.00 |
| PURCHASE OFFER | Fixed Income | 4,018,000 | • | 0.00 |
| RAYMOND, JAMES & ASSOC., INC. | Fixed Income | • | • | 0.00 |
| RBC CAPITAL MARKETS LLC | Fixed Income | 103,000 | • | 0.00 |
| RBS SECURITIES IMC | Fixed Income | 395,000 | • | 0.00 |
| RECEIPTS FROM FISCAL AGENTS | Fixed Income | 33,000 | - | 0.00 |
| EAPORT GROUP SECURITIES, LLC | Fixed income | 1,374,000 | • | 0.00 |
| EAPORT SECURITIES CORPORATION | Fixed Income | 57,000 | • | 0.00 |
| TERNE AGEE & LEACH INC | Fixed Income | 125,000 | - | 0.00 |
| TIFEL NICHOLAUS & CO, INC | Fixed Income | 5,690,000 | • | 0.00 |
| HE PRINCERIDGE GROUOP LLC | Fixed Income | 408,000 | 650 | 0.00 |
| BS SECURITIES LLC | Fixed Income | 75,000 | • | 0.00 |
| ELLS FARGO SECS LLC | Fixed Income | 2,521,050 | 11 | 0.00 |
| BN AMRO CLEARING BANK N V | REITS | 5,334,695 | 127 | 0.00 |
| AIRD ROBERT W AND CO INC | REITS | 896 | 356 | 0.40 |
| ARCLAYS CAPITAL LE | REITS | 4,417 | 195 | 0.04 |
| ARCLAYS CAPITAL SECS LONDON | | 127,974 | 3,860 | 0.03 |
| NP PARIBAS PEREGRINE SECS HK | REITS | 691 | 2,135 | 3.09 |
| NY CONVERGEX EXEC SOLUTION | REITS | 1,429 | 1,567 | 1.10 |
| ANTOR FITZGERALD AND CO INC | REITS | 3,378 | 68 | 0.02 |
| | REITS | 84,507 | 1,750 | 0.02 |
| TATION GROUP BCC CLRG NY | REITS | 94,937 | 3,312 | 0.03 |
| TIGROUP GLOBAL MARKETS INC | REITS | 176,615 | 3,721 | 0.02 |
| TIGROUP GLOBAL MARKETS LTD, | REITS | 16,309 | 123 | 0.01 |
| OWEN AND CO LLC | REITS | 30,693 | 987 | 0.03 |
| REDIT SUISSE FIRST BOSTON | REITS | 244,348 | 7,241 | 0.03 |
| REDIT SUISSE FIRST BOSTON HK | REITS | 24,814 | 1,149 | 0.05 |
| CARNEGIE AB, STOCKHOLM | REITS | 392 | 142 | 0.36 |
| IWA SECURITIES SMBC HK LTD | REITS | 26,166 | 350 | 0.01 |
| UTSCHE BANC SECURITIES INC | REITS | 112,025 | 3,384 | 0.03 |
| UTSCHE BANK SECURITIES INC | REITS | 2 | 10 | 4.21 |
| ERCORE GROUP LLC | REITS | 32,991 | 1,397 | |
| ELITY CAPITAL MARKETS | REITS | 62,706 | 1,254 | 0.04 |
| RTIS BK (NEDERLAND) NV | REITS | 2,797 | | 0.02 |
| THE CONTRACTOR OF THE CONTRACT | | | | |
| ED, ALBERT + CO LLC | REITS | 58,139 | 492 2,751 | 0.18 0.05 |

Schedule of Broker's Commissions

For Fiscal Year Ended June 30, 2013

Schedule 5A

| Brokerage Firm | Investment Type | Number of shares traded | Commissions paid | Average cost per share |
|-----------------------------------|--------------------|-------------------------|------------------|------------------------|
| GOLDMAN SACHS EXECUTION AND CL | REITS | 10,654 | 71 | 0.01 |
| GOLDMAN SACHS INTL LONDON | REITS | 33,186 | 715 | 0.02 |
| G-TRADE SERVICES LTD | REITS | 11,349 | 362 | 0.03 |
| HSBC SECS BROKERS(ASIA) LTD | REITS | 1,495 | 339 | 0.23 |
| INSTINET SINGAPORE SERVICES PTE | REITS | 222,358 | 2,175 | 0.01 |
| INVESTMENT TECHNOLOGY GRP NY | REITS | 12,112 | 242 | 0.02 |
| ISI GROUP INC | REITS | 67,301 | 3,031 | 0.05 |
| ITG AUSTRALIA LIMITED | REITS | 168 | 262 | 1.56 |
| IXIS SECURITIES | REITS | 3,751 | 365 | 0.10 |
| J P Morgan Clearing Corp | REITS | 11,778 | 353 | 0.03 |
| J.P MORGAN SECURITIES INC. | REITS | 55,769 | 1,968 | 0.04 |
| J.P. MORGAN CLEARING CORP. | REITS | 636 | 19 | 0.03 |
| JEFFERIES AND COMPANIES INC J | REITS | 2,170 | 479 | 0.22 |
| JEFFERIES LLC | REITS | 77,602 | 1,793 | 0.02 |
| JEFFRIES INTERNATIONAL LTD Ln | REITS | 137,700 | 2,214 | 0.02 |
| JONESTRADING INST SVCS LLC | REITS | 3,350 | 67 | 0.02 |
| JP MORGAN SECS LTD LONDON | REITS | 18,219 | 443 | 0.02 |
| JP Morgan Securities Inc | REITS | 29,060 | 1,130 | 0.04 |
| JPMORGAN SECURIT (ASIA PACIFIC) | REITS | 26,382 | 1,422 | 0.05 |
| KEEFE BRUYETTE + WOODS INC | REITS | 10,952 | 548 | 0.05 |
| KEYBANC CAPITAL MARKETS INC | REITS | 133,257 | 4,087 | 0.03 |
| LIQUIDNET INC | REITS | 23,761 | 475 | 0.02 |
| MACQUARIE BANK LIMITED | REITS | 1,441 | 20 | 0.01 |
| MACQUARIE CAPITAL USA INC | REITS | 52,227 | 1,072 | 0.02 |
| MACQUARIE SECS USA INC | REITS | 23,992 | 576 | 0.02 |
| MERRILL LYNCH INTL LTD EQUIT S | REITS | 153,076 | 2,429 | 0.02 |
| MERRILL LYNCH PIERCE FENNER | REITS | 164,579 | 5,758 | 0.03 |
| | REITS | 61 | 414 | 6.75 |
| MERRILL LYNCH, PIERCE, FENNER Smt | REITS | 32,644 | 1,632 | 0.05 |
| MOGAVERO LEE AND CO INC | REITS | 19,164 | 910 | 0.05 |
| MORGAN STANLEY AND CO LLC | REITS | 16,056 | 311 | 0.02 |
| OPPENHEIMER AND CO INC | REITS | 17,607 | 93 | 0.01 |
| PAREL, PARIS | REITS | 1,113,442 | 34,054 | 0.03 |
| PERSHING LLC | REITS | 140,724 | 1,653 | 0.01 |
| PERSHING SECURITIES LONDON | REITS | 9,003 | 330 | 0.04 |
| RAYMOND JAMES and ASSOC INC | | 11,124 | 445 | 0.04 |
| RAYMOND JAMES AND ASSOCIATES | REITS | 225,643 | 7,978 | 0.04 |
| RBC CAPITAL MARKETS CORP | REITS | • | | |
| RBC DOMINION SECURITIES TORONTO | REITS | 6,907 | 276 | 0.04 |
| SCOTIA CAPITAL MKTS, TORONTO | REITS | 1,836 | 55 | 0.03 |
| STANDARD CHARTERED BANK (Hk) | REITS | 21,134 | 335 | 0.02 |
| STIFEL NICHOLAUS + CO, INC | REITS | 189,640 | 6,552 | 0.03 |
| TORONTO DOMINION SECURITIES | REITS | 10,281 | 308 | 0.03 |
| UBS SECURITIES ASIA LTD | REITS | 210,612 | 4,231 | 0.02 |
| UBS SECURITIES LLC | REITS | 978,231 | 21,843 | 0.02 |
| WEEDEN+ CO | REITS | 37,356 | 1,052 | 0.03 |
| WELLS FARGO SECURITIES, LLC | REITS | 132,980 | 4,914 | 0.04 |
| GRAND TOTAL | | 299,416,194 | 1,756,809 | 0.01 |

Schedule 6A

Investment Summary

Year Ended June 30, 2013

(Dollar amount in thousands)

| | Market Value | Percent of Total Market Value |
|--|----------------------|--------------------------------|
| Type of Investment: | | |
| Short Term investments: | | |
| Short Term Investments | \$ 184,694 | 1.77% |
| Commercial paper | 208,161 | 1.99% |
| Total Short-Term | 392,855 | 3.76% |
| Fixed Income: | | |
| U.S. Govt Securities | 984,390 | 8.70% |
| Corporate Bonds | 909,186 | 9.42% |
| Yankee Bonds | 8,918 | 0.10% |
| Total Fixed Income | 1,902,494 | 18.22% |
| Domestic Equities: | 3,440,857 | 32.93% |
| Private Equity and Hedge Fund | 1,119,593 | 10.71% |
| Private Equity-real estate | 336,060 | 3.22% |
| Mutual Funds: | | |
| International Equity | 1,698,801 | 16.26% |
| Fixed Investment | 337,426 | |
| Domestic Equity | - | 0.22% |
| Mortgage Debt | 50,067 | 0.48% |
| Treasury Inflation -protected securities | 232,465 | 2.61% |
| Total Mutual Funds | 2,318,759 | 22.19% |
| Promissory Notes | 1,788 | 0.02% |
| Collateral from Securities Lending | 936,985 | 8.96% |
| Total Market Value | \$ 10,449,391 | 100.00% |
| | | |

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]

New York City Fire Pension Fund

Comprehensive Annual Financial Report

A Pension Trust Fund of the City of New York



Actuarial Section

Part IV

Fiscal Year Ended June 30, 2013

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]



OFFICE OF THE ACTUARY

255 GREENWICH STREET • 9th FLOOR NEW YORK, NY 10007 (212) 442 - 5775 • FAX: (212) 442 - 5777

ROBERT C. NORTH, JR. CHIEF ACTUARY

November 8, 2013

Board of Trustees
New York Fire Department
Pension Fund
9 Metrotech Center
Brooklyn, NY 11201-3857

Re: Actuarial Information for the Comprehensive Annual Financial Report ("CAFR") for the Fiscal Year Ended June 30, 2013

Dear Members:

The financial objective of the New York Fire Department Pension Fund ("FIRE" or the "Plan") is to fund members' retirement benefits during their active service and to establish 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, 2011 (Lag) actuarial valuation to determine Fiscal Year 2013 Employer Contributions).

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

For Fiscal Year 2013, the Employer Contributions to FIRE, based on the June 30, 2011 (Lag) actuarial valuation, are equal to those recommended by the Actuary for the New York City Retirement Systems (the "Actuary") and represent the Statutory Contributions.

Employer Contributions for Fiscal Year 2013 were also equal to the Annual Required Contributions as defined under Governmental Accounting Standards Board ("GASB") Statement Number 25 ("GASB 25") as amended by GASB Statement No. 50 ("GASB 50").

The Annual Required Contributions, computed in accordance with GASB 25 as amended by GASB 50, are consistent with generally accepted actuarial principles.

Actuarial Assumptions and Methods

Provided in this Actuarial Section of the CAFR is a "Summary of Actuarial Assumptions and Methods in Effect for the June 30, 2011 (Lag) Actuarial Valuation." These actuarial assumptions and methods were first employed in the June 30, 2010 (Lag) actuarial valuation that was used to determine Fiscal Year 2012 Employer Contributions to the Plan (the "2012 A&M").

These actuarial assumptions and methods are generally unchanged from those employed in the June 30, 2010 (Lag) actuarial valuation that was used to determine Fiscal Year 2012 Employer Contributions to the Plan.

After reviewing the results of independent actuarial studies dated December 2011 by The Hay Group ("Hay") and November 2006 by The Segal Company ("Segal") in accordance with Section 96 of the New York City Charter, the Actuary issued a February 10, 2012 Report entitled "Proposed Changes in Actuarial Assumptions and Methods for Determining Employer Contributions for Fiscal Years Beginning on and After July 1, 2011 for the New York City Fire Department Pension Fund" ("February 2012 Report").

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

Benefits and Census Data

A summary of the benefits applicable to Plan members included in the June 30, 2011 (Lag) actuarial valuation is shown earlier in the Introductory Section of the CAFR.

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

A summary of the census data used in the June 30, 2011 (Lag) actuarial valuation is included in this CAFR. A summary of the census data used in the June 30, 2010 (Lag) actuarial valuation of the Plan is available in the June 30, 2012 CAFR.

Funded Status

The Funded Status of the Plan is usually expressed in various relationships of Assets to Liabilities.

With respect to the Funded Status of the Plan, included in the Financial Section of the CAFR is a Schedule of Funding Progress (Schedule 1).

Included in the Actuarial Section of the CAFR is a Solvency Test (i.e., Comparative Summary of Actuarial Values and Percentages Covered by Actuarial Value of Assets) as prescribed by the Government Finance Officers Association ("GFOA"). This Solvency Test represents an alternative approach to describing progress toward funding objectives.

In addition to the Schedule of Funding Progress and the Solvency Test, included for informational purposes in the Actuarial Section of the CAFR (following the Solvency Test) is an Additional Discussion of Plan Funding and Other Measures of Funded Status that provides different comparisons between the Assets and Liabilities of the Plan.

Presentation Style and Sources of Information

The actuarial information herein is being presented in a manner believed to be consistent with the requirements of the GFOA and, where applicable, with GASB 25 which was adopted for financial reporting purposes beginning Fiscal Year 1995 and with GASB 50 which was adopted for financial reporting purposes beginning Fiscal Year 2008.

The Additional Discussion of Plan Funding and Other Measures of Funded Status represents information provided by the Actuary to assist those users who desire additional disclosures.

As prescribed by GASB 25, as amended by GASB 50, included in the Financial Section of the CAFR are the following schedules prepared by the OA:

- Schedule of Funding Progress.
- Schedule of Employer Contributions.
- Schedule of Actuarial Assumptions and Methods.

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

- Summary of Actuarial Assumptions and Methods in Effect for the June 30, 2011 (Lag)
 Actuarial Valuation.
- Active Member Valuation Data.
- Summary of Plan Membership.
- Retirants and Beneficiaries Added to and Removed from Rolls.
- Statutory vs. Annual Required Contributions.
- Funded Status Based on Entry Age Actuarial Cost Method.
- Comparative Summary of Actuarial Values and Percentages Covered by Actuarial Value of Assets – Solvency Test.
- Additional Discussion of Plan Funding and Other Measures of Funded Status.

The Summary of Plan Membership in the Financial Section of the CAFR was prepared by the OA.

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

Acknowledgement of Qualification

A Statement of Actuarial Opinion ("SAO"), acknowledging the qualification of the Actuary to render the actuarial opinion contained herein, appears at the end of this Actuarial Section.

Respectfully submitted,

Robert C. North, Jr., FSA, MAAA

Chief Actuary

RCN/bs

Att.

cc: Ms. M.E. Basso

Mr. A.G. Garcia

Mr. J.R. Gibney

Mr. E. Hue

Mr. S.H. Rumley

Ms. L. Tian

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION

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

The most recently completed study was published by The Hay Group ("Hay"), dated December 2011 and analyzed experience for Fiscal Years 2006 through 2009. Hay made recommendations with respect to the actuarial assumptions and methods based on their analysis.

