



STATE OF NEW YORK INSURANCE DEPARTMENT
REPORT ON EXAMINATION
OF THE
NEW YORK CITY POLICE PENSION FUND, SUBCHAPTER 2

CONDITION:

JUNE 30, 2004

DATE OF REPORT:

JUNE 25, 2009

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REPORT ON EXAMINATION
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NEW YORK CITY POLICE PENSION FUND, SUBCHAPTER 2
AS OF
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EXAMINER:

JOSHUA WEISS

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STATE OF NEW YORK
INSURANCE DEPARTMENT
25 BEAVER STREET
NEW YORK, NEW YORK 10004

David A. Paterson
Governor

Eric R. Dinallo
Superintendent

June 25, 2009

Honorable Eric R. Dinallo
Superintendent of Insurance
New York, New York 10004

Sir:

In accordance with instructions contained in Appointment No. 22351, dated March 21, 2005, and annexed hereto, an examination has been made into the condition and affairs of the New York City Police Pension Fund, Subchapter 2, hereinafter referred to as "the Fund or System," at its home office located at 233 Broadway, 25th floor, New York, New York 10279.

Wherever "Department" appears in this report, it refers to the State of New York Insurance Department.

The report indicating the results of this examination is respectfully submitted.

1. EXECUTIVE SUMMARY

This examination covers the period from July 1, 1999 through June 30, 2004. The examination comprised a verification of assets and liabilities as of June 30, 2004 to determine whether the Fund's 2004 filed annual statement fairly presents its financial condition. This report on examination is confined to financial statements and comments on those matters which involve departure from laws, regulations or rules, or which require explanation or description.

The examination revealed the following key findings and recommendations:

1. Based on the examiner's review, it was revealed that during the period of examination the System did not have a comprehensive Investment Policy Statement that governed, controlled, and monitored its investment activities. However, subsequent to the examination period the System did develop a comprehensive Investment Policy Statement which the Department believes satisfies its concerns about proper governance of the System's investment activities. It is noted that the System and the Comptroller maintain that the System did have various policies and guidelines in place governing investment activities, and that in an effort to consolidate those guidelines an Investment Policy Statement was adopted starting in 2004. (See item 17 of this report)
2. With regard to loaned securities, it was noted that the board of trustees and the Comptroller's office did not give clear guidance to Citibank on how to deal with downgraded securities in the portfolio. This issue was also a concern raised in the Independent Fiduciary Services, Inc. Management Study and Operations Review report of the New York City Comptroller's Asset Management Function. Subsequent to the examination period, however, the Fund adopted an Investment Policy Statement which the Department believes has controls that should provide adequate oversight of the Fund's Securities Lending Program. (See item 8 of this report)
3. Recommendation that the Fund update its Rules and Regulations to incorporate the changes that have been instituted since 1940. This is a repeat recommendation from the prior two reports on examination. The Fund has advised that in response to the examiner's recommendation, it will begin to rewrite these rules and regulations. (See item 7 of this report)

2. SCOPE OF EXAMINATION

The prior examination was conducted as of June 30, 1999. This examination covers the period from July 1, 1999 through June 30, 2004. As necessary, the examiner reviewed transactions occurring subsequent to June 30, 2004, but prior to the date of this report.

The examination comprised a verification of assets and liabilities as of June 30, 2004 to determine whether the Fund's 2004 filed annual statement fairly presents its financial condition. The examiner reviewed the Fund's income and disbursements necessary to accomplish such verification and utilized such examination procedures, as deemed appropriate, in the review of the following matters:

- History of the Fund
- Management and control
- Corporate governance
- Growth of the Fund
- Accounts and records
- Financial statements
- Member benefits

The examiner reviewed the corrective actions taken by the Fund with respect to the recommendations contained in the prior report on examination. The results of the examiner's review are contained in Item 18 of this report. This report on examination is confined to financial statements and comments on those matters which involve departure from laws, regulations or rules, or which require explanation or description.

3. DESCRIPTION OF THE FUND

A. History

The Fund was incorporated on March 1, 1940 and commenced business on March 29, 1940. The Fund succeeded the Subchapter 1 (Article 1) pension fund established for New York City police prior to 1940. On January 30, 1940, Title B of Chapter 18 (recodified as Title 13, Chapter 2) of the Administrative Code of the City of New York (“Administrative Code”) was amended so that a new fund could operate on an actuarial basis covering persons appointed to the police force after June 1, 1940.

In 1995, legislation was enacted merging Subchapter 1 into Subchapter 2. In addition, legislation was passed in 1995 allowing the New York City Transit Authority and Housing Authority Police Officers to transfer out of New York City Employees Retirement System (NYCERS) and merge with the Fund. Three different police departments thus became one unified police force under the direct control of the Police Commissioner.

The Fund operates pursuant to Title 13, Chapter 2, Subchapter 2 of the Administrative Code. Under the Administrative Code, the Fund is subject to the supervision of the Department, which may examine its affairs with the same powers and jurisdiction as are applicable to a life insurance company under Article 3 of the New York Insurance Law. The Fund is also subject to assessment for expenses pursuant to Section 313 of the New York Insurance Law.

B. Management

Management of the Fund is vested in its board of trustees. Such board consists of the Police Commissioner, the Comptroller, a representative of the Mayor, the Commissioner of Finance, the President of the Patrolmen’s Benevolent Association, the First Vice President of the Patrolmen’s Benevolent Association, the Second Vice President of the Patrolmen’s Benevolent Association, the Chairperson of the board of trustees of the Patrolmen’s Benevolent Association, the President of the Captains Endowment Association, the President of the Lieutenants Benevolent Association, the President of the Sergeants Benevolent Association, and the President of the Detectives Endowment Association.

The 12 board members, as of June 30, 2004, were as follows:

<u>Name</u>	<u>Business Affiliation</u>
Raymond W. Kelly	Police Commissioner
William C. Thompson, Jr.	Comptroller
Anthony Crowell	Representative of the Mayor's office
Martha E. Stark	Commissioner of Finance
Patrick J. Lynch	President of the Patrolmen's Benevolent Association
John Puglisi	First VP of the Patrolmen's Benevolent Association
Mubarak Abdul-Jabbar	Second Vice-President Patrolmen's Benevolent Association
John Flynn	Board of Trustees, Patrolmen's Benevolent Association
John Driscoll	President of the Captain's Endowment Association
Anthony Garvey	President of the Lieutenants' Benevolent Association
Edward Mullins	President of the Sergeants' Benevolent Association
Thomas Scotto	President of the Detectives Endowment Association

In July 2004, Thomas Scotto was replaced by Michael Palladino.

The examiner's review of the minutes of the meetings of the board of trustees and its committees indicated that meetings were well attended and that each trustee attended a majority of meetings.

The following is a listing of the principal officers of the Fund as of June 30, 2004:

<u>Name</u>	<u>Title</u>
Raymond Kelly	Chairman
Patrick J. Lynch	Secretary
William C. Thompson, Jr.	Treasurer
Robert C. North, Jr.	Actuary

4. SIGNIFICANT OPERATING RESULTS

Indicated below is significant information concerning the operations of the Fund during the period under examination as extracted from its filed annual statements. Failure of items to add to the totals shown in any table in this report is due to rounding.

The following table indicates the Fund's financial growth (decline) during the period under review:

	<u>June 30, 1999</u>	<u>June 30, 2004</u>	<u>Increase (Decrease)</u>
Admitted assets	\$ <u>17,290,639,975</u>	\$ <u>16,184,068,295</u>	\$(<u>1,106,571,680</u>)
Reserves	\$13,849,252,000	\$18,510,638,000	\$4,661,386,000
Benefits due and unpaid	12,203,945	43,598,248	31,394,303
Other liabilities	<u>339,495,128</u>	<u>542,314,587</u>	<u>202,819,459</u>
Net reserves and all other liabilities	\$14,200,951,073	\$19,096,550,835	\$4,895,599,762
Excess of admitted assets over total net reserves and all other liabilities	<u>3,089,688,902</u>	<u>(2,912,482,540)</u>	<u>(6,002,171,442)</u>
Total	\$ <u>17,290,639,975</u>	\$ <u>16,184,068,295</u>	\$(<u>1,106,571,680</u>)

The Fund's admitted assets as of June 30, 2004, were mainly comprised of stocks and private equity (46%), and bonds (27%).

The following table indicates the membership of the Fund as of the beginning and closing dates of this examination:

	<u>July 1, 1999</u>	<u>June 30, 2004</u>	<u>Increase/(Decrease)</u>
Active members	39,107	35,409	(3,698)
Service pensioners	18,622	23,504	4,882
All other pensioners	<u>16,117</u>	<u>15,948</u>	<u>(169)</u>
Total	<u>73,846</u>	<u>74,861</u>	<u>1,015</u>

5. FINANCIAL STATEMENTS

The following is a comparative statement of assets, reserves, and other liabilities and a comparative statement of income and disbursements for the period July 1, 1999 through June 30, 2004, as contained in the filed annual statements. The examiner's review of a sample of transactions did not reveal any differences which materially affected the Fund's financial condition as presented in its filed annual statements.

A. STATEMENT OF ASSETS AND LIABILITIES FISCAL YEAR ENDED JUNE 30, 2004

Assets

Ledger assets

Book value of bonds	\$ 4,351,998,086
Discount notes	178,200,000
Commercial paper	110,484,750
Short term investment funds	227,060,379
Book value of stocks	4,662,892,644
Private equity	191,285,039
International equity	2,611,843,065
Cash on deposit-not on interest	(31,839,514)
Accounts receivable	299,798,840
Member loans receivable	542,314,587
Accounts payable	<u>(936,720,315)</u>
Total ledger assets	<u>\$12,207,317,561</u>

Non-ledger assets

Interest due and accrued:	
Bonds	\$ 46,784,345
Commercial paper	38,849
Common stock dividends declared but unpaid	7,896,721
Market value of stocks over book value	<u>3,922,030,819</u>
Total non-ledger assets	<u>3,976,750,734</u>