The previously completed study was published by The Segal Company ("Segal") dated November 2006, and analyzed experience for Fiscal Years 2002 through 2005. Segal made recommendations with respect to the actuarial assumptions and methods based on their analysis.

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

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

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

- (2) The investment rate of return assumption is 7.0% per annum, net of expenses.
- (3) The mortality tables for service and disability pensioners were developed from an experience study of the Plan's and the predecessor Plan's pensioners. Sample probabilities are shown in Table 1a. The mortality tables for beneficiaries were developed from experience review. 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 Tables 4a and 4b for members withdrawing from Active Service for Service Retirement.
- (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.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION (Cont'd)

- Overtime earnings are also used to estimate salaries at termination, retirement or death. A Dual Overtime assumption (i.e., a Baseline Overtime assumption for most years and a separate overtime assumption for the years included in the calculation of Final Salary or Final Average Salary) was introduced as of the June 30, 1995 actuarial valuation. Sample percentage increases in the Baseline Overtime assumptions and the Dual Overtime assumptions effective beginning with the June 30, 2010 (Lag) actuarial valuation 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 COLA assumption is 1.5% per annum for Tier II members and 2.5% per annum for Tier III members.
- (8) The valuation assumes a closed group of members. Salaries of members on the valuation date are assumed to increase in accordance with the Salary Scale.
- (9) Beginning with the June 30, 2010 (Lag) actuarial valuation, the Entry Age Actuarial Cost Method ("EAACM") of funding is utilized by the Plan's Actuary to calculate the contribution required of the Employer.

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

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

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

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

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION (Cont'd)

(10) One-Year Lag Methodology ("Lag" or "OYLM") uses a June 30, 2011 valuation date to determine Fiscal Year 2013 Employer Contributions.

This methodology requires technical adjustments to certain components used to determine Fiscal Year 2013 Employer Contributions as follows:

Present Value of Future Salary ("PVFS")

The PVFS at June 30, 2011 is reduced by the value of salary projected to be paid during Fiscal Year 2012.

Salary for Determining Employer Contributions

Salary used to determine the employer normal contribution is the salary projected to be paid during Fiscal Year 2013 to members on payroll at June 30, 2011.

UAAL Payments

For determining the UAAL payments for Fiscal Year 2013, and to be consistent with the OYLM, the UAAL as of June 30, 2011 is adjusted by the discounted value of employer normal contributions paid during Fiscal Year 2012.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION (Cont'd)

(11) Beginning with the June 30, 2004 (Lag) actuarial valuation, the Actuarial Asset Valuation Method ("AAVM") was changed to a method that reset the Actuarial Asset Value ("AAV") to Market Value (i.e., "Market Value Restart") as of June 30, 1999. As of each June 30 thereafter, the AAVM recognizes investment returns greater or less than expected over a period of six years.

Under this revised AAVM, any Unexpected Investment Returns ("UIR") for Fiscal Years 2000 and later are phased into the AAV beginning the following June 30 at a rate of 15%, 15%, 15%, 15%, 20% and 20% per year (or cumulative rates of 15%, 30%, 45%, 60%, 80% and 100% over a period of six years).

These revised averaging factors were applied against the UIR computed under the prior five-year AAVM used for Fiscal Years 2000 to 2004.

The revised AAVM was utilized for the first time in the June 30, 2004 (Lag) actuarial valuation to determine the Fiscal Year 2006 Employer Contributions in conjunction with the One-Year Lag Methodology and the revised economic and noneconomic assumptions.

The AAVM in effect for the June 30, 2009 (Lag) actuarial valuation was unchanged from the AAVM used in the June 30, 2008 (Lag) actuarial valuation.

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

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

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

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

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION (Cont'd)

(12) The obligations of the Plan to the Firefighters' Variable Supplements Fund ("FFVSF") and the Fire Officers' Variable Supplements Fund ("FOVSF") are recognized through the Liability Valuation Method.

Under this method, the APV of Future SKIM from the Plan to the FFVSF and FOVSF 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 FFVSF and FOVSF. The APV of Future SKIM is computed as the excess, if any, of the APV of benefits of the FFVSF and FOVSF offset by the AAV of the FFVSF and FOVSF, respectively. Under the EAACM, a portion of the APV of Future SKIM is reflected in the APV of Future Normal Costs and a portion is reflected in the AAL.

- (13) Distinct male and female probabilities for mortality are used effective June 30, 1995.
- (14) The Actuarial Present Value of Future Benefits ("APVB") as of June 30, 2011, used to determine the Fiscal Year 2013 Employer Contributions, includes estimates of liabilities for:
 - World Trade Center Post-Retirement Reclassifications.
- (15) As discussed herein, the actuarial assumptions and methods are generally unchanged from those of the June 30, 2010 (Lag) actuarial valuation.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 1a

Deaths among Service and Disability Pensioners

Percentage of Pensioners Dying within Next Year

| | Service | Service Pensioners | | Disability Pensioners | | |
|-----|----------|--------------------|----------|------------------------------|--|--|
| Age | Males | <u>Females</u> | Males | Females | | |
| 40 | .1167% | .0532% | .1997% | .0595% | | |
| 45 | .1555 | .0747 | .2427 | .1101 | | |
| 50 | .1851 | .1112 | .2907 | .1945 | | |
| 55 | .3410 | .1815 | .4170 | .3832 | | |
| 60 | .5096 | .4081 | .6538 | .5537 | | |
| 65 | .8721 | .6640 | 1.0885 | .9165 | | |
| 70 | 1.2401 | .9654 | 1.6834 | 1.5179 | | |
| 75 | 2.1980 | 1.4017 | 2.5814 | 2.5123 | | |
| 80 | 4.0910 | 2.5675 | 4.6502 | 4.4692 | | |
| 85 | 8.2212 | 4.4439 | 8.9563 | 7.8883 | | |
| 90 | 13.6044 | 8.3918 | 13.7694 | 13.5234 | | |
| 95 | 25.0224 | 15.9320 | 25.7915 | 20.1960 | | |
| 100 | 33.6045 | 23.1601 | 33.6045 | 23.4195 | | |
| 105 | 39.7886 | 29.3116 | 39.7886 | 29.3116 | | |
| 110 | 100.0000 | 100.0000 | 100.0000 | 100.0000 | | |

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 1b

Deaths among Beneficiaries

Percentage of Beneficiaries Dying within Next Year

| Age | Males | <u>Females</u> |
|-----|----------|----------------|
| 20 | .0214% | .0124% |
| 25 | .0292 | .0146 |
| 30 | .0392 | .0205 |
| 35 | .0719 | .0411 |
| 40 | .1021 | .0591 |
| 45 | .2684 | .1014 |
| 50 | .3401 | .1846 |
| 55 | .5880 | .3893 |
| 60 | .8400 | .7716 |
| 65 | 1.3072 | 1.1533 |
| 70 | 1.8086 | 1.5676 |
| 75 | 2.7100 | 2.2479 |
| 80 | 5.3016 | 3.7819 |
| 85 | 8.4627 | 6.3549 |
| 90 | 15.2335 | 11.5224 |
| 95 | 24.6664 | 19.5152 |
| 100 | 33.6045 | 23.1881 |
| 105 | 39.7886 | 29.3116 |
| 110 | 100.0000 | 100.0000 |

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2011 (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

| Age | Accidental <u>Disability</u> | Ordinary <u>Disability</u> | Ordina <u>Males</u> | ry Death <u>Females</u> | Accidental <u>Death</u> |
|-----|---------------------------------|-------------------------------|------------------------|----------------------------|----------------------------|
| 20 | 0.03% | 0.01% | 0.04% | 0.03% | 0.02% |
| 25 | 0.03 | 0.01 | 0.04 | 0.03 | 0.02 |
| 30 | 0.15 | 0.05 | 0.04 | 0.03 | 0.02 |
| 35 | 0.60 | 0.10 | 0.04 | 0.03 | 0.02 |
| 40 | 1.30 | 0.15 | 0.05 | 0.04 | 0.02 |
| 45 | 2.00 | 0.20 | 0.10 | 0.07 | 0.05 |
| 50 | 3.50 | 0.30 | 0.15 | 0.10 | 0.10 |
| 55 | 5.00 | 1.00 | 0.20 | 0.15 | 0.20 |
| 60 | 15.00 | 6.00 | 0.30 | 0.20 | 0.30 |
| 63 | NA | NA | NA | NA | NA |

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION (Cont'd)

<u>Table 2b</u>

<u>Withdrawals from Active Service (Due to Death or Disability)</u>

<u>Tier I and Tier II Members Eligible for WTC Benefits</u>

Percentage of Active Members Separating within Next Year

| Age | Accidental <u>Disability</u> | Ordinary Disability | Ordinary <u>Males</u> | y Death <u>Females</u> | Accidental <u>Death</u> |
|-----|---------------------------------|------------------------|--------------------------|---------------------------|----------------------------|
| 20 | 0.05% | 0.01% | 0.04% | 0.03% | 0.02% |
| 25 | 0.05 | 0.01 | 0.04 | 0.03 | 0.02 |
| 30 | 0.25 | 0.05 | 0.04 | 0.03 | 0.02 |
| 35 | 1.00 | 0.10 | 0.04 | 0.03 | 0.02 |
| 40 | 2.00 | 0.15 | 0.05 | 0.04 | 0.02 |
| 45 | 3.00 | 0.20 | 0.10 | 0.07 | 0.05 |
| 50 | 5.00 | 0.30 | 0.15 | 0.10 | 0.10 |
| 55 | 8.00 | 1.00 | 0.20 | 0.15 | 0.20 |
| 60 | 21.00 | 6.00 | 0.30 | 0.20 | 0.30 |
| 63 | NA | NA | NA | NA | NA |

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 2c

Withdrawals from Active Service (Due to Death or Disability)

Tier III Members

Percentage of Active Members Separating within Next Year

| Age | Accidental <u>Disability</u> | Ordinary <u>Disability</u> | Ordina <u>Males</u> | ry Death <u>Females</u> | Accidental <u>Death</u> |
|-----|---------------------------------|-------------------------------|------------------------|----------------------------|----------------------------|
| 20 | 0.03% | 0.01% | 0.04% | 0.03% | 0.02% |
| 25 | 0.03 | 0.01 | 0.04 | 0.03 | 0.02 |
| 30 | 0.15 | 0.05 | 0.04 | 0.03 | 0.02 |
| 35 | 0.60 | 0.10 | 0.04 | 0.03 | 0.02 |
| 40 | 1.20 | 0.15 | 0.05 | 0.04 | 0.02 |
| 45 | 1.80 | 0.20 | 0.10 | 0.07 | 0.05 |
| 50 | 2.40 | 0.30 | 0.15 | 0.10 | 0.10 |
| 55 | 3.00 | 1.00 | 0.20 | 0.15 | 0.20 |
| 60 | 8.00 | 6.00 | 0.30 | 0.20 | 0.30 |
| 63 | NA | NA | NA | NA | NA |

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 3
Withdrawals from Active Service

Percentage of Active Members Withdrawing within Next Year

Tier III Early Service Retirement Unreduced Before Reduced All Tiers Years of Full COLA Retirement Withdrawal **Service** NA NA 0 2.00% NA 5 0.40 NA NA NA 0.20 10 NA NA 0.10 15 NA 20 5.00% NA NA 2.00 21 NA 5.00% 22 NA NA 2.00 23 NA NA 2.00 24 NΑ NA

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION (Cont'd)

<u>Table 4a</u>

<u>Withdrawals from Active Service (for Service Retirement)</u>

Tier I and Tier II Members

Percentage of Eligible Active Members Retiring within Next Year

Years of Service Since First Eligible

| Age | <u>0-1</u> | <u>1-2</u> | <u>2+</u> |
|-----|------------|------------|-----------|
| 40 | 10.00% | 2.00% | 2.00% |
| 45 | 10.00 | 2.00 | 2.00 |
| 50 | 15.00 | 2.00 | 2.00 |
| 55 | 20.00 | 6.00 | 6.00 |
| 60 | 20.00 | 12.00 | 12.00 |
| 63 | 100.00 | 100.00 | 100.00 |

Table 4b

Withdrawals from Active Service (for Service Retirement)

Tier III Members - Unreduced with Full COLA

Percentage of Eligible Active Members Retiring within Next Year

Years of Service Since First Eligible

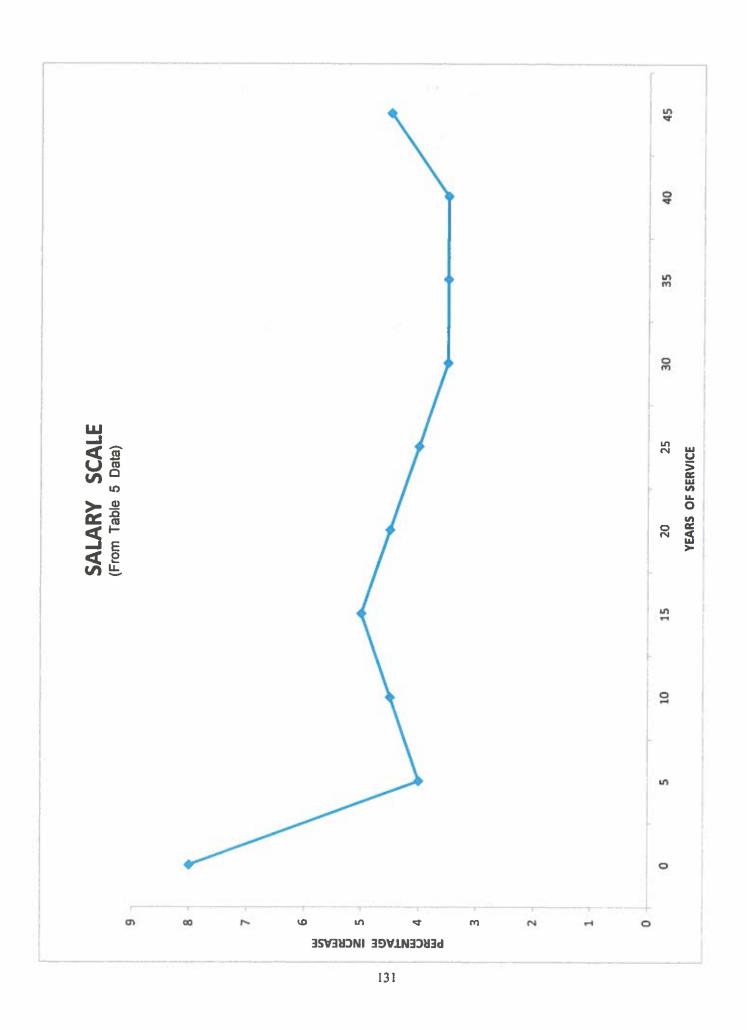
| Age | <u>0-1</u> | <u>1-2</u> | <u>2+</u> |
|-----|------------|------------|-----------|
| 40 | 10.00% | 2.00% | 2.00% |
| 45 | 10.00 | 2.00 | 2.00 |
| 50 | 15.00 | 2.00 | 2.00 |
| 55 | 20.00 | 6.00 | 6.00 |
| 60 | 20.00 | 12.00 | 12.00 |
| 63 | 100.00 | 100.00 | 100.00 |

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS IN EFFECT FOR THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION (Cont'd)