Gross assets \$16,184,068,295

Total admitted assets \$16,184,068,295

Liabilities

Present value of benefits payable on account of beneficiaries now drawing allowances	\$12,856,032,252
Net reserve for members in active service	4,133,206,627
Present value of future skim A/V VSF	<u>1,521,399,121</u>
Total net reserves	\$18,510,638,000
Benefits due and unpaid	43,598,248
Amount in transit	11,186,569,767
Reserve which may be offset by amount in transit	(11,186,569,767)
Reserve on account of loans receivable	<u>542,314,587</u>
Net reserve and all other liabilities	<u>\$19,096,550,835</u>
Excess of admitted assets over total net reserves and all other liabilities	<u>\$ (2,912,482,540)</u>
Total	<u><u>\$16,184,068,295</u></u>

B. STATEMENT OF INCOME AND DISBURSEMENTS

FISCAL YEAR ENDED JUNE 30,

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
<u>Income</u>					
<u>From members:</u>					
Regular contributions or payments	\$ 92,895,632	\$102,598,769	\$124,866,003	\$109,223,675	\$115,371,251
Loan repayments	85,749,815	94,706,557	90,420,209	95,074,475	83,849,605
Prior city service	1,351,635	434,680	924,787	2,244,223	4,320,075
Special contributions or payments	333,226	156,252	458,304	792,724	797,608
Prepaid loans	1,367,480	2,146,657	3,548,013	5,411,659	6,056,068
Refund of excess	2,806	43,200	227,868	239,066	565,056
Military contributions	12,703	3,626,243	2,521,769	719,694	493,226
Prior trainee time	0	2,210	0	0	0
Child care contributions	0	770,400	1,017,931	309,116	310,634
<u>From employer:</u>					
Regular contributions or payments	439,246,093	223,931,181	534,475,649	625,379,069	811,978,416
Recoup of trustees' expenses	0	0	0	6,000	0
Prior state service	422,553	1,173,936	843,159	1,053,502	1,394,514
City supplements:					
Regular	0	0	0	0	0
Line of duty-widow	9,044,902	7,623,878	8,081,385	9,524,764	9,607,669
Parity	604,579	575,652	544,110	557,274	441,481
Chapter 125/00	0	142,001	0	242,352	281,912
Refund	92,926	0	118,245	0	0
Members' loans receivable	0	0	454,945,031	440,662,926	450,511,438
Reserve for loans outstanding	356,075,078	334,042,409	0	0	0
Other assets-members' contributions	1,633,171	1,068,261	640,450	342,992	1,502,454

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
<u>From interest:</u>					
Bonds	\$ 284,147,506	\$ 339,270,766	\$ 306,582,321	\$ 249,998,018	\$ 207,929,024
Stocks	119,945,408	110,056,431	116,332,042	125,786,931	133,444,328
Interest on money market	33,137	2,320	0	0	0
From international fund	0	0	0	0	2,346,608
Commercial paper	8,513,840	4,765,493	2,375,587	2,032,789	1,724,248
Short term investment funds	39,999,196	30,643,774	18,531,200	7,065,395	3,154,660
Security lending	6,494,161	5,996,380	8,739,067	4,694,328	4,791,853
Members' loans receivable	0	0	19,649,085	21,915,761	21,739,656
<u>From other sources:</u>					
Money left on deposit	1,327,554	1,511,626	2,855,101	4,181,175	2,761,658
Health Insurance	2,916	0	0	0	0
Investment income	1,133,081	2,420,985	2,098,940	947,888	3,352,284
Gross profit on sale or maturity of:					
Bonds	86,557,667	163,120,416	159,652,344	185,993,755	160,921,811
Stocks	1,402,870,059	699,357,426	16,751,058	159,664,096	427,145,745
International investment	1,648,892	210,000	0	1,130,040	1,157,805,107
Increase by adjustment in book value of bonds	<u>22,205,561</u>	<u>28,848,126</u>	<u>27,733,820</u>	<u>24,824,802</u>	<u>19,008,868</u>
Total income	\$2,963,711,577	\$2,159,246,029	\$1,904,933,478	\$2,080,018,489	\$3,633,607,257
Increase by transfer of funds	<u>1,353,044,537</u>	<u>1,456,439,440</u>	<u>1,308,545,689</u>	<u>1,416,692,348</u>	<u>1,870,831,672</u>
Total income and increases	<u>\$4,316,756,114</u>	<u>\$3,615,685,469</u>	<u>\$3,213,479,167</u>	<u>\$3,496,710,837</u>	<u>\$5,504,438,929</u>

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
<u>Disbursements</u>					
Payment on account of retirement:					
Annual or other periodic payments	\$783,779,337	\$818,627,504	\$886,635,803	\$974,494,503	\$1,072,732,490
Lump sum payments on account of:					
Death after retirement	5,544,211	3,502,163	363,212	4,264,808	5,785,863
Line of duty deaths	4,179,363	6,856,183	8,085,784	7,360,189	7,967,894
Payments on account of death from ordinary causes before retirement	5,094,466	3,950,304	8,583,017	6,289,998	7,622,622
Payments on account of resignation and dismissal with cause	2,054,327	1,712,666	1,733,092	1,457,595	1,299,924
Payments on account of transfers of Reserves	8,531,005	21,965,625	0	1,179,992	6,856,098
Payments on account of excess					
Contributions	476,339	924,448	324,036	239,862	305,946
City Supplemental Chapter 390-398	88,668,026	0	0	0	0
City Supplemental- line of duty-widows	9,044,902	7,623,878	8,081,385	9,524,764	9,607,669
City Supplemental – parity	604,579	575,652	544,110	557,274	441,481
City Supplement – Chapter 125/2000	0	173,405,541	190,391,963	187,640,023	187,843,064
Member loans	141,896,920	164,395,574	215,960,303	97,553,610	89,449,540
Refund of military contribution	0	0	0	0	1,553
Benefit distribution	0	0	0	103,943,140	94,869,230
Transfers to other systems	1,945,904	74,125	3,714,010	6,523,073	4,117,573
Payments on account of money left on					
Deposit	0	2,671,460	0	0	0
Administrative expenses, per Schedule H	0	0	7,659,848	11,395,129	11,612,000
Withholding tax	66,475	5,487	1,823	28,904	7,841
Investment expense	22,367,341	22,006,477	21,937,429	19,796,749	29,876,102
Foreign tax withheld on dividend	30,436	6,784	8,031	25,973	17,803
Trustee expense	1,876	8,917	41,736	4,881	12,937
State insurance audit	0	103,699	0	0	0
Health insurance	0	889	91	2,565	3,348
Security lending expense	0	0	0	15,000,000	13,908,000
Reimbursement to work comp	0	0	0	3,425	0

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
Gross loss on sale or maturity of:					
Bonds	\$ 170,811,732	\$ 85,803,219	\$ 189,211,873	\$ 201,794,941	\$ 109,944,988
Stocks	203,002,571	270,167,083	105,573,775	386,078,938	2,371,942
Stocks, international equity	0	0	0	58,765,087	925,149,837
Decrease by adjustment in book value of bonds	9,936,128	11,257,158	12,766,059	19,114,324	22,808,498
Prior year members loans receivable	<u>339,495,128</u>	<u>356,075,078</u>	<u>334,042,409</u>	<u>454,945,031</u>	<u>544,668,197</u>
Total disbursements	\$ 1,797,531,006	\$ 1,951,719,914	\$ 1,995,659,789	\$ 2,567,984,778	\$ 3,149,282,440
Decrease by transfer of funds	<u>1,353,044,537</u>	<u>1,546,439,440</u>	<u>1,308,545,689</u>	<u>1,416,692,348</u>	<u>1,870,831,672</u>
Total disbursements and Decreases	\$ <u>3,150,575,603</u>	\$ <u>3,498,159,354</u>	\$ <u>3,304,205,478</u>	\$ <u>3,984,677,126</u>	\$ <u>5,020,114,112</u>
Total income over disbursements	\$ 1,166,180,511	\$ 207,526,115	\$ (90,726,311)	\$ (487,966,289)	\$ 484,324,817
Ledger assets, prior year	<u>\$10,927,978,718</u>	<u>\$12,094,159,229</u>	<u>\$12,301,685,344</u>	<u>\$12,210,956,033</u>	<u>\$11,722,992,744</u>
Ledger assets, current year	<u>\$12,094,159,229</u>	<u>\$12,301,685,344</u>	<u>\$12,210,956,033</u>	<u>\$11,722,992,744</u>	<u>\$12,207,317,561</u>

6. TREATMENT OF MEMBERS

The examiner reviewed a sample of various types of benefits to members and beneficiaries to determine whether members or beneficiaries were treated fairly and in accordance with the rules of the Fund. The examiner also reviewed the various controls involved, checked the accuracy of the computations and traced the accounting data to the books of account.

7. RULES AND REGULATIONS

The Administrative Code of the City of New York was re-codified in 1985. The Rules and Regulations used by the Fund are based on the Administrative Code as reenacted in 1940, and therefore make reference to provisions of the Administrative Code which are obsolete and no longer applicable. In addition, the Rules and Regulations do not reflect the current practices and procedures of the Fund. Some examples of obsolete rules and regulations include the following:

“Article I

Rule 2. The offices of the fund shall be located at Police Headquarters, No. 240 Centre Street, Borough of Manhattan, City, County and State of New York.”

On September 9, 2002 the Fund moved its office from, 1 Police Plaza, New York, New York to 233 Broadway, New York, New York.

“*Rule 21.* Moneys of the Fund shall be invested only as provided by resolution of the board, and no investments shall be made except in obligations issued by the City of New York, the State of New York, or the United States of America.”

The Fund has invested in a variety of corporate securities, including a substantial international portfolio, for many years.

“Article II

Rule 17. . . . At the time of becoming a member the applicant shall indicate on the form his election as to the basis on which he wishes to contribute, either:

Retirement after 20 years of service

Retirement after 25 years of service, or

Retirement after attainment age 55

The election so made shall be binding thereafter on the Board and the member, and shall not be subject to change . . . ”

All police officers may retire after 20 years of allowable police service. No election as to the basis on which an officer wishes to contribute is required.

“*Rule 24.* Loans to members . . . may be authorized by the Board upon application therefore . . . to an amount not exceeding forty (40) per cent of the total amount posted to his credit . . . ”

Fund members routinely receive loans in excess of forty percent of contributions.

The previous two reports on examination recommended that the Fund update its “Rules and Regulations” to incorporate all the changes that have been instituted since 1940. That recommendation is repeated in this report. The Fund has advised that in response to the examiner’s recommendation, it will begin to rewrite these rules and regulations.