<u>Table 5</u>
Salary Scale

| Assumed Annual Percentage Increases Within Next Year* |
|---|
| 8.00% |
| 4.00 |
| 4.50 |
| 5.00 |
| 4.50 |
| 4.00 |
| 3.50 |
| 3.50 |
| 3.50 |
| 3.50 |
| |

* 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, 2011 (LAG) ACTUARIAL VALUATION (Cont'd)

Table 6

Overtime

| Years of <u>Service</u> | All Tiers Baseline | Tier I/II Dual Service | Tier I/II Dual Disability | Tier III Dual Service | Tier III Dual Disability |
|-------------------------------|-----------------------|---------------------------|------------------------------|-----------------------|--------------------------|
| 0 | 15.00% | 16.00% | 15.00% | 16.00% | 15.00% |
| 5 | 15.00 | 16.00 | 15.00 | 16.00 | 15.00 |
| 10 | 15.00 | 16.00 | 15.00 | 16.00 | 15.00 |
| 15 | 15.00 | 18.00 | 15.00 | 16.00 | 15.00 |
| 20 | 18.00 | 23.00 | 20.00 | 21.00 | 20.00 |
| 25 | 13.00 | 18.00 | 15.00 | 16.00 | 15.00 |
| 30 | 8.00 | 10.00 | 8.00 | 9.00 | 8.00 |
| 35 | 5.00 | 6.00 | 5.00 | 6.00 | 5.00 |
| 40 | 5.00 | 6.00 | 5.00 | 6.00 | 5.00 |
| 45 | 5.00 | 6.00 | 5.00 | 6.00 | 5.00 |

ACTIVE MEMBER VALUATION DATA

| Valuation <u>Date</u> | Number | Annual Payroll(1) | Annual Average Pay | Percentage Increase (Decrease) in <u>Average Pay</u> |
|-----------------------|--------|-------------------|-----------------------|---|
| 6/30/99 | 11,477 | \$729,726,243 | \$63,582 | 5.6% |
| 6/30/00 | 11,492 | 741,486,584 | 64,522 | 1.5 |
| 6/30/01 | 11,333 | 799,232,008 | 70,523 | 9.3 |
| 6/30/02 | 11,271 | 789,694,432 | 70,064 | (0.7) |
| 6/30/03 | 10,860 | 748,763,008 | 68,947 | (1.6) |
| 6/30/04 | 11,239 | 804,974,081 | 71,623 | 3.9 |
| 6/30/04 (Lag) | 11,239 | 864,824,737(2) | 76,948 | 11.6(3) |
| 6/30/05 (Lag) | 11,470 | 908,261,197 | 79,186 | 2.9 |
| 6/30/06 (Lag) | 11,641 | 932,730,174 | 80,125 | 1.2 |
| 6/30/07 (Lag) | 11,528 | 1,000,383,326 | 86,779 | 8.3 |
| 6/30/08 (Lag) | 11,574 | 1,051,591,517 | 90,858 | 4.7 |
| 6/30/09 (Lag) | 11,460 | 1,079,682,340 | 94,213 | 3.7 |
| 6/30/10 (Lag) (4) | 11,080 | 1,138,187,795 | 102,725 | 9.0 |
| 6/30/11 (Lag) | 10,650 | 1,125,459,668 | 105,677 | 2.9 |
| 6/30/12 (Lag) (5) | 10,267 | 1,106,113,386 | 107,735 | 1.9 |

⁽¹⁾ 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.

⁽²⁾ The annualized covered payroll under the One-Year Lag Methodology as of June 30, 2004 used for the Fiscal Year 2006 Employer Contributions differs from that used to compute Fiscal Year 2005 Employer Contributions due to changes in actuarial assumptions and updated information on labor contract settlements.

⁽³⁾ Increase from June 30, 2003.

⁽⁴⁾ Beginning with the June 30, 2010 (Lag) actuarial valuation, the annualized covered payroll is based on revised actuarial assumptions.

⁽⁵⁾ Preliminary.

SUMMARY OF PLAN MEMBERSHIP

As of the June 30, 2011 (Lag) and June 30, 2010 (Lag) actuarial valuations, the Plan's Membership consisted of:

| Group | 2011 (Lag) | 2010 (Lag) |
|---|------------|------------|
| Retirees and beneficiaries currently receiving benefits | 17,017 | 17,140 |
| Terminated vested members not yet receiving benefits | 30 | 33 |
| Other Inactives* | 16 | 23 |
| Active members | 10,650 | 11,080 |
| Total | 27,713 | 28,276 |

^{*} Represents members who are no longer on payroll but not otherwise classified.

RETIRANTS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

(Dollar Amounts in Thousands)

| | Added | to Rolls | Remove | d from Rolis | Rolls En | d of Year | |
|---------------|--------|-------------------------------------|--------|----------------------|----------|-------------------------------------|---------------------------------------|
| Year Ended | Number | Annual Allowances ⁽⁷⁾ | Number | Annual Allowances | Number | Annual Allowances ⁽¹⁾ | % Increase In Annual Allowances |
| 6/30/99 | 524 | \$40,336 | 558 | \$9,525 | 16,146 | \$457,102 | 7.2% |
| 6/30/00 | 576 | 31,757 | 559 | 10,724 | 16,163 | 478,136 | 4.6 |
| 6/30/01 | 599 | 81,850 | 607 | 11,301 | 16,155 | 548,685 | 14.8 |
| 6/30/02 | 1,123 | 56,005 | 563 | 13,109 | 16,715 | 591,581 | 7.8 |
| 6/30/03 | 1,310 | 79,286 | 616 | 15,236 | 17,409 | 655,631 | 10.8 |
| 6/30/04 | 619 | 47,404 | 569 | 15,596 | 17,459 | 687,439 | 4.9 |
| 6/30/05 | 725 | 51,588 | 741 | 23,571 | 17,443 | 715,456 | 4.1 |
| 6/30/06 | 756 | 55,146 | 714 | 21,538 | 17,485 | 749,064 | 4.7 |
| 6/30/07 | 777 | 71,664 | 783 | 26,221 | 17,479 | 794,507 | 6.1 |
| 6/30/08 | 616 | 62,100 | 691 | 23,260 | 17,404 | 833,347 | 4.9 |
| 6/30/09 | 476 | 49,098 | 617 | 20,248 | 17,263 | 862,197 | 3.5 |
| 6/30/10 | 556 | 54,884 | 679 | 25,161 | 17,140 | 891,920 | 3.4 |
| 6/30/11 | 653 | 64,844 | 776 | 35,553 | 17,017 | 921,210 | 3.3 |

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.

⁽²⁾ Balancing Item - Amounts shown include changes due to benefit finalization, changes in benefit type (e.g., Service to Accidental Disability), COLA increases and other changes.

STATUTORY VS. ANNUAL REQUIRED CONTRIBUTIONS

(Dollar Amounts in Thousands)

| Fiscal Year <u>Ended</u> | Statutory Contribution(1) | Annual Required Contribution | Employer Rate of Contribution (2) |
|-----------------------------|---------------------------|---------------------------------|-----------------------------------|
| 6/30/00 | \$182,854 | \$182,854 | 25.058% |
| 6/30/01 | 241,311 | 298,897 | 32.544 |
| 6/30/02 | 302,318 | 346,220 | 37.826 |
| 6/30/03 | 316,967 | 389,502 | 40.138 |
| 6/30/04 | 392,693 | 427,660 | 52.446 |
| 6/30/05 | 489,508 | 518,398 | 60.810 |
| 6/30/06 | 608,771 | 608,771 | 69.774 |
| 6/30/07 | 683,193 | 683,193 | 74.537 |
| 6/30/08 | 780,202 | 780,202 | 82.608 |
| 6/30/09 | 843,751 | 843,751 | 83.238 |
| 6/30/10 | 874,331 | 874,331 | 82.491 |
| 6/30/11 | 890,706 | 890,706 | 82.248 |
| 6/30/12 | 976,895 | 976,895 | 84.990 |
| 6/30/13 | 962,173 | 962,173 | 85.154 |

⁽¹⁾ Represents total employer contributions accrued for fiscal year.

The Statutory Contributions for Fiscal Years 2001 and 2002 were computed in accordance with Chapter 125/00 which provided for a five-year phase-in of the additional actuarial liabilities attributable to Chapter 125/00.

The Statutory Contributions for Fiscal Years 2003 through 2005 were computed in accordance with Chapter 278/02 which extended from five to ten years the phase-in period for the funding of the additional actuarial liabilities attributable to Chapter 125/00.

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 attributable to Chapter 125/00.

Beginning Fiscal Year 2012, the Statutory Contributions were computed in accordance with Chapter 3/13.

⁽²⁾ The Employer Rate of Contribution equals the Statutory Contributions 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 ACTUARIAL COST METHOD (Dollar Amounts in Thousands)

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

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

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

| Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) ⁽¹⁾ - Entry Age (b) | Unfunded AAL (UAAL) – Entry Age (b-a) | Funded Ratio (a/b) | Covered Payroll | UAAL as a Percentage of Covered <u>Payroll</u> ((b-a)/c) |
|--|-------------------------------|--|---|--------------------|--------------------|--|
| June 30, 2012 (Lag) ^{(2),(3)} | \$8,520,769 | \$16,280,003 | \$7,759,234 | 52.3% | \$1,106,113 | 701.5% |
| June 30, 2011 (Lag) ⁽²⁾ | 7,955,668 | 15,808,930 | 7,853,262 | 50.3 | 1,125,460 | 697.8 |
| June 30, 2010 (Lag) ⁽²⁾ | 7,392,656 | 15,349,598 | 7,956,942 | 48.2 | 1,138,188 | 699.1 |
| June 30, 2009 (Lag) | 7,304,758 | 12,864,974 | 5,560.216 | 56.8 | 1,079,682 | 515.0 |
| June 30, 2008 (Lag) | 6,942,992 | 12,313,206 | 5,370,214 | 56.4 | 1,051,592 | 510.7 |
| June 30, 2007 (Lag) | 6,459,130 | 11,731,140 | 5,272,010 | 55.1 | 1,000,383 | 527.0 |
| June 30, 2006 (Lag) | 6,174,111 | 11,061,482 | 4,887,371 | 55.8 | 932,730 | 524.0 |

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

⁽¹⁾ AAL includes the accrued liabilities attributable to the Variable Supplements Funds, net of their Actuarial Asset Values, if any.

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

⁽³⁾ Preliminary.

NEW YORK FIRE DEPARTMENT PENSION FUND COMPARATIVE SUMMARY OF ACTUARIAL VALUES AND PERCENTAGES COVERED BY ACTUARIAL VALUE OF ASSETS SOLVENCY TEST

(Dollar Amounts in Thousands)

Aggregate Accrued Liabilities for

| As of June 30 | Accumulated Member Contributions (A) | Current Retirants and Beneficiaries (B) | Active Members' Employer Financed Portion (C) | Actuarial Value of Assets (D) | (A | Percentage of Actuarial Values Covered by Actuarial Value of Assets (B) | harial by Assets (C) |
|---------------|--------------------------------------|---|---|-------------------------------|-----------|---|----------------------|
| 1999 | \$370,092 | \$4,005,134 | \$2,117,282 | \$6,179,799 | 100% | 100% | 00 U1 de |
| 2000 | 396,418 | 4,773,314 | 2,267,706 | 6,388,132 | 100 | 100 | 54 |
| 2001 | 446,921 | 4,939,847 | 2,467,328 | 6,525,746 | 100 | 100 | 46 |
| 2002 | 496,972 | 5,457,660 | 2,357,209 | 6,612,273 | 100 | 100 | 28 |
| 2003 | 537,841 | 6,159,223 | 2,026,273 | 6,441,534 | 100 | 96 | 0 |
| 2004 | 582,691 | 6,474,286 | 2,115,777 | 6,185,754 | 100 | 87 | 0 |
| 2004 (Lag) | 582,691 | 6,534,286 | 2,667,287 | 6,277,298 | 100 | 87 | 0 |
| 2005 (Lag) | 582,259 | 6,740,143 | 2,832,468 | 6,169,209 | 100 | 83 | 0 |
| 2006 (Lag) | 661,712 | 7,319,033 | 2,915,997 | 6,174,111 | 100 | 75 | 0 |
| 2007 (Lag) | 724,622 | 7,672,323 | 3,145,238 | 6,459,130 | 100 | 75 | 0 |
| 2008 (Lag) | 784,897 | 7,961,318 | 3,352,573 | 6,942,992 | 100 | 77 | 0 |
| 2009 (Lag) | 864,004 | 8,188,720 | 3,525,921 | 7,304,758 | 100 | 79 | 0 |
| 2010 (Lag) | 948,223 | 9,695,971 | 4,831,637 | 7,392,656 | 100 | 66 | 0 |
| 2011 (Lag) | 1,037,070 | 9,949,809 | 4,872,536 | 7,955,668 | 100 | 70 | 0 |

Also, see following "SOLVENCY TEST – NOTES."

COMPARATIVE SUMMARY OF ACTUARIAL VALUES AND PERCENTAGES COVERED BY ACTUARIAL VALUE OF ASSETS

SOLVENCY TEST - NOTES

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

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

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

This comparative summary 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, 2004 (Lag) valuation used to compute the Employer Contributions for Fiscal Year 2006 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. For the valuation dates shown in the table, the Actuarial Interest Rate and General Wage Increase assumptions were equal to 8.0% per annum, gross of expenses and 3.0% per annum, respectively, from the June 30, 1999 actuarial valuation through the June 30, 2009 (Lag) actuarial valuation. Beginning with the June 30, 2010 (Lag) actuarial valuation, the Actuarial Interest Rate assumption equals 7.0% per annum, net of expenses and the General Wage Increase assumption equals 3.0% per annum.

ADDITIONAL DISCUSSION OF PLAN FUNDING AND OTHER MEASURES OF FUNDED STATUS

On-Going Funding of the Plan

Under the basic equation of pension funding, Contributions plus Investment Earnings pay for Benefits plus Expenses.

There are three major sources for financing those Benefits and Expenses paid from the Plan.

First, Member Contributions are established by statute and paid as percentages of member salaries.

Second, Investment Earnings reflect the rates of return achieved on the amounts of assets held in different asset classes in the Trust.

Third, Employer Contributions are determined by actuarial methodology to finance the Benefits payable by the Plan that are not provided by either Member Contributions or Investment Earnings and for the Administrative and Investment Expenses of the Plan.

This actuarial methodology includes demographic and certain tabular assumptions proposed by the Actuary and adopted by the Board of Trustees, and certain economic assumptions and financing methods proposed by the Actuary, supported by the Board of Trustees and, where required, enacted into law by the New York State Legislature and Governor.

Employer Contributions are particularly responsive to Investment Earnings and increase (decrease) on a smoothed basis whenever Investment Earnings are less (more) than expected.

For example, during Fiscal Years 2001 to 2003, the Assets of the Plan decreased because they earned less than expected. Consequently, over the following several years, the actuarial methodology responded by increasing Employer Contributions in order to bring the overall financial status of the Plan back into balance.

The New York City Charter requires an independent actuary to conduct an experience review of the Plan every two years. The Actuary utilizes this information and regularly proposes changes in actuarial assumptions and methods, most recently during Fiscal Year 2012.