8. SECURITIES LENDING

A. Board of Trustee Oversight

Pursuant to the Administrative Code, the Fund delegates to the New York City Comptroller certain responsibilities for the investment and management of the Fund’s assets. The Comptroller retained Citibank, a unit of Citigroup, as custodial bank for the Fund and the other New York City pension funds, by agreement (“Custodian Agreement”) dated January 1, 1998, between the Comptroller and Citibank. Pursuant to the Custodian Agreement, Citibank also established and provided a securities lending

program for the New York City pension funds, (“Securities Lending Program”). The terms of the Securities Lending Program required that Citibank, acting as the securities lending agent, loan securities to qualified borrowers in exchange for cash collateral from the borrowers of such lent securities. Citibank was authorized to invest the cash collateral in certain securities, pursuant to certain written investment guidelines developed by the Comptroller.

Citibank, on behalf of the Fund, Teachers’ Retirement System of the City of New York, New York Fire Department Pension Fund, and the New York City Employees Retirement System purchased an \$80 million principal amount of NPF XII, Inc., Series 2000-2 Class A Health Care Receivables Securitization Program Notes, in a private placement offering in October 2000 using \$80 million of cash collateral from the Securities Lending Program. NPF XII, Inc. is a special purpose entity and wholly-owned subsidiary of National Century Financial Enterprises, Inc. (“NCFE”). The Fund’s portion of the total purchase was \$15 million. As a result of fraudulent conduct by NCFE and its officers, and a series of downgrades, NCFE declared bankruptcy in November 2002. The New York City pension funds sustained a loss of \$80 million, with the Fund incurring \$15 million of the total loss.

The New York City Corporation Counsel informed Citibank that they were prepared to assert and pursue against Citibank causes of action arising from the \$80 million loss. At issue was the question of whether Citibank, as custodian, should have sold NCFE securities once the securities were downgraded. Although Citibank denied any responsibility for the loss, in order to avoid litigation concerning the dispute, the parties agreed to settle the dispute. The agreement involved an immediate payment by Citigroup of \$15 million and possible additional payments dependent upon amounts recovered from other parties involved in the transaction. The \$15 million was divided among all the NYC pension funds that participated in the NCFE transaction. The Fund has subsequently advised that recovery efforts continued after the examination period, and that total recoveries are expected to be at least \$50 million. Based on the examiner’s review, it appears that Citibank was given authority by the New York City Comptroller to invest the cash collateral received from the Securities Lending Program.

It was also noted that the board of trustees and the Comptroller's office did not give clear guidance to Citibank on how to deal with downgraded securities in the portfolio. This issue was also a concern raised in the Independent Fiduciary Services, Inc. Management Study and Operations Review report of the New York City Comptroller's Asset Management Function. However, on December 17, 2007 the Fund adopted an Investment Policy Statement which states the following:

“Cash collateral received will be invested in a high-quality investment program that emphasizes the return of principal, maintains required daily liquidity, and ensures diversification across approved investment types.”

“Each agent bank is required to act as a fiduciary with respect to the Fund and to have systemic and procedural controls in place to ensure adherence to guidelines for operating the securities lending program on behalf of the Fund. The results of the securities lending program are reported to the Board on a regular basis.”

The Department believes that the above additional controls should provide adequate oversight of the Fund's Securities Lending Program.

9. ACTUARIAL COST METHOD AND EMPLOYER CONTRIBUTION

The actuarial cost method by which employer contributions to the New York City Police Department Pension Fund are computed is the Frozen Initial Liability Actuarial Cost Method. Under this method, the present value of future normal contributions is developed as a balancing item, calculated by subtracting the sum of the actuarial value of assets, the unfunded actuarial accrued liability and the actuarial present value of prospective required employee contributions from the actuarial present value of prospective benefits as of the valuation date. This can be written symbolically as:

$$PVFNC = PVB - (AVA + UAAL + PVFeeC)$$

Where

PVFNC = Present Value of Future Normal (Employer) Contributions

PVB = Present Value of Prospective Benefits (section 10)

AVA = Actuarial Value of Assets (section 12)

UAAL = Unfunded Actuarial Accrued Liability (section 11)

PVFeeC = Present Value of Future Required Employee Contributions

For the June 30, 2004 valuation, the above values are (to the nearest million dollars):

PVB =	27,377	Present value of future benefits
AVA =	18,510	Assets on hand (actuarial value)
UAAL =	0	Portion of future employer contributions
PVFeeC =	316	Present value of employee contributions

The present value of future normal employer contributions is then

$$\begin{aligned} PVFNC &= 27,377 - (18,510 + 0 + 316) \\ &= 27,377 - 18,826 \\ &= 8,551 \end{aligned}$$

This calculation is displayed in more detail in the next table.

As a consequence of this method, actuarial gains and losses (deviations of actual experience from what was assumed) are reflected in the normal contribution rate, as opposed to being separately amortized. The fiscal year runs from July 1 through June 30. The valuation date (date as of which Retirement System liabilities and assets are determined for the purpose of calculating the employer contribution) is the last day of each fiscal year, June 30. The values determined as of that date are used to calculate the amount of employer contribution due for the next succeeding fiscal year, beginning one day after the valuation date.