The most recent changes, approved by the Board of Trustees and implemented during Fiscal Year 2012, include: (1) updated demographic assumptions, (2) updated economic assumptions, (3) employing the Entry Age Actuarial Cost Method, (4) establishing Unfunded Actuarial Accrued Liabilities, their payment periods and payment methods, (5) resetting of the Actuarial Asset Value to Market Value (i.e., "Market Value Restart") as of June 30, 2011 and (6) defining the AAV as of June 30, 2010 to recognize Fiscal Year 2011 investment performance.

The ongoing process of actuarial rebalancing and periodic reviews of actuarial assumptions and methods by the Actuary and the Board of Trustees, coupled with a financially responsible, long-duration employer like the City of New York (the "City") that can afford some variability of Employer Contributions, help provide financial security for the Plan and its participants and reasonable intergenerational budget equity for taxpayers.

With the City that has always paid and is expected to continue to pay the statutorily-required Employer Contributions as calculated by the Actuary and approved by the Board of Trustees, changes in Employer Contributions represent the source for rebalancing the basic equation of pension funding.

ADDITIONAL DISCUSSION OF PLAN FUNDING AND OTHER MEASURES OF FUNDED STATUS (Cont'd)

Other Measures of Funded Status

Measures of Funded Status of the Plan are determined at specific points in time and are usually expressed in various relationships of Assets to Obligations. Assets as percentages of Obligations are referred to as Funded Ratios.

Comparisons of Funded Status over time provide insight into the evolving financial condition of the Plan.

The Other Measures of Funded Status presented herein provide different perspectives of the financial condition of the Plan and comparisons amongst these Other Measures of Funded Status can prove insightful.

As noted, there are multiple, possible definitions of the Plan's Assets and Obligations. Some of these definitions of and comments on Assets and Obligations are set forth immediately hereafter. Additional observations about the meanings and usefulness of and the relationships amongst certain of the Funded Ratios are provided following the Table of Funded Ratios.

Definition of and Comments on Assets

With respect to Assets, both the Market Value of Assets ("MVA") and the Actuarial Value of Assets (or Actuarial Asset Value ("AAV")) are used to determine Funded Ratios.

In the case of the Plan, the AAVM currently in use provides for smoothing of the MVA by phasing any Unexpected Investment Returns (i.e., Investment Earnings greater or less than those expected under the actuarial interest rate assumption used each year) into the AAV over a period of six years.

The advantage of using MVA is that it represents the fair value of the Assets of the Plan at any point in time.

The advantage of using AAV is that it is smoothed to remove the volatility of MVA. The disadvantage of AAV is that it is not the fair value of Assets in the marketplace and, therefore, does not show the volatility of the Assets.

ADDITIONAL DISCUSSION OF PLAN FUNDING AND OTHER MEASURES OF FUNDED STATUS (Cont'd)

Definition of and Comments on Obligations

With respect to Obligations, the Actuarial Accrued Liability ("AAL") under any particular Actuarial Cost Method ("ACM") is that portion of the APV of projected benefits which is not provided by future normal costs (employer and employee).

With respect to the Plan, where, prior to Fiscal Year 2012, the ACM was the Frozen Initial Liability ("FIL") ACM, the AAL mathematically can be recast as the Unfunded AAL ("UAAL") plus the AAV. To the extent that the UAAL does not change much year to year, then the related AAL remains relatively consistent in value with the AAV each year.

With respect to the ongoing funding of the Plan, the use of the FIL ACM provided for amortizing actuarial gains and losses over the future working lifetimes of active employees. As used by the Plan, the FIL ACM generally resulted in funding that was more conservative (i.e., greater Employer Contributions) than that of most other Public Pension Plans.

The Entry Age Accrued Liability ("EAAL") is defined as the APV of projected benefits less the sum of the APV of future employee contributions and the APV of future employer Entry Age Normal Costs.

The EAAL is a required disclosure in accordance with Governmental Accounting Standards Board ("GASB") Statement Number 43 ("GASB 43") and GASB Statement Number 45 ("GASB 45") for Other Post-Employment Benefits ("OPEB") under the Aggregate ACM.

In accordance with GASB Statement Number 50 ("GASB 50"), beginning with Fiscal Year 2009, the EAAL is a required disclosure for Public Pension Plans that determine employer contributions using the Aggregate ACM.

The Entry Age ACM is the most-commonly utilized ACM for funding Public Pension Plans.

Beginning with the June 30, 2010 (Lag) actuarial valuation (i.e., Fiscal Year 2012 Employer Contributions), the Entry Age ACM is being used for the on-going funding of the Plan.

The Projected Benefit Obligation ("PBO") is defined as the proportion of APV of all benefits attributed by the Plan's benefit formula to employee service rendered prior to the valuation date. The PBO was required reporting under GASB Statement Number 5 ("GASB 5") prior to its replacement by GASB 25 and GASB 27.

ADDITIONAL DISCUSSION OF PLAN FUNDING AND OTHER MEASURES OF FUNDED STATUS (Cont'd)

The Accumulated Benefit Obligation ("ABO") is determined in a manner somewhat comparable to the PBO but using only salaries prior to the valuation date (i.e. assuming no future salaries or future salary increases).

The Market Value Accumulated Benefit Obligation ("MVABO") is determined in the same manner as an ABO using the same actuarial assumptions except that projected benefit payments are discounted using annual yields on U.S. Treasury securities of like duration. The MVABO is sometimes described as a Marketo-Market measure of Obligations or a Market Value of Liabilities ("MVL").

ADDITIONAL DISCUSSION OF PLAN FUNDING AND OTHER MEASURES OF FUNDED STATUS (Cont'd)

Table of Asset and Obligation Values

The following table presents the values of Assets and Obligations used to calculate alternative Funded Ratios.

Component Measures of Funded Status (Dollar Amounts in Millions) Market Value MVABO MVABO Actuarial Actuarial **Entry Age** Projected Market Accumulated Weighted Accumulated Equiv. Accrued Benefit Valuation Value of Asset Accrued Renefit Benefit Discount Average Liability (AAL)⁽²⁾ Liability (EAAL) **Obligation** Assets Value Date Obligation Yield Duration Obligation $(AAV)^{(1)}$ (PBO)⁽³⁾ (ABO)⁽³⁾ (MVABO)(4) June 30, (MVA) Per Annum (Years) \$6,492.5 \$5,938.1 \$7,248.6 6.0% 10.6 \$6,328.7 \$6,321.5 1999 \$6,179.8 \$6,179.8 6,961.3 8,482.9 6.0 11.0 2000 6,419.6 6,388.1 6,530.6 7,284.3 7.437.4 6,660.8 10.8 7,707.3 7.854.1 7,213.2 9,111.2 5.7 2001 5.690.8 6,525.7 4,878.4 6,612.3 6,738.7 8,218.5 0,311.8 7,791.7 9,821.4 5.7 10.3 2002 B,306.4 11,902.2 4,859.6 6,441.5 6,558.0 В,697.9 8,723.3 4.6 11.2 2003 5,351.2 9,200.4 9,172.8 8,687.5 11,180.4 5.5 10.6 2004 6,185.8 6,290.9 11,660.7 2004 (Lag) (5) 9,817.1 9,784.3 9,109.5 5.5 10.6 5,351.2 6,277.3 6,382.5 9,480.5 14,156.3 5.661.6 6.169.2 6,261.6 10.236.4 10.154.9 4.2 12.4 2005 (Lag) 13,477.5 2006 (Lag) 6,165.3 6,174.1 6,252.0 11,061.5 10,896.7 10,381.4 5.4 11.5 11,731.1 10,900.9 14,429.6 5.2 11.6 7,202.7 6,520.7 11,542.2 2007 (Lag) 6,459.1 12,313.2 12,098.8 11,493.4 16,649.7 4.5 11.9 2008 (Lag) 6,817.3 6,943.0 6,986.2 12,865.0 12,578.6 12,011.9 18,140.4 12.1 2009 (Lag) 5,576.8 7,304.8 7,327.6 4.1 2010 (Lag) (6) 15,349.6 15,475.8 14,576.3 22,243.5 3.7 13.2 6,438.B 7,392.7 15,349.6 2011 (Lag) 7,955.7 7,955.7 15,808.9 15,808.9 15,859.4 15,164.9 21,910.6 4.1 12.5 2012 (Lag) (7) 28.751.4 8,520.8 16,280.0 16,280.0 16,271.2 15,636.7 2.4 14.6 8,124.7

See footnotes on next page.

ADDITIONAL DISCUSSION OF PLAN FUNDING AND OTHER MEASURES OF FUNDED STATUS (Cont'd)

- (1) The AAV used for the June 30, 1999 to June 30, 2009 actuarial valuations assumes the AAV was reset to MVA as of June 30, 1999. As of each June 30 thereafter, the AAV recognizes Investment Returns greater or less than expected over a period of five years (six years beginning with the June 30, 2004 (Lag) actuarial valuation). The AAV used for June 30, 2010 and after assumes the AAV was reset to MVA as of June 30, 2011 with the June 30, 2010 AAV defined to recognize Fiscal Year 2011 investment performance and the June 30, 2012 and after AAV recognizing Investment Returns greater or less than expected over a period of six years.
- (2) Calculated in accordance with the Actuarial Cost Method and actuarial assumptions used for determining Employer Contributions.
- (1) Calculated based on actuarial assumptions used for determining Employer Contributions. Prior to the June 30, 2010 (Lag) actuarial valuation, the ABO and PBO do not include accrued liabilities attributable to the Variable Supplements Funds, net of the AAV, if any.
- (4) Calculated based on actuarial assumptions used for determining Employer Contributions except that projected benefit payments are discounted using annual yields derived from U.S. Treasury Spot Rates as published by the U.S. Department of the Treasury Office of Thrift Supervision ("OTS") in its Selected Asset and Liability Price Tables. For June 30, 2012 and after, these Spot Yields are based on OTS methodology as provided by the U.S. Department of Treasury. Also shown are the related MVABO Equivalent Discount Yield and the MVABO Weighted Average Duration. Prior to the June 30, 2010 (Lag) actuarial valuation, the MVABO does not include accrued liabilities attributable to the Variable Supplements Funds, not of their AAV, if any.
- (5) Beginning with the June 30, 2004 (Lag) actuarial valuation, figures are based on the revised actuarial assumptions and methods used to develop Fiscal Year 2006 employer contributions.
- (6) Beginning with the June 30, 2010 (Lag) actuarial valuation, figures are based on the revised actuarial assumptions and methods used to develop Fiscal Year 2012 employer contributions, including the EAACM and an AIR assumption of 7.0% per annum, net of expenses.
- ⁽⁷⁾ Preliminary.

ADDITIONAL DISCUSSION OF PLAN FUNDING AND OTHER MEASURES OF FUNDED STATUS (Cont'd)

Table of Funded Ratios

The following table presents alternative Funded Ratios comparing Assets to Obligations, including: (1) AAV divided by AAL, (2) AAV divided by EAAL, (3) MVA divided by EAAL, (4) AAV divided by PBO, (5) MVA divided by PBO, (6) AAV divided by ABO, (7) MVA divided by ABO and (8) MVA divided by MVABO.

| | | | Fund | ed Ratios | ,, <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u> | | | |
|-------------------|---------|----------|----------|-----------|---|---------|---------|-----------|
| Valuation Date | AAV/AAL | AAV/EAAL | MVA/EARL | AAV/PBO | MVA/PBO | AAV/ABO | MVA/ABO | MVA/MVABO |
| 6/30/99 | 98% | 98% | 98% | 95% | 95% | 104% | 104% | 85% |
| 6/30/00 | 98 | 88 | 88 | 86 | 86 | 92 | 92 | 76 |
| 6/30/01 | 98 | 85 | 74 | 83 | 72 | 90 | 79 | 62 |
| 6/30/02 | 98 | 80 | 59 | 80 | 59 | 85 | 63 | 50 |
| 6/30/03 | 98 | 74 | 56 | 74 | 56 | 78 | 59 | 41 |
| 6/30/04 | 98 | 67 | 58 | 67 | 58 | 71 | 62 | 48 |
| 6/30/04 (Lag) | 98 | 64 | 55 | 64 | 55 | 69 | 59 | 46 |
| 6/30/05 (Lag) | 99 | 60 | 55 | 61 | 56 | 65 | 60 | 40 |
| 6/30/06 (Lag) | 99 | 56 | 56 | 57 | 57 | 59 | 59 | 46 |
| 6/30/07 (Lag) | 99 | 55 | 61 | 56 | 62 | 59 | 66 | 50 |
| 6/30/08 (Lag) | 99 | 56 | 55 | 57 | 56 | 60 | 59 | 41 |
| 6/30/09 (Lag) | 100 | 57 | 43 | 58 | 44 | 61 | 46 | 31 |
| 6/30/10 (Lag) | 49 | 48 | 42 | 48 | 42 | 51 | 44 | 29 |
| 6/30/11 (Lag) | 50 | 50 | 50 | 50 | 50 | 52 | 52 | 36 |
| 6/30/12 (Lag) | 52 | 52 | 50 | 52 | 50 | 54 | 52 | 28 |

ADDITIONAL DISCUSSION OF PLAN FUNDING AND OTHER MEASURES OF FUNDED STATUS (Cont'd)

Comments on Funded Ratios and Funding Methodology

With respect to the different Funded Ratios shown in the preceding table, the ratio of AAV/AAL is from the Schedule of Funding Progress (Schedule 1) presented in the Financial Section of this CAFR.

Due to the mathematics of the FIL ACM where AAL equals AAV plus UAAL, the AAV/AAL Funded Ratios prior to Fiscal Year 2012 tended to remain relatively constant from year to year and provided limited insight into the ongoing financial performance of the Plan.

The Other Measures of Funded Status shown in the preceding table provide different relationships between the Assets and Obligations of the Plan and are designed to offer additional insight into the Funded Status of the Plan that the Actuary believes useful to some users.

The ratios of AAV/EAAL reflect information that is now a required disclosure for certain Public Pension Plans that utilize the Aggregate ACM. This requirement also exists for certain OPEB plans under GASB 43 and GASB 45.

The ratios of AAV/PBO present information that was previously required under GASB 5 and is a comparable but somewhat different representation of the information shown in the Solvency Test presented earlier in this Section of the CAFR.

The ratios of MVA/MVABO provide information on Funded Status that is (1) independent of the asset allocation of the Plan, (2) exclusive of any advance recognition of expected asset risk premia (e.g., equity risk premium) and (3) absent any smoothing of asset values.

Inherent in its design, the MVA/MVABO Funded Ratio is expected to be volatile due to the impact of asset gains and losses without smoothing and the impact of changes in interest rates in the economy. Such volatility is a reflection of markets and can provide useful disclosure information. However, such volatility is not consistent with the needs of budgeting. Those budgeting needs are met by the actuarial assumptions and ACM in use to determine Employer Contributions.

Comparing the MVA/EAAL to AAV/EAAL, MVA/PBO to AAV/PBO or MVA/ABO to AAV/ABO provides an opportunity to evaluate the degree of smoothing provided by the Actuarial Asset Valuation Method.

ADDITIONAL DISCUSSION OF PLAN FUNDING AND OTHER MEASURES OF FUNDED STATUS (Cont'd)

Comparing Funded Ratios based on the same Assets (i.e., MVA or AAV) but different definitions of Obligations (e.g., EAAL versus PBO versus ABO) provides an opportunity to evaluate the differences in those different definitions of Obligations.

Comparing AAV/PBO with AAV/ABO provides insight into the impact of expected salary growth on the value of benefits earned to date.

Comparing MVA/ABO with MVA/MVABO provides an opportunity to compare the impact of alternative interest rates on discounting the ABO.

Note: While the EAAL includes the AAL (net of AAV) for the Variable Supplements Funds where the ABO, PBO and MVABO do not, the difference due to this inconsistency is minor.

It should also be noted that Measures of Funded Status are best examined with more consideration of their trends over time than their values at any given point in time.

Finally, over time, it should be noted that as the City pays into the Plan the actuarially-determined Employer Contributions, all Funded Ratios can be expected to increase from their current levels.

8506L&R:bs 148

NEW YORK FIRE DEPARTMENT PENSION FUND COMPREHENSIVE ANNUAL FINANCIAL REPORT FISCAL YEAR ENDED JUNE 30, 2013

ACKNOWLEDGEMENT OF QUALIFICATION

I, Robert C. North, Jr., am the Chief Actuary for the New York City Retirement Systems. I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Retentil

Robert C. North, Jr., FSA, FSPA, FCA, MAAA, EA

Chief Actuary

New York City Retirement Systems

November 8, 2013

8506L&R:bs

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]

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



Appendix A

Census Data for Active Members

As of June 30, 2013

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]

NEW YORK CITY FIRE DEPARTMENT PENSION FUND DATA USED IN THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION FOR DETERMINING FINAL FISCAL YEAR 2013 EMPLOYER CONTRIBUTIONS

MALES

| AGE \ SVC | UNDER 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | | | | |
|-------------------|---------|---------|----------|---------|---------|---------|---------|---------|---------|--------------------|
| NUMBER: | | | | | 20-27 | | 30-34 | 35-39 | 40 & UP | ALL YEARS |
| UNDER 20 | 0 | 0 | 0 | 0 | 0 | | | - | _ | |
| 20 TO 24 | 14 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 25 TO 29 | 525 | 551 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 30 TO 34 | 394 | 1,655 | 269 | | 0 | 0 | 0 | 0 | 0 | 1,079 |
| 35 TO 39 | 115 | 1,127 | | 4 | 0 | 0 | 0 | 0 | 0 | 2,322 |
| 40 TO 44 | 6 | 253 | 731 | 228 | 2 | 0 | 0 | 0 | 0 | 2,203 |
| 45 TO 49 | 0 | 4 | 754 | 647 | 231 | 1 | 0 | 0 | 0 | 1,892 |
| 50 TO 54 | 0 | 0 | 293 7 | 534 | 564 | 241 | 0 | 0 | 0 | 1,636 |
| 55 TO 59 | 0 | 0 | | 122 | 308 | 432 | 115 | 2 | 0 | 986 |
| 60 TO 64 | 0 | | 3 | 2 | 55 | 180 | 149 | 18 | 0 | 407 |
| 65 TO 69 | 0 | 1 | 0 | 1 | 2 | 11 | 23 | 16 | 11 | 65 |
| 70 & UP | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 3 |
| TOTAL | 1,054 | 3,591 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 1,034 | 3,591 | 2,060 | 1,539 | 1,162 | 866 | 287 | 36 | 12 | 10,607 |
| | | | | | | | | | | |
| SALARIES (IN T | | | | | | | | | | |
| UNDER 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 TO 24 | 774 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 774 |
| 25 TO 29 | 32,444 | 52,337 | 272 | 0 | 0 | 0 | 0 | 0 | 0 | 85,053 |
| 30 TO 34 | 24,488 | 164,364 | 27,623 | 406 | 0 | 0 | 0 | 0 | 0 | 216,881 |
| 35 TO 39 | 7,342 | 114,050 | 78,455 | 25,712 | 239 | 0 | 0 | 0 | 0 | 225,798 |
| 40 TO 44 | 494 | 25,794 | 80,665 | 76,030 | 29,422 | 128 | 0 | 0 | - 0 | 212,534 |
| 45 TO 49 | 0 | 447 | 31,170 | 61,742 | 70,701 | 31,398 | 0 | 0 | 0 | 195,459 |
| 50 TO 54 | 0 | 0 | 791 | 14,085 | 36,847 | 54,394 | 16,868 | 190 | 0 | 123,175 |
| 55 TO 59 | 0 | 0 | 392 | 274 | 6,227 | 22,050 | 20,503 | 2,569 | 0 | 52,014 |
| 60 TO 64 | 0 | 144 | 0 | 147 | 294 | 1,336 | 3,094 | 2,365 | 1,486 | 8,867 |
| 65 TO 69 | 0 | 0 | 0 | 147 | 0 | 148 | 0 | 0 | 205 | 499 |
| 70 & UP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OTAL * | 65,542 | 357,137 | 219,368 | 178,542 | 143,730 | 109,454 | 40,465 | 5,124 | 1,691 | 1,121,054 |
| | | | | | | | | | | |
| VERAGE SALAF | | | | 61 | | | | | | |
| INDER 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 TO 24 | 55,277 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55,277 |
| 5 TO 29 | 61,799 | 94,986 | 90,520 | 0 | 0 | 0 | 0 | 0 | 0 | 78,826 |
| 0 TO 34 | 62,153 | 99,313 | 102,688 | 101,418 | 0 | 0 | 0 | 0 | 0 | 93,402 |
| 5 TO 39 | 63,841 | 101,198 | 107,325 | 112,772 | 119,686 | 0 | 0 | 0 | 0 | 102,495 |
| 0 TO 44 | 82,409 | 101,954 | 106,983 | 117,512 | 127,366 | 128,124 | 0 | 0 | 0 | 112,333 |
| 5 TO 49 | 0 | 111,863 | 106,384 | 115,621 | 125,357 | 130,283 | 0 | 0 | 0 | 119,474 |
| 0 TO 54 | 0 | 0 | 112,961 | 115,454 | 119,632 | 125,913 | 146,675 | 95,157 | 0 | 124,924 |
| 5 TO 59 | 0 | 0 | 130,570 | 137,000 | 113,225 | 122,498 | 137,603 | 142,699 | 0 | 127,799 |
| 0 TO 64 | 0 | 144,484 | 0 | 146,577 | 147,100 | 121,494 | 134,533 | 147,820 | 135,078 | |
| | 0 | 0 | 0 | 146,577 | 0 | 147,622 | 0 | 0 | 205,180 | 136,414 166,460 |
| 5 TO 69 | | | | | | | | | | |
| 5 TO 69 D & UP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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

- Total may not add up due to rounding.
- ** Average based on unrounded salary.

NEW YORK CITY FIRE DEPARTMENT PENSION FUND DATA USED IN THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION FOR DETERMINING FINAL FISCAL YEAR 2013 EMPLOYER CONTRIBUTIONS

FEMALES

| AGE \ SVC | UNDER 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 & UP | ALL YEARS |
|----------------------------------|-------------|---------|---------|-------|---------|----------|---------|-------|---------|-----------|
| NUMBER: | | | | | | | | | | |
| UNDER 20 | 0 | 0 | O | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 TO 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 TO 29 | o | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 30 TO 34 | 4 | 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 35 TO 39 | 4 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 40 TO 44 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 45 TO 49 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 3 |
| 50 TO 54 | 0 | 0 | o | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 55 TO 59 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| 60 TO 64 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65 TO 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 70 & UP | 0 | 16 | 14 | | 1 | 0 | 3 | 0 | 0 | 43 |
| TOTAL | 9 | 10 | 24 | | | | | /// | | |
| | | | | | | | | | | |
| SALARIES (IN | THOUSANDS): | | | | | | | _ | | |
| UNDER 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 TO 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 TO 29 | 0 | 256 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 30 TO 34 | 242 | 558 | 515 | 0 | 0 | 0 | 0 | 0 | 0 | 1,315 |
| 35 TO 39 | 242 | 604 | 203 | 0 | 0 | 0 | 0 | 0 | 0 | 1,049 |
| 40 TO 44 | 0 | 101 | 639 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 45 TO 49 | 0 | 0 | 130 | 0 | 0 | 0 | 0 | 0 | 0 | _ |
| 50 TO 54 | 115 | 0 | 0 | 0 | 161 | 0 | 168 | 0 | 0 | |
| 55 TO 59 | 0 | 0 | 0 | 0 | 0 | 0 | 191 | 0 | 0 | |
| 60 TO 64 | 0 | 0 | 146 | 0 | 0 | 0 | 134 | 0 | 0 | |
| 65 TO 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 70 & UP | 0 | 0 | 0 | 0 | 0 | 00 | 0 | 0 | 0 | |
| TOTAL * | 600 | 1,518 | 1,633 | 0 | 161 | 0 | 494 | 00 | 0 | 4,406 |
| | | | | | | | | | | |
| AVERAGE SA | I ARIES: ** | Q. | | | | | | | | |
| UNDER 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 TO 24 | o | 0 | 0 | 0 | 0 | 0 | 0 | 0 | O | 0 |
| 25 TO 29 | 0 | 85,377 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 85,377 |
| 25 10 2 3 30 TO 34 | 60,595 | 92,963 | 102,925 | 0 | 0 | 0 | 0 | 0 | C | 87,652 |
| | 60,595 | 100,601 | 101,358 | 0 | 0 | 0 | 0 | 0 | C | 87,391 |
| 35 TO 39 | 0 | 100,001 | 127,884 | 0 | 0 | 0 | 0 | 0 | C | 123,359 |
| 40 TO 44 | | 100,737 | 130,392 | 0 | 0 | 0 | 0 | 0 | 0 | 130,392 |
| 45 TO 49 | 0 | 0 | 0 | 0 | 161,236 | 0 | 168,478 | 0 | 0 | 148,193 |
| 50 TO 54 | 114,865 | | 0 | 0 | 0 | 0 | 191,180 | 0 | • | 191,180 |
| 55 TO 59 | 0 | 0 | 145,529 | 0 | 0 | 0 | 134,287 | 0 | C | 139,908 |
| 60 TO 64 | 0 | 0 | 145,529 | 0 | 0 | 0 | 0 | 0 | (| |
| 65 TO 69 | 0 | 0 | _ | 0 | 0 | 0 | 0 | 0 | |) 0 |
| 70 & UP | 0 | 0 | 116.620 | 0 | 161,236 | 0 | 164,648 | 0 | | 102,459 |
| TOTAL | 66,625 | 94,891 | 116,620 | U | 1014200 | <u> </u> | | | | |

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

^{*} Total may not add up due to rounding.

^{**} Average based on unrounded salary.

NEW YORK CITY FIRE DEPARTMENT PENSION FUND DATA USED IN THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION FOR DETERMINING FINAL FISCAL YEAR 2013 EMPLOYER CONTRIBUTIONS

MALES AND FEMALES

| AGE \ SVC | UNDER 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 & UP | ALL YEARS |
|----------------|------------|---------|---------|---------|---------|--------------|-----------------|--------------|---------|---------------|
| NUMBER: | | | | •••••• | | | *************** | **** | | |
| UNDER 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | a |
| 20 TO 24 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 25 TO 29 | 525 | 554 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1,082 |
| 30 TO 34 | 398 | 1,661 | 274 | 4 | 0 | 0 | 0 | 0 | 0 | 2,337 |
| 35 TO 39 | 119 | 1,133 | 733 | 228 | 2 | . 0 | 0 | 0 | 0 | 2,215 |
| 40 TO 44 | 6 | 254 | 759 | 647 | 231 | 1 | 0 | 0 | 0 | 1,898 |
| 45 TO 49 | 0 | 4 | 294 | 534 | 564 | 241 | 0 | 0 | 0 | 1,637 |
| 50 TO 54 | 1 | 0 | 7 | 122 | 309 | 432 | 116 | 2 | 0 | 989 |
| 55 TO 59 | 0 | 0 | 3 | 2 | 55 | 180 | 150 | 18 | 0 | 408 |
| 60 TO 64 | 0 | 1 | 1 | 1 | 2 | 11 | 24 | 16 | 11 | 67 |
| 65 TO 69 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 3 |
| 70 & UP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 1,063 | 3,607 | 2,074 | 1,539 | 1,163 | 866 | 290 | 36 | 12 | 10,650 |
| SALARIES (IN T | HOUSANDS): | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 20 TO 24 | 774 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 774 |
| 25 TO 29 | 32,444 | 52,594 | 272 | 0 | 0 | 0 | 0 | 0 | 0 | 774 85,310 |
| 30 TO 34 | 24,730 | 164,921 | 28,138 | 406 | 0 | 0 | 0 | 0 | 0 | 218,195 |
| 35 TO 39 | 7,584 | 114,653 | 78,658 | 25,712 | 239 | 0 | 0 | 0 | 0 | 226,846 |
| 40 TO 44 | 494 | 25,895 | 81,305 | 76,030 | 29,422 | 128 | 0 | 0 | 0 | 213,274 |
| 45 TO 49 | 0 | 447 | 31,301 | 61,742 | 70,701 | 31,398 | 0 | 0 | 0 | 195,590 |
| 50 TO 54 | 115 | 0 | 791 | 14,085 | 37,008 | 54,394 | 17,036 | 190 | 0 | 123,620 |
| 55 TO 59 | 0 | 0 | 392 | 274 | 6,227 | 22,050 | 20,694 | 2,569 | 0 | 52,205 |
| 60 TO 64 | 0 | 144 | 146 | 147 | 294 | 1,336 | 3,229 | 2,365 | 1,486 | 9,147 |
| 65 TO 69 | 0 | 0 | 0 | 147 | 0 | 148 | 0 | 0 | 205 | 499 |
| 70 & UP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL * | 66,142 | 358,655 | 221,000 | 178,542 | 143,892 | 109,454 | 40,959 | 5,124 | 1,691 | 1,125,460 |
| AVERAGE SALA | RIES: ** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 20 TO 24 | 55,277 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 |
| 25 TO 29 | 61,799 | 94,934 | 90,520 | 0 | 0 | 0 | 0 | 0 | 0 | 55,277 |
| 30 TO 34 | 62,137 | 99,290 | 102,693 | 101,418 | 0 | 0 | 0 | 0 | 0 | 78,844 |
| 35 TO 39 | 63,731 | 101,194 | 107,309 | 112,772 | 119,686 | 0 | 0 | 0 | 0 | 93,366 |
| 40 TO 44 | 82,409 | 101,949 | 107,121 | 117,512 | 127,366 | 128,124 | 0 | 0 | 0 | 102,414 |
| 45 TO 49 | 0 | 111,863 | 106,465 | 115,621 | 125,357 | 130,283 | | 0 | 0 | 112,368 |
| 50 TO 54 | 114,865 | 0 | 112,961 | 115,454 | 119,767 | 125,913 | 146.863 | 0 05 157 | 0 | 119,480 |
| 55 TQ 59 | 0 | 0 | 130,570 | 137,000 | 113,767 | 122,498 | 146,863 | 95,157 | 0 | 124,995 |
| 60 TO 64 | 0 | 144,484 | 145,529 | 146,577 | 147,100 | 121,498 | 137,960 | 142,699 | 125.078 | 127,954 |
| 65 TO 69 | 0 | 0 | 145,525 | 146,577 | 147,100 | | 134,523 | 147,820 | 135,078 | 136,519 |
| 70 & UP | 0 | 0 | 0 | 140,577 | 0 | 147,622 0 | 0 | 0 | 205,180 | 166,460 |
| TOTAL | 62,222 | 99,433 | 106,558 | 116,012 | 123,725 | 126,391 | 0 141,237 | 0 142,334 | 140.020 | 105 677 |
| | | 72,744 | 200,000 | 210,012 | 143,143 | 120,331 | 141,237 | 142,334 | 140,920 | 105,677 |

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

^{*} Total may not add up due to rounding.