The New York City Office of the Actuary, which performs the actuarial valuation, sends an Estimated Appropriation letter to the Retirement System in May or June. This letter informs the System of the estimated amount to be contributed for the fiscal year beginning July 1. This estimated amount is determined by the Office of the Actuary based on current actuarial assumptions, projections of the census data from the prior actuarial valuation, and any known significant legislation. The System then begins making monthly contributions for the fiscal year beginning July 1 on the basis of the Estimated Appropriation letter.

Usually by the spring of the year, the Office of the Actuary has completed the valuation as of the preceding June 30. The Office of the Actuary then sends an Appropriations “True-Up” letter to the System informing it of the actual contribution due for the fiscal year ending on the next June 30. The System adjusts the monthly contributions it is making so that, by June 30, the total amount it has contributed during the fiscal year, including the estimated amounts commencing at the beginning of the fiscal year and the adjusted amounts contributed in the last few months of the fiscal year, is the amount specified by the Appropriations True-Up letter.

For example, for the fiscal year ending June 30, 2002, the events described above were as follows:

June 6, 2001: Office of the Actuary (OA) sends Estimated Appropriation Letter to System stating that the estimated employer contribution for the 2002 fiscal year is \$508,833,000.

July, 2001: System begins making monthly contributions of \$42,403,000 for 2002 fiscal year based on the Estimated Appropriation Letter.

- July, 2001: OA begins work on actuarial valuation for 2002 fiscal year. This valuation is based on census and asset data as of June 30, 2001.
- May 6, 2002: OA sends “True-Up” Appropriation Letter to System stating that the employer contribution for the 2002 fiscal year is \$534,476,000. At that point, the System has probably one more monthly contribution to be made for the 2002 fiscal year, and the amount of that contribution is increased to \$68,046,000 so that the sum of the previous eleven contributions and that final contribution is \$534,476,000.

The formula above shows the development of the Present Value of Future Normal Contributions as a balancing item. The normal contribution rate is calculated by dividing the present value of future normal contributions by the present value of projected future salaries of members on the payroll as of the valuation date. This contribution rate is calculated to be a level percentage of payroll in future years. The employer normal contribution for the ensuing fiscal year is derived by multiplying the normal contribution rate by aggregate annual salaries. The resulting normal contribution is appropriate for a value that is to be paid immediately on the valuation date; in fact, as mentioned above, the contribution is paid throughout the year. To adjust for the timing, the present value of projected future salaries reflects an interest adjustment, so that the resulting normal cost is appropriate for, on average, a mid-year contribution.

The total employer contribution is made up of several components. The normal contribution, described above, is generally the largest component. Other components are described below.

Amortization of unfunded actuarial accrued liability (UAAL contribution): This component is itself made up of one or more components, each one of which is a contribution to amortize a liability amount which is not being funded through the normal cost.

Investment Expenses: Beginning with the June 30, 1999 actuarial valuation, investment expenses were explicitly addressed in the calculation of the employer contribution; previously, the amount of investment expenses had been implicitly recognized in the calculation of the normal cost. The investment expense included in the total employer

contribution for a fiscal year is the actual investment expense for the preceding fiscal year increased by the assumed interest rate; i.e., multiplied by 1.08.

Group Term Life Insurance (GTLI) Premium: In addition to retirement benefits, the System provides death benefits for members. Internal Revenue Code section 79 states that the first \$50,000 of group life insurance benefits has no tax consequences to the employee or the employer; amounts of insurance in excess of \$50,000 are included in employee income. To accommodate that distinction, the first \$50,000 of life insurance benefit paid on account of death in active service in the Retirement System is paid from the funds of the Group Term Life Insurance Plan. The amount in excess of \$50,000 is paid from the funds of the Retirement System. The GTLI premium is the amount of the employer contribution necessary to fund the benefits to be paid from the Group Term Life Insurance Plan. The GTLI premium amount is not shown separately in the table below; it is included in the employer normal cost.

The report of the examining actuary covers the five fiscal years ending June 30, 2000 through June 30, 2004. The following table, and many of the subsequent tables in this Report, includes values for those five fiscal years, as well as values for the immediately preceding fiscal year, ending June 30, 1999. The values determined as of June 30, 1999, are used to determine the employer contribution to be made during the fiscal year ending June 30, 2000.

Employer contributions were computed as follows (dollar amounts shown to nearest thousand):