^{**} Average based on unrounded salary.

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]

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



Appendix B

Census Data for Pensioners

As of June 30, 2013

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]

NEW YORK CITY FIRE DEPARTMENT PENSION FUND DATA USED IN THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION FOR DETERMINING FINAL FISCAL YEAR 2013 EMPLOYER CONTRIBUTIONS SUMMARY OF PENSIONERS BY CAUSE AND GENDER

| | | MALE | | | FEMALE | | 90 | OTH MALE & FEM/ | N C |
|------------------------|------------|---------------------|----------|--------|-----------|---------|-------------|--------------------------|------------------|
| AGE | NUMBER | BENEFITS | AVERAGE | NUMBER | BENEFITS | AVERAGE | NUMBER | BENEFITS | AVERAGE |
| ACCIDENTAL DISABILITY: | 1101110-11 | | AVEIDAGE | HOMBER | DENETIIS | AVERAGE | Hadmoek | BENEFIIS | AVENAGE |
| UNDER 30 | 1 | 68.422 | 68,422 | 1 | 70,247 | 70,247 | 2 | 129.660 | en 225 |
| 30 TO 34 | 21 | 1,485,647 | 70,745 | ō | 0 | 0,247 | 21 | 138,669 1,485,647 | 69,335 |
| 35 TO 39 | 124 | 8,743,776 | 70,514 | 1 | 78,205 | 78,205 | 125 | 8,821,981 | 70,745 |
| 40 TO 44 | 412 | 30,307.142 | 73,561 | 1 | 72,322 | 72,322 | 413 | | 70,576 |
| 45 TO 49 | 903 | 70,554,168 | 78,133 | 1 | 102,708 | 102,708 | 904 | 30,379,464 70,656,876 | 73,558 |
| 50 TO 54 | 1,523 | 123,091,130 | 80,821 | 6 | 395,936 | 65,989 | 1,529 | 123,487,066 | 78,160 80,763 |
| 55 TO 59 | 1,370 | 111,103,314 | 81,097 | 4 | 390,149 | 97,537 | 1,329 | 111,493,463 | • |
| 60 TO 64 | 902 | 66,506,081 | 73,732 | 5 | 285,623 | 57,125 | 907 | 66,791,704 | 81,145 |
| 65 TO 69 | 907 | 58.220.946 | 64,191 | 0 | 200,023 | 0 | 907 | | 73,640 |
| 70 TO 74 | 1.014 | 54,108,453 | 53,361 | 0 | 0 | 0 | | 58,220,946 | 64,191 |
| 75 TO 79 | 847 | 39,084,870 | 46,145 | 1 | 65,470 | 65,470 | 1,014 | 54,108,453 | 53,361 |
| 80 TO 84 | 403 | 18,239,272 | 45,259 | 0 | 0.470 | | 848 | 39,150,340 | 46,168 |
| 85 TO 89 | 208 | 8,913,826 | 42,855 | 0 | 0 | 0 | 403 | 18,239,272 | 45,259 |
| 90 & UP | 85 | 3,347,483 | 39,382 | 0 | 0 | 0 | 208 | 8,913,826 | 42,855 |
| TOTAL | 8,720 | 593,774,530 | 68,093 | 20 | 1,460,660 | 73,033 | 85 | 3,347,483 | 39,382 |
| TOTAL | 0,120 | 030,114,030 | 00,033 | 20 | 2,400,000 | 73,033 | 8,740 | 595,235,190 | 68,105 |
| ORDINARY DISABILITY: | | | | | | | | | |
| UNDER 30 | 0 | 0 | 0 | 0 | | | _ | _ | _ |
| 30 TO 34 | 1 | 23,479 | 23,479 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35 TO 39 | 1 | 20,443 | 20,443 | 0 | 0 | 0 | 1 | 23,479 | 23,479 |
| 40 TO 44 | 7 | 229,103 | 32,729 | 0 | 0 | 0 | 1 | 20,443 | 20,443 |
| 45 TO 49 | 15 | 428,516 | 28,568 | | 0 | 0 | 7 | 229,103 | 32,729 |
| 50 TO 54 | 43 | 1,128,677 | 26,248 | 0 1 | . 0 | 0 | 15 | 428,516 | 28,568 |
| 55 TO 59 | 43 | 1,040,265 | 24,192 | 0 | 27,924 | 27,924 | 44 | 1,156,601 | 26,286 |
| 60 TO 64 | 59 | 2,668,737 | 45,233 | 0 | 0 | 0 | 43 | 1,040,265 | 24,192 |
| 65 TO 69 | 90 | 5,915,416 | 65,727 | 0 | 0 | 0 | 59 | 2,668,737 | 45,233 |
| 70 TO 74 | 240 | 14,025,917 | 58,441 | 0 | 0 | 0 | 90 | 5,915,416 | 65,727 |
| 75 TO 79 | 251 | 12,932,454 | 51,524 | 0 | 0 | 0 | 240 | 14,025,917 | 58,441 |
| 80 TO 84 | 202 | 9,398,298 | 46,526 | 0 | 0 | 0 | 251 | 12,932,454 | 51,524 |
| 85 TO 89 | 98 | 4,036,662 | 41,190 | | | 0 | 202 | 9,398,298 | 46,526 |
| 90 & UP | 59 | 2,255,424 | 38,228 | 0 | 0 | 0 | 98 | 4,036,662 | 41,190 |
| TOTAL | 1.109 | 54,103,391 | 48,786 | 1 | 27,924 | 27,924 | 59 1.110 | 2,255,424 | 38,228 |
| TOTAL | 4,103 | 34,103,331 | **0,780 | | 21,924 | 21,924 | 1,110 | 54,131,315 | 48,767 |
| SERVICE RETIREMENT: | | | | | | | | | |
| UNDER 30 | 0 | 0 | | 0 | 0 | | | _ | |
| 30 TO 34 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 35 10 39 | 0 | 0 | o | 0 | 0 | 0 | 0 | 0 | 0 |
| 40 TO 44 | 19 | 993.192 | 52,273 | 0 | 0 | 0 | 0 | 0 | 0 |
| 45 TO 49 | 105 | 5,652,394 | 53,832 | 0 | 0 | 0 | 19 | 993,192 | 52,273 |
| 50 TO 54 | 489 | 25,27 1 ,823 | | 0 | 0 | 0 | 105 | 5,652,394 | 53,832 |
| 55 TO 59 | _ | 32,382,676 | 51,681 | 2 | 102,241 | 51,121 | 491 | 25,374,064 | 51,678 |
| | 633 | | 51,157 | 4 | 198,073 | 49,518 | 637 | 32,580,749 | 51,147 |
| 60 TO 64 | 623 | 29,807,829 | 47,846 | 3 | 98,051 | 32,684 | 626 | 29,905,880 | 47,773 |
| 65 TO 69 70 TO 74 | 821 | 36,788,357 | 44,809 | 0 | 0 | 0 | 821 | 36,788,357 | 44,809 |
| | 1,102 | 42,694,865 | 38,743 | 1 | 33,716 | 33,716 | 1,103 | 42,728,581 | 38,739 |
| 75 TO 79 | 959 | 33,495,158 | 34,927 | 0 | 0 | 0 | 959 | 33,495,158 | 34,927 |
| 80 TO 84 | 551 | 18,007,546 | 32,682 | 0 | 0 | 0 | 551 | 18,007,546 | 32,682 |
| 85 TO 89 | 326 | 10,291,708 | 31,570 | 0 | 0 | 0 | 326 | 10,291,708 | 31,570 |
| 90 & UP | 192 | 5,484,373 | 28,564 | 0 | 0 | 0 | 192 | 5,484,373 | 28,564 |
| TOTAL | 5,820 | 240,869,921 | 41,387 | 10 | 432,081 | 43,208 | 5,830 | 241,302,002 | 41,390 |

NEW YORK CITY FIRE DEPARTMENT PENSION FUND DATA USED IN THE JUNE 30, 2011 (LAG) ACTUARIAL VALUATION FOR DETERMINING FINAL FISCAL YEAR 2013 EMPLOYER CONTRIBUTIONS SUMMARY OF PENSIONERS BY CAUSE AND GENDER

| | | MALE | | | FEMALE | | BOT | H MALE & FEMA | LE |
|----------------------|---------------|---------------------------|---------|---------|------------|---------|---------------------------------------|---------------------------------------|---------|
| AGE | NUMBER | BENEFITS | AVERAGE | NUMBER | BENEFITS | AVERAGE | NUMBER | BENEFITS | AVERAGE |
| ACCIDENTAL DEATH: | | | | | | 1 | | | |
| UNDER 30 | 2 | 58,030 | 29,015 | 3 | 108,795 | 36,265 | 5 | 166,825 | 33,365 |
| 30 TO 34 | 0 | 0 | 0 | 5 | 185,343 | 37,069 | 5 | 185,343 | 37,069 |
| 35 TO 39 | 0 | 0 | 0 | 45 | 1,560,279 | 34,673 | 45 | 1,560,279 | 34,673 |
| 40 TO 44 | 0 | 0 | 0 | 70 | 2,618,638 | 37,409 | 70 | 2,618,638 | 37,409 |
| 45 TO 49 | 0 | 0 | o | 107 | 4,087,300 | 38,199 | 107 | 4,087,300 | 38,199 |
| 50 TO 54 | ō | 0 | o | 96 | 3,831,559 | 39,912 | 96 | 3,831,559 | 39,912 |
| 55 TO 59 | o | ō | o | 61 | 2,521,193 | 41,331 | 61 | 2,521,193 | 41,331 |
| 60 TO 64 | ō | ō | o | 47 | 1,775,601 | 37,779 | 47 | 1,775,601 | 37,779 |
| 65 TO 69 | o | 0 | 0 | 44 | 1,434,121 | 32,594 | 44 | 1,434,121 | 32,594 |
| 70 TO 74 | 0 | ō | 0 | 48 | 1,353,001 | 28,188 | 48 | 1,353,001 | 28,188 |
| 75 TO 79 | o | ō | 0 | 45 | 1,204,496 | 26,767 | 45 | 1,204,496 | 26,767 |
| 80 TO 84 | ō | o | 0 | 19 | 474,775 | 24,988 | 19 | 474,775 | 24,988 |
| 85 TO 89 | 0 | 0 | 0 | 18 | 451,861 | 25,103 | 18 | 451,861 | 25,103 |
| 90 & UP | o | 0 | 0 | 22 | 526,429 | 23,929 | 22 | 526,429 | 23,929 |
| TOTAL | 2 | 58,030 | 29,015 | 630 | 22,133,391 | 35,132 | 632 | 22,191,421 | 35,113 |
| TOTAL | | | | | | | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | |
| OTHER BENEFICIARIES: | | | | | | | | | |
| UNDER 30 | 0 | 0 | o | 4 | 206,632 | 51,658 | 4 | 206,632 | 51,658 |
| 30 TO 34 | 1 | 58,517 | 58,517 | 0 | 0 | 0 | 1 | 58,517 | 58,517 |
| 35 TO 39 | ō | 0 | 0 | 0 | Ō | o | 0 | 0 | 0 |
| 40 TO 44 | 0 | ő | 0 | 1 | 33,681 | 33.681 | 1 | 33,681 | 33,681 |
| 45 TO 49 | 1 | 62,516 | 62,516 | 5 | 276,335 | 55,267 | 6 | 338,851 | 56,475 |
| 50 TO 54 | ō | 0 | 02,010 | 12 | 495,375 | 41,281 | 12 | 495,375 | 41,281 |
| 55 TO 59 | 0 | o | 0 | 13 | 420,063 | 32,313 | 13 | 420.063 | 32,313 |
| 50 TO 64 | 0 | Ö | 0 | 19 | 730,695 | 38,458 | 19 | 730,695 | 38,458 |
| 65 TO 69 | ő | ō | 0 | 32 | 984,483 | 30,765 | 32 | 984,483 | 30,765 |
| 70 10 74 | o | o | 0 | 37 | 1.116,701 | 30.181 | 37 | 1,116,701 | 30,181 |
| 75 10 79 | o | 0 | 0 | 45 | 684,993 | 15,222 | 45 | 684,993 | 15,222 |
| 80 TO 84 | o | 0 | 0 | 71 | 772,803 | 10,885 | 71 | 772,803 | 10,885 |
| 85 TO 89 | ō | 0 | 0 | 119 | 1,012,875 | 8,512 | 119 | 1,012,875 | 8,512 |
| 90 & UP | ő | o | 0 | 345 | 1,494,785 | 4,333 | 345 | 1,494,785 | 4,333 |
| TOTAL | 2 | 121,033 | 60,517 | 703 | 8,229,421 | 11,706 | 705 | 8,350,454 | 11,845 |
| TOTAL | | | · | | | | | | |
| ALL PENSIONERS AND | RENEFICIARIE | 5. | | | | | | | |
| UNDER 30 | 3 | 126,452 | 42,151 | 8 | 385,674 | 48,209 | 11 | 512,126 | 46,557 |
| 30 TO 34 | 23 | 1,567,643 | 68,158 | 5 | 185,343 | 37,069 | 28 | 1,752,986 | 62,607 |
| 35 TO 39 | 125 | 8,764,219 | 70,114 | 46 | 1,638,484 | 35,619 | 171 | 10,402,703 | 60,835 |
| 40 TO 44 | 438 | 31,529,437 | 71,985 | 72 | 2,724,641 | 37,842 | 510 | 34,254,078 | 67,165 |
| 45 TO 49 | 1,024 | 76,697,594 | 74,900 | 113 | 4,466,343 | 39,525 | 1,137 | 81,163,937 | 71,384 |
| 50 TO 54 | 2,055 | 149,491,630 | 72,745 | 1 | 4,853,035 | 41,479 | 2,172 | 154,344,665 | 71,061 |
| 55 TO 59 | 2,046 | 144,526,255 | 70,638 | l | 3,529,478 | 43,042 | 2,128 | 148,055,733 | 69,575 |
| 60 TO 64 | 1,584 | 98,982,647 | 62,489 | 1 | 2,889,970 | 39,054 | | 101,872,617 | 61,443 |
| | 1,818 | 100,924,719 | 55,514 | 1 | 2,418,604 | 31,824 | | 103,343,323 | 54,564 |
| 65 TO 69 | 2,356 | 110,829,235 | 47,041 | 1 | 2,503,418 | 29,110 | 2,442 | 113,332,653 | 46,410 |
| 70 TO 74 | 2,356 | 85,512,482 | 41,571 | 1 | 1,954,959 | 21,483 | 2,148 | 87,467,441 | 40,720 |
| 75 TO 79 | 1,156 | 45,645,116 | 39,485 | ì | 1.247,578 | 13,862 | | 46,892,694 | 37,635 |
| 80 TO 84 | 632 | | 36,776 | * | 1,464,736 | 10,692 | 769 | 24,706,932 | 32,129 |
| 85 TO 89 | | 23,242,196 | 32,998 | i | 2,021,214 | 5,507 | 703 | 13,108,494 | 18,647 |
| 90 & UP | 336 15,653 | 11,087,280 888,926,905 | 56,790 | | 32,283,477 | 23,668 | | 921,210,382 | 54,135 |
| TOTAL | 10,003 | 000,720,300 | 30,730 | 1 4,004 | 32,200,411 | 20,000 | 2.,021 | | |

New York City Fire Pension Fund

Comprehensive Annual Financial Report

A Pension Trust Fund of the City of New York



Statistical Section

Part V

Fiscal Year Ended June 30, 2013

[THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY]

The Statistical Section Narrative

The Statistical section of the New York City Fire 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 trends and Revenue capacity.

Operating information

The operating information gives users an indication of how the information in the financial statements relate to the activities of the fund. The schedules show data on 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 the 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 revenues for the plan. The schedules show the sources and the changes in the level of revenues over time. The main sources of revenues for the plan are investment income and employer contributions.

TABLE OF BENEFIT EXPENSES BY TYPE

(In thousands)

| 2010 2011 2012 2013 | 2004 2005 2006 2008 | FISCAL |
|--|---|---|
| 244,502 240,312 240,3186 237,294 | \$ 256,676 253,706 254,777 253,902 248,262 249,084 | Service Retirement Payments |
| 56,905 55,019 53,002 51,273 | \$ 63,868 63,615 62,603 59,685 58,392 | Ordinary Disability Payments |
| 552,814 587,885 621,698 659,243 | \$ 338,051 369,126 402,335 449,918 495,662 524,425 | Accidental Disability Payments |
| 54,069 55,488 57,614 59,888 | \$ 20,267 20,374 20,639 20,727 21,174 51,974 | Payments for Death in Duty |
| 14,426 13,723 13,923 14,646 | 8,563 8,563 8,563 14,353 | Payments of Deceased Service and Disability |
| 3,454 1,279 1,353 1,371 | \$ 4,672 3,138 4,944 3,539 2,339 4,219 | Death Benefits Lump Sum Payments |
| 28,603 29,768 50,213 40,916 | 79,539 26,006 | Other Benefits * |
| 954,773 983,474 1,037,589 1,064,631 | 842,228 800,975 871,477 915,225 928,453 | Total |

^{*} This represents City Supplements and other payments.

TABLE OF RETIRED MEMBERS AND BENEFICIARIES BY TYPE OF BENEFIT

FISCAL YEAR 2013

| | ı | | 9 | | | | | | | |
|---|--------|--------------------------------------|-----------|------------------------------------|--------|-------|-------|-------|-------|---|
| ORDINARY OTHER BENEFICIARIES BENEFITS (2) | | | 40,916 | | | | | | | |
| OTHER | | | • | | | | | | | |
| ES I | 99 | | 1,371 | | | | | | | |
| ARY | | | ₹ | | | | | | | |
| ORDINARY | | | • | | | | | | | |
| | 427 | | 8,870 | | E | 1 | - [| 1 | f | 1 |
| ACCIDENTAL BENEFICIARIES | | | 80 | | | 1 | | | | 1 |
| CCID | | | 40 | | | | | | | N |
| | 556 | | 5,776 | TL | | | | | | |
| SE | | | IO. | ENE | | | | | | 7 |
| SERVICE BENEFICIARIES | | N | • |)FB] | | | | | | |
| ဟ | 654 | ANNUAL PAYROLL AMOUNT (in thousands) | | RETIRED MEMBERS BY TYPE OF BENEFIT | | | P. | | | 4 |
| LINE OF DUTY BENEFITS | - | ands) | 59,888 | YTY | | | | | | V |
| | ¥ | (in thousands) | ₽ | RS B | | | Ħ | = | = | - |
| ENTA ILITY EES (| 9,064 | AL P | 659,243 | MBE | 1 | Ţ. | 1 | T | | |
| ACCIDENTAL DISABILITY RETIREES (1) | | NNO. | 40 | ME | | | | | | |
| L. | 1,010 | ∢I | 61,273 | RED | | | | | | |
| ORDINARY DISABILITY RETIREES (1) | ₹ | | 51, | TETI | | | | | | |
| ORDI DISAI RETI | | | v. | - | | 1 | - | 1 | 1 | 1 |
| £ | 5,487 | | 237,294 | | 10,000 | 8,000 | 6,000 | 4,000 | 2,000 | • |
| SERVICE RETIREES (1) | 4,5 | | 237 | | 10, | ထ် | 6, | 4 | 2, | |
| RET | | | 40 | | | | | | | |
| AND | 17,264 | | 1,064,631 | | | | | | | |
| TOTAL NUMBERS RETIREES AND BENEFICIARIES | - | | 1,06 | | | | | | | |
| TOTAL NUMBERS RETIREES AND BENEFICIARIES | | | | | | | | | | |
| • | | | | | | | | | | |

SEE RETIREMENT BENEFIT BELOW

9

S

4

ന

2

Type of Retirement

- 1 Service retirement (20 yrs or over)
 2 Ordinary Disability (Non Line of Duty)
 3 Accidental Disability (Line of Duty)
 4 Line of Duty benefits for surviving spouse
 5 Survivors of Service Retirees
 6 Survivors of Accidental Disability retirees
 7 Survivors of Ordinary Disability retirees
- (1) Includes Maximum Allowance and Options.

(2) Includes City Supplements and Return of Contributions Vouchers.

TABLE OF RETIRED MEMBERS AND BENEFICIARIES BY TYPE OF OPTION SELECTED *

FISCAL YEAR 2013

| OTHER BENEFITS (2) | • |
|---|--------|
| BENEFICIARIES | 810 |
| LINE OF DUTY BENEFICIARIES (1) | 654 |
| POP - UP OPTION | 7 |
| OPTION | 929 |
| OPTION | 326 |
| OPTION | 250 |
| OPTION | 7 |
| MAXIMUM ALLOWANCE (1) | 14,546 |
| TOTAL NUMBER OF 1 RETIREES AND 9 BENEFICIARIES | 17,264 |

ANNUAL PAYROLL AMOUNT

| 40,916 |
|-----------|
| 6 |
| 9,091 |
| 4 |
| 59,888 |
| ₩ |
| 709 |
| 4 |
| \$ 45,024 |
| 16,867 |
| 43 |
| 12,666 |
| 69 |
| \$ 485 |
| 878,985 |
| 49 |
| 1,064,631 |
| 49 |

⁽¹⁾ Includes Subchapter I and III.

Note: Option figures include Retirees and Beneficiaries.

⁽²⁾ Includes City Supplements and Return of Contributions Vouchers.

Retired Members by Type of Benefit **New York City Fire Pension Fund** As of June 30, 2013

Number of

Amount of

Exhibit 4

| Monthly | Retired | | | Type of Retirement | thement | | | Option Selected | lected b | | | |
|------------|---------|-------|-------|--------------------|---------|----------|------------|-----------------|------------|------------|------------|----------|
| Benefits | Members | - | 2 | 60 | 4 | . | Unmodified | - | 2 | e | - | agri god |
| \$ 42,877 | 17 | | | 4 | ur. | α | 47 | | | , | , | |
| 146.082 | 50 | , | ٠ | |) ų | 9 0 | - ! | • | | • | | • |
| | 3 | , | - | n.7 | n | 2 | 47 | * | • | | ଟ | • |
| 266,682 | 187 | | ₹* | 133 | 45 | B | 165 | ٠ | ທ | ٠ | 17 | • |
| 2,854,507 | 522 | 14 | ςΩ | 415 | 77 | 11 | 312 | er. | 76 | 7 | | |
| 6,763,661 | 1,291 | 110 | 17 | 1,029 | 109 | . E | 1 174 |) K | | ָרָ בָּי | 2 5 | 7 (|
| 12,862,055 | 2,167 | 496 | 4 | 1,523 | 80 | - 01 | 2115 | י כ | י נ | ? r | 3 3 | า |
| 12,337,978 | | 512 | 39 | 1,410 | 76 | 53 | 1 963 | 4 - | 4 4 | ~ 0 | - P | |
| 8,489,385 | 1,750 | 623 | 53 | 972 | 9 | | 1,500 | , | - 4 - 4 | 9 8 | /6 | 4 |
| 8,611,944 | | 812 | 83 | 927 | 47 | 000 | 1 600 | | 2 0 | 0 Q | ò | . ! |
| 9,444,388 | 2,361 | 999 | 219 | 1.038 | 62 | 2 6 | ייי כ | | 0 7 | 2 5 | 140 | ï |
| 7,288,953 | 2,085 | 856 | 236 | 960 | 2,45 | 3 8 | A5.2.2. | e | ž č | ر د | 5 C | |
| 3,907,725 | 1,369 | 557 | 168 | 452 | 5, 75 | 167 | 1 282 | - 30 | * · | - (| 2 6 | |
| 2,058,911 | 763 | 323 | 69 | 166 | - | 143 | 502, | - 13 | | 7 T | 5 6 | • |
| 1,092,375 | 720 | 195 | 29 | 68 | 22 | 355 | 208 208 | | ŧ, | - | <u> </u> | . 8 |
| Total | 17,284 | 6,487 | 1,010 | 9,064 | 964 | 1,049 | 18,010 | = | 260 | 328 | 858 | 1 4 |

Type of retirement:

Service retirement
 Ordinary Disability
 Accidental Disability
 Line of Duty (Accidental Death)
 Beneficiaries (All)

Option safected:

The following options reduce the retired member's monthly benefits

Option 1 - Provides a member with a reffrement allowance payable for life which is less than the Maximum Allowance.

Option 2 - Provides a member with a reduced relirement allowance with the provision that upon-his or her death the same allowance will continue to be paid to his or her beneficiary for life.

Option 3 - Provides a member with a retirement allowance reduce from the Maximum Allowance, with-the provision that one half of the allowance will continue to be paid to the member's beneficiary for itle.

Option 4 - This option provides, upon the member's death, payment of a specified benefit or benefits actuarially-sound and approved by the Actuary and the Board of Trustees.

POP - UP (refer to Option 4-2 and Option 4-3) These are called the "POP - UPS" because they areOPTIONS variations of Option 2 and 3 and provide that if the beneficiary predeceases the retiree, then the retirement allowance will "Pop - Up to the level of the Meximum Retirement Allowance.

New York City Fire Pension Fund Average Benefit Payments Last Ten Years

| Age Credited Service | Retirement Effective Dates Under 30 30-34 35-39 40-44 45-49 50-54 55-59 60-84 65-69 | Period 7/1/03 to 6/30/04 Average monthly benefit \$ 2,500 \$ 2,936 \$ 3,582 \$ 3,885 \$ 3,961 \$ 4,040 \$ 4,186 \$ 3,900 \$ 3,502 Average final salary \$ 29,994 \$ 35,228 \$ 42,982 \$ 48,617 \$ 47,537 \$ 48,479 \$ 50,233 \$ 48,799 \$ 42,028 Average final salary \$ 29,994 \$ 35,228 \$ 42,982 \$ 48,617 \$ 47,537 \$ 48,479 \$ 50,233 \$ 48,799 \$ 42,028 Average final salary \$ 29,994 \$ 35,228 \$ 42,982 \$ 48,617 \$ 47,537 \$ 48,479 \$ 50,233 \$ 48,799 \$ 42,028 | Period 7/1/04 to 8/30/05 Average monthly benefit \$ 2,897 \$ 3,213 \$ 3,822 \$ 4,157 \$ 4,201 \$ 4,282 \$ 4,285 \$ 4,086 \$ 3,627 Average final salary 34,760 38,561 45,858 50,499 51,385 51,425 48,787 43,522 Average final salary 34,760 38,561 45,858 50,499 51,385 51,425 48,787 43,522 Number of retired members 6 63 187 537 1,504 1,570 1,593 2,019 2,774 | Period 7/1/05 to 6/30/08 Average monthly benefit 3,421 3,264 3,995 4,394 4,423 4,505 4,414 4,266 3,762 Average final salary 41,054 39,165 47,945 52,733 53,081 54,059 52,973 51,187 45,143 Average final salary 7 59 208 584 1,401 1,614 1,524 1,959 2,612 | 3,375 3,611 4,284 4,716 4,882 4,895 4,715 4,424 40,499 43,327 51,409 56,588 58,345 58,735 56,579 53,083 8 59 229 638 1,420 1,981 1,570 1,900 | Period 7/1/07 to 8/90/08 Average monthly benefit 3,843 3,606 4,527 5,144 5,257 5,232 4,887 4,633 4,005 Average final salary 46,116 43,273 54,323 61,725 63,079 62,786 59,844 55,591 48,061 Average final salary 46,116 43,273 54,323 61,725 63,079 62,786 1,639 1,749 2,388 | Period 7/1/08 to 8/30/09 3,881 3,842 4,572 5,195 5,309 5,284 5,037 4,679 4,679 Average monthly benefit 3,881 3,842 4,572 5,195 5,309 5,284 5,037 4,679 4,679 Average final salary 46,577 43,706 54,866 62,342 63,710 63,414 60,442 56,147 48,542 Number of retired members 7 43 234 629 1,306 2,230 1,734 1,823 2,270 | Period 7/1/09 to 8/30/10 Average monthly benefit 3,843 3,608 4,527 5,144 5,257 5,231 4,985 4,833 4,005 Average final salary 46,116 43,273 54,323 61,725 63,079 62,774 59,823 55,591 48,061 Average final salary 46,116 43,273 54,323 618 1,304 2,155 1,640 1,749 2,268 | Period 7/1/10 to 8/39/11 3,570 4,613 4,923 5,415 5,764 5,963 5,576 4,958 4,355 Average final salary 42,838 55,350 59,071 84,974 69,172 67,956 66,907 59,497 52,263 Number of retired members 11 32 197 517 1,162 2,254 1,916 1,674 2,014 | Period 7/1/11 to 6/30/12 4,950 4,951 4,923 5,415 5,764 5,863 5,576 4,958 4,958 Average monthly benefit 3,570 4,613 4,923 5,415 5,764 5,863 5,576 66,907 59,497 52,263 Average final salary 42,838 55,350 59,071 64,974 69,172 67,956 66,907 59,497 52,263 Number of retired members 11 52 206 527 1,180 2,002 2,315 1,694 2,033 | Period 7/1/12 to 6/30/13 570 570 570 570 570 570 570 570 570 570 |
|----------------------|---|--|--|---|--|--|---|---|--|---|--|
| | | w w | | 4,394 2,733 584 | 4,716 6,588 638 | 5,144 11,725 618 | 5,195 12,342 629 | 5,144 11,725 818 | 5,415 34,974 517 | 5,415 | 54,974 527 |
| Age | - 1 | | | 4,423 53,081 1,401 | 4,862 58,345 1,420 | 5,257 63,079 1,304 | 5,309 63,710 1,306 | 5,257 63,079 1,304 | 5,764 69,172 1,162 | 5,764 69,172 1,180 | |
| Credited 5 | · · | | | 4,505 54,059 1,814 | 4,895 58,735 1,981 | 5,232 62,786 2,154 | 5,284 63,414 2,230 | 5,231 62,774 2,155 | 5,863 67,956 2,254 | 5,663 67,956 2,002 | |
| Service | 55 - 57 - 67 | | | 4,414 52,973 1,524 | 4,715 56,579 1,570 | 4,987 59,844 1,639 | 5,037 60,442 1,734 | 4,985 59,823 1,640 | 5,576 66,907 1,916 | 5,576 66,907 2,315 | |
| | 60-64 | 3,900 46,799 2,181 | 4,066 46,787 2,019 | 4,266 51,187 1,959 | 4,424 53,083 1,900 | 4,633 55,591 1,749 | 4,679 56,147 1,823 | 4,633 55,591 1,749 | 4,958 59,497 1,674 | 4,958 59,497 1,694 | |
| i | 65-69 | 3,502 \$ 42,028 \$ 2,871 | 3,627 43,522 2,774 | 3,762 45,143 2,612 | 3,879 46,553 2,570 | 4,005 48,061 2,388 | 4,045 48,542 2,270 | 4,005 48,061 2,268 | 4,355 52,262 2,014 | 4,355 52,262 2,033 | h h |
| | 70-74 | 3,138 \$ 37,654 \$ 2,227 | \$ 3,191 38,289 2,393 | 3,270 39,244 2,515 | 3,341 40,093 2,482 | 3,500 42,002 2,590 | 3,535 42,422 2,585 | 3,500 42,002 2,466 | 3,754 45,042 2,602 | 3,754 45,042 2,448 | 3.868 |
| | 75-79 | 2,830 33,965 1,598 | \$ 2,928 35,130 1,618 | 3,052 36,619 1,649 | 3,117 37,402 1,643 | 3,179 38,143 1,745 | 3,210 38,524 1,739 | 3,179 38,143 1,745 | 3,316 39,791 1,994 | 3,316 39,791 2,001 | 3,393 |
| | 80-84 | \$ 2,320 \$ 27,842 1,299 | \$ 2,476 29,709 1,256 | 2,604 31,250 1,290 | 2,689 32,267 1,283 | 2,786 33,432 1,290 | 2,814 33,766 1,266 | 2,786 33,432 1,290 | 3,003 36,036 1,220 | 3,003 36,036 1,364 | 3,136 |
| | 85-89 | \$ 1,493 \$ 17,919 1,161 | \$ 1,625 19,497 1,101 | 1,827 21,920 998 | 1,971 23,651 902 | 2,166 25,993 854 | 2,188 26,253 818 | 2,166 25,993 854 | 2,562 30,744 799 | 2,562 30,744 854 | 2,677 |
| Exhibit 6 | 90 & Up | \$ 1,207 \$ 14,484 733 | \$ 1,274 15,286 822 | 1,260 15,120 865 | 1,210 14,524 794 | 1,276 15,308 789 | 1,288 15,461 764 | 1,272 15,262 787 | 1,424 17,090 748 | 1,424 1 17,090 1 717 | 7 1,554 |

Source: Office of the Actuary City of New York.