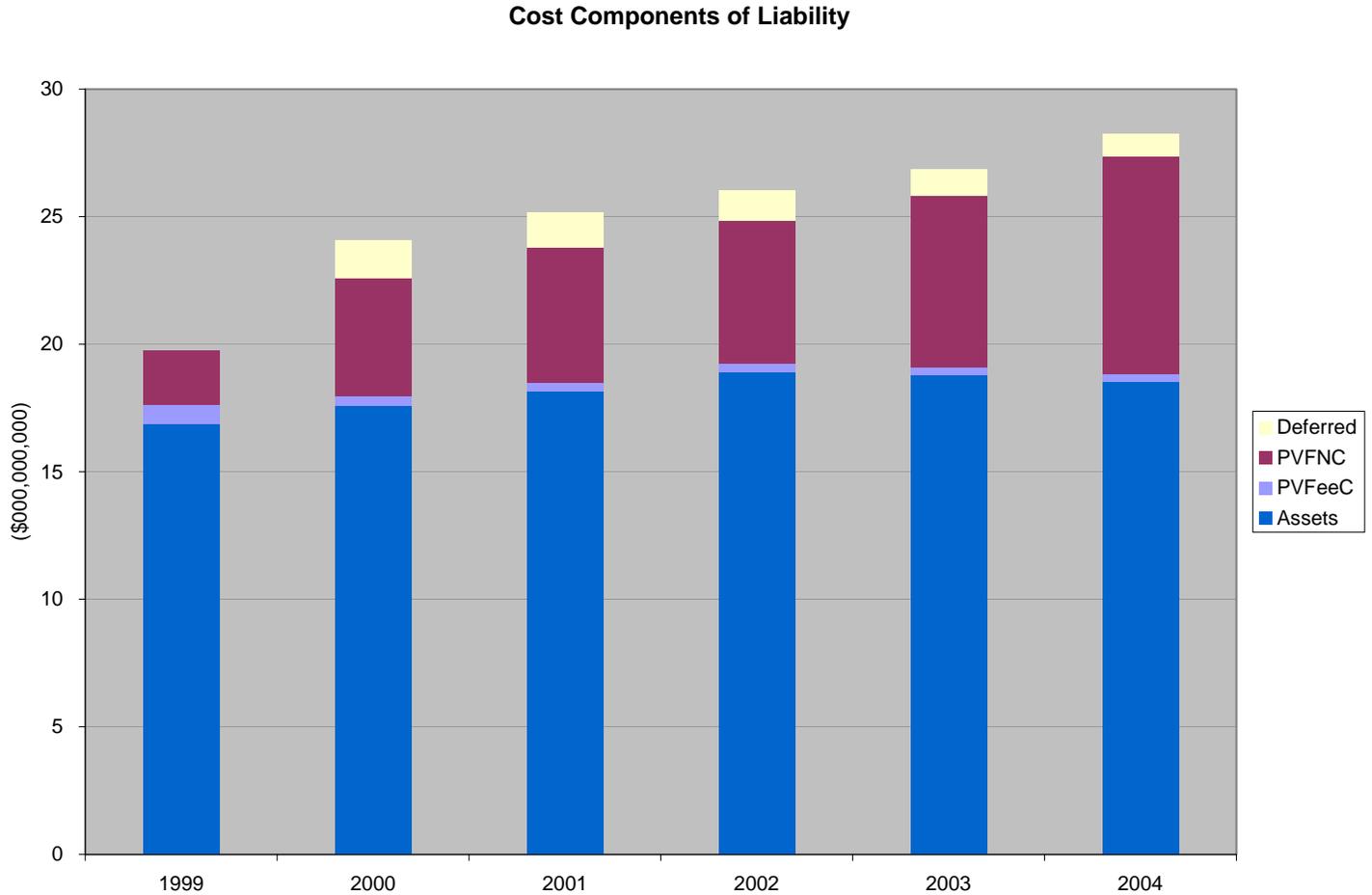
	<u>6/30/99</u>	<u>6/30/00</u>	<u>6/30/01</u>	<u>6/30/02</u>	<u>6/30/03</u>	<u>6/30/04</u>
Liabilities						
PV Benefits for beneficiaries	7,475,708	7,711,075	8,218,805	9,285,295	10,016,547	10,872,431
PV Supplemental Benefits	645,946	2,022,634	2,026,690	2,009,142	2,004,215	1,983,601
PV Benefits for Actives	11,392,664	12,728,237	13,263,658	13,732,415	13,586,608	13,877,085
PV Future Skim for VSF	254,874	116,030	282,708	999,720	1,234,062	1,521,399
Total	19,769,192	22,577,976	23,791,861	26,026,572	26,841,432	28,254,516
Deferred per 125/2000 ¹	-	1,488,260	1,360,796	1,204,987	1,043,593	877,328
Net Total	19,769,192	21,089,716	22,431,065	24,821,585	25,797,839	27,377,188
Assets						
Actuarial Asset Value	16,877,765	17,601,913	18,141,670	18,913,634	18,781,359	18,510,638
Prospective Assets						
PV Future UAL Contribs	0	0	0	0	0	0
PV Future Employee Contribs	752,490	366,640	339,429	329,561	316,185	315,692
Total	17,630,255	17,968,553	18,481,099	19,243,195	19,097,544	18,826,330
PV Future Normal Contribs	2,138,937	4,609,423	5,310,762	5,578,390	6,700,295	8,550,858
PV Future Salaries	21,222,785	21,875,097	21,670,135	21,450,346	20,954,233	21,287,175
Normal Rate	10.078%	21.072%	24.507%	26.006%	31.976%	40.169%
Annual Salaries	2,331,957	2,465,682	2,500,130	2,496,249	2,433,897	2,460,750
Components of Contribution						
Normal Contribution	235,015	519,569	612,707	649,175	778,263	988,459
Contribution credit per 125/2000 ¹	-	(130,602)	(102,005)	(55,769)	-	-
UAL Contribution	0	0	0	0	0	0
Administrative expense	0	0	0	8,273	12,307	12,541
Investment expense	15,007	24,190	23,774	23,701	21,409	32,286
Total Pension Expense	250,022	413,157	534,476	625,380	811,979	1,033,286
City Rate	10.722%	16.756%	21.378%	25.053%	33.361%	41.991%

¹ Sections 13-696.i and .j of the Administrative Code of the City of New York, as added by Chapter 125 of the Laws of 2000 and amended by Chapter 278 of the Laws of 2002, require that some of the funding for the additional liability attributable to the automatic cost-of-living adjustments provided by Chapter 125 of the Laws of 2000 be deferred. Chapter 125 required that the deferral be calculated as a percentage of the normal contribution; that results in the contribution credit for 6/30/2000 and 6/30/2001. Chapter 278 required that the deferral be determined by a percentage of the liability; that method was used for the 6/30/2002 and subsequent valuations. For 6/30/2000 and 6/30/2001, the grayed liability figures for “Deferred per 125/2000” show the amounts that would have been deferred by 278/2002, but were not because the valuations had already been completed.

The table above shows that the normal contribution, usually the largest single component of the total employer contribution, increased significantly during the last five years. The normal contribution had decreased in the late 1990's due to significant investment gains, as well as changes in actuarial assumptions and methodology. During the period this examination covers, investment results were significantly less than expected. In addition, significant benefit increases were provided. As a result, the normal contribution rate, as developed by the traditional actuarial process, has begun to increase.

A legislative change has delayed some of the effect of the actuarial increase in the employer normal contribution. Chapter 125 of the Laws of 2000 provided automatic cost-of-living allowances to retirees, reduced member contributions to certain members, and other benefit increases. That chapter also required that the funding for the additional liability created by the chapter be phased in over five years. Chapter 278 of the Laws of 2002 modified that phase-in period so that the additional liability created by Chapter 125 was phased in over a ten year period.

Shown below is a chart of the primary asset and liability components.

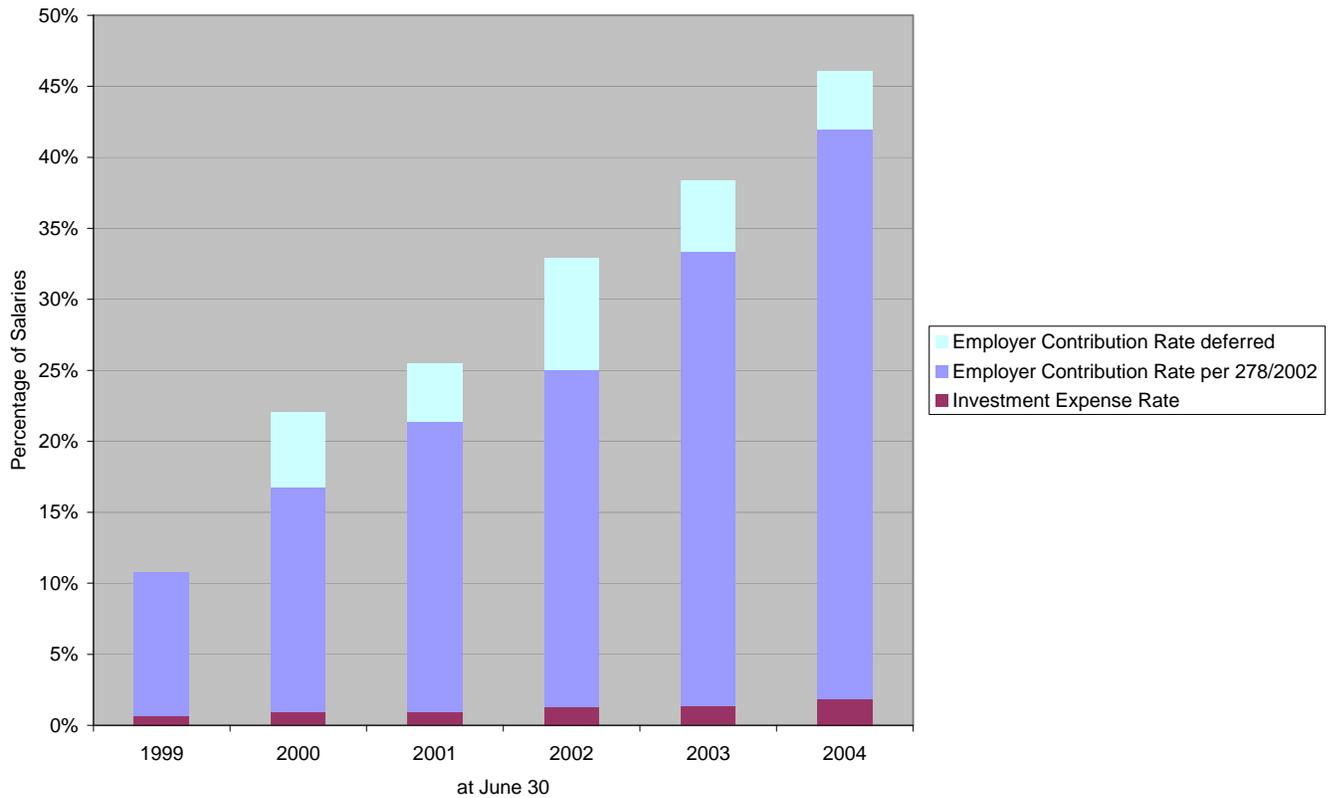


This chart illustrates the major components that were used to develop the employer contribution requirement. The total height of each bar represents the total plan liability – the present value of benefits to be eventually provided to members. The darker blue