New York City Fire Pension Fund Benefit and Refund Deductions from Net Assets by Type Last Ten Fiscal Years

(In thousands)

Exhibit 6

| 2013 | 237,294 | 59,888 | 659,243 51,273 1,371 | \$1,014,845 | 8,870 40,916 \$ 49,786 | \$1,064,631 |
|------------------|-----------------------|---------------------------|--|----------------|---|----------------------------|
| 2012 | 239,786 5,847 | 57,614 | 621,698 53,002 1,353 | 1 1 | 8,076 50,213 \$ 58,289 | \$1,037,589 \$1,064,631 |
| 2011 | 240,312 5,990 | 55,488 | 587,885 55,019 1,279 | \$ 945,973 | 7,733 29,768 | \$ 983,474 |
| 2010 | 244,502 10,040 | 54,069 | 552,814 56,905 4,386 | \$ 922,716 | 3,454 28,603 \$ 32,057 | \$ 954,773 |
| 2009 | 249,084 10,212 | 51,974 | 524,425 58,392 4,141 | \$ 898,228 | 4,219 26,006 \$ 30,225 | \$ 928,453 |
| 2008 | 248,262 | 21,174 | 495,662 59,685 3,898 | \$ 833,347 | 2,339 79,539 \$ 81,878 | \$ 915,225 |
| 2007 | 253,902 4,926 | 20,727 | 449,918 61,397 3,637 | \$ 794,507 | 3,539 73,431 \$ 76,970 | \$ 871,477 |
| 2006 | 254,777 5,290 | 20,639 | 402,335 62,603 3,417 | \$ 749,061 | 4,944 46,970 \$ 51,914 | \$ 800,975 |
| 2005 | 253,706 5,363 | 20,374 | 369,126 63,615 3,272 | \$ 715,456 | 3,138 123,634 \$ 126,772 | \$ 842,228 |
| 2004 | 256,676 5,720 | 20,267 | 338,051 63,868 2,858 | \$ 687,440 | 4,672 58,847 \$ 63,519 | \$ 750,959 |
| Type of Benefit: | Retirees Survivors | Death in service benefits | Disability benefits: On Retirees - duty Characteristics Survivors | Total benefits | Type of Refunds Death Other benefits Total refunds | Total Benefits and Refunds |

Source Fire Department New York.

SCHEDULE OF AVERAGE ANNUAL BENEFIT PAYMENT AMOUNTS

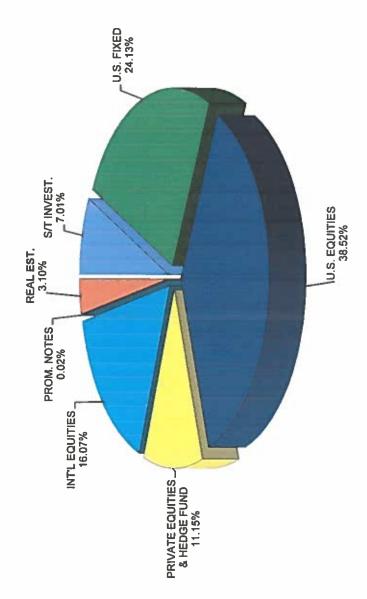
| 2013 | 2012 | 2011 | 2010 (Lag) | 2009 (Lag) | 2008 (Lag) | 2007 (Lag) | 2006 (Lag) | 2005 (Lag) | 2004 (Lag) | Fiscal Year | |
|--------|--------|--------|------------|------------|------------|------------|------------|------------|------------|--------------------------------|--|
| 5,487 | 5,667 | 5,837 | 5,957 | 6,194 | 6,353 | 6,606 | 6,839 | 6,965 | 7,148 | Numbers | Service Retirement Benefits |
| 43,247 | 41,080 | 41,170 | 40,447 | 39,908 | 39,078 | 38,435 | 37,254 | 36,426 | \$ 35,909 | Average Annuai Allowance | efits |
| 9,064 | 8,912 | 8,712 | 8,593 | 8,331 | 8,149 | 7,816 | 7,420 | 7,103 | 6,780 | Number | Accide Disabil |
| 72,723 | 69,760 | 67,480 | 65,741 | 63,286 | 60,825 | 57,564 | 54,223 | 51,968 | \$ 49,860 | Average Annuai Allowance | Accidental (Duty) Disability Benefits |
| 1,010 | 1,058 | 011,1 | 1,167 | 1,217 | 1,284 | 1,339 | 1,398 | 1,448 | 1,488 | Number | Ordinary (Non Duty Disability Benefits |
| 50,765 | 50,096 | 49,007 | 48,219 | 47,398 | 46,484 | 45,853 | 44,780 | 43,933 | \$ 42,922 | Average Annuai Allowance | y (Non Duty) ty Benefits |
| 1,/03 | 1,767 | 1,414 | 1,423 | 1,521 | 1,618 | 1,718 | 1,828 | 1,927 | 2,043 | Number | Survivor's |
| 44,5/1 | 102,14 | 40,141 | 49 144 | 19,782 | 20,942 | 17,208 | 19,767 | 19,310 | \$ 14,119 | Average Annual Allowance | Survivor's Benefits * |

^{*} Includes World Trade Center Benefits

Exhibit 7

TOTAL INVESTMENTS FISCAL YEAR 2013

(At Market Value)



NEW YOK CITY FIRE PENSION FUND

Schedule of Changes in Net Positions

(In thousands)

| | | Additions t | Additions to Plan Net Position | | | 2- | Deductio | Deductions from Plan Net Position | t Position | | |
|-------|--|---------------|--------------------------------|--------|-----------|-----------|----------|-----------------------------------|------------|-------------------------|--------------|
| Year | Member | Employer | Net Investment | Other | Total | Benefit | | Administrative | | Total | Change in |
| Ended | Ended Contributions Contributions | Contributions | Income/(Loss) | income | Additions | Payments | Refunds | Expenses | Other | Deductions Net Position | Net Position |
| 2004 | 42,529 | 392,693 | 774,109 | 33,257 | 1,242,588 | 750,742 | 217 | 1 | | 750,959 | 491.629 |
| 2005 | 52,680 | 489,508 | 560,821 | 49,662 | 1,152,671 | 841,648 | 319 | • | 261 | 842,228 | 310,443 |
| 2006 | 76,548 | 608,771 | 590,395 | 28,971 | 1,304,685 | 800,552 | • | 413 | 10 | 800,975 | 503,710 |
| 2007 | 71,614 | 683,193 | 1,117,227 | 36,770 | 1,908,804 | 870,841 | 444 | 172 | 20 | 871,477 | 1,037,327 |
| 2008 | 75,974 | 780,202 | (366,390) | 40,103 | 529,889 | 914,569 | 418 | 200 | 38 | 915,225 | (385,336) |
| 2009 | 84,357 | 843,751 | (1,282,917) | 42,729 | (312,080) | 927,819 | 325 | 248 | 61 | 928,453 | (1,240,533) |
| 2010 | 89,223 | 874,331 | 818,201 | 34,990 | 1,816,745 | 953,990 | 510 | 237 | 36 | 954,773 | 861,972 |
| 2011 | 94,893 | 890,706 | 1,472,892 | 41,887 | 2,500,378 | 982,962 | 276 | 236 | • | 983,474 | 1,516,904 |
| 2012 | 98,494 | 976,895 | 93,548 | 37,661 | 1,206,598 | 1,036,806 | 443 | 340 | • | 1,037,589 | 169,009 |
| 2013 | 104,816 | 962 173 | 961,192 | 38,965 | 2,067,146 | 1,063,349 | 816 | 445 | 21 * | 1,064,631 | 1.002.515 |

Other * Operating expense

NEW YORK CITY FIRE PENSION FUND

SCHEDULE OF REVENUES BY SOURCE

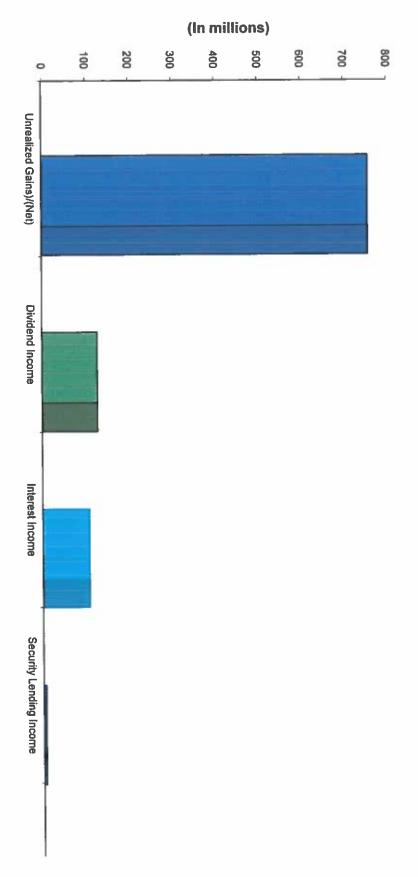
(in thousands)

| % of Annual Covered Payroll | N/A | ΑN | Z Z | VIV. | ¥N. | Z/A | ΥN | N/A | N/A | Viv. | 42 | N/A |
|--|----------------|-----------|-----------|-----------|------------|-----------|-------------|-----------|-----------|-----------|-----------|-----------|
| Total | 1.242.588 | 1.152.671 | 1.304.685 | 1 900 904 | \$00,00°,1 | 529,889 | (312,080) | 1,816,745 | 2.500.378 | 1 206 500 | 1,400,000 | 2,067,146 |
| | G | | | | | | | | | | | |
| Appreciation Depreciation) In fair value of investments | 660,256 | 422,856 | 437,591 | 946 293 | /EGA 024) | (100,400) | (1,457,773) | 666,775 | 1,304,444 | (068 920) | (00)000 | 757,136 |
| P G P i | ₩ | | | | | | | | | | | |
| Interest and Dividends | 124,437 | 147,184 | 164,325 | 185,836 | 240 151 | 10101 | 187,040 | 176,097 | 192,667 | 220.373 | | 237,031 |
| | ₩ | | | | | | | | | | | |
| Other Income | 22,673 | 40,443 | 17,450 | 21.868 | 28.393 | 30 545 | 00,040 | 10,319 | 17,668 | 9,756 | | 066'0 |
| 1 | 63 | | | | | | | | | | | |
| Employer Contributions | 392,693 | 489,508 | 608,771 | 683,193 | 780.202 | 843 751 | 01010 | 155,470 | 890,706 | 976,895 | 022 472 | 304,173 |
| _ | 49 | | | | | | | | | | | |
| Member | 42,529 | 52,680 | 76,548 | 71,614 | 75,974 | 84.357 | 80 223 | 00,440 | 24,823 | 98,494 | 104 816 |) |
| 20 | ()) | | | | | | | | | | | |
| Fiscal Year Ended June 30 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2 7 6 | 1107 | 2012 | 2013 | |
| | | | | | | | | | | | | |

Source: Statement of Changes in Plan Net Position

INVESTMENT INCOME

Fiscal Year 2013



NEW YORK CITY FIRE PENSION FUND

SCHEDULE OF EXPENSES BY TYPE

(in thousands)

| Total | 6 | ACR'OC/ e | 842,228 | 800,975 | 871,477 | 915,225 | 928.453 | 954 773 | 983 474 | 1 037 500 | 1,064,631 | 1 1 1 1 1 1 1 1 |
|---------------------------------|---------|-----------|---------|---------|---------|----------|----------|---------|---------|-----------|------------------|-----------------|
| Other Payments | | . 0 | 197 | 10 | 20 | 38 | 61 | 36 | | • | , 1 2 | |
| T a | ¥ | } | | | | | | | | | | |
| Administrative Expenses | • | Ι, | | 413 | 172 | 200 | 248 | 237 | 236 | 340 | 445 | |
| Admin Exp | €9 | • | | | | | | | | | | |
| Refunds | 217 | 319 | | | 444 | 418 | 325 | 510 | 276 | 443 | 816 | |
| | 8 | · · | | | - , | . | . | _ | ~ | | • | |
| Benefit Payments | 750,742 | 841,648 | 800,552 | 0.70 | 40'0'4 | 914,569 | 927,819 | 953,990 | 982,962 | 1,036,806 | 1,063,349 | |
| | 69 | | | | | | | | | | | |
| Fiscal Year Ended June 30 | 2004 | 2005 | 2006 | 2002 | 0000 | 2000 | 2009 | 2010 | 2011 | 2012 | 2013 | |
| 1 | | | | | | | | | | | | |

Table of Compensation to Administrative Officials and Commissions & Payments To Brokers and Consultants Fiscal Year Ended June 30, 2013

| Official Plan Position | Salary or wance Paid |
|---|-------------------------------|
| Pension Fund Administrative Personnel | \$ 2,009,686 |
| Comptroller's Office Executive Management Costs | 12,447 |
| First Deputy Personal Service Cost | 94,938 |
| Financial Information Service Agency (FISA) | 283,081 |
| Office of Payroll Administration (OPA) | 168,571 |
| Deputy Comptroller Asset Management (Personal Service Cost) | 727,918 |
| Deputy Comptroller Asset Management (Outside Service Costs) | 601,996 |
| Administrative Support Cost | 1,694 |
| Office of Management and Budget | 113,992 |
| Legal Advisor | 113,414 |
| Investments Advisor | 38,481,716 |
| Securities Lending Fees Total | \$ 790,837 * 43,400,290 |

^{*} Except for investment advisor and Securities Lending fees these expenses were charged to other City Agencies on behalf of the New York Fire Pension Fund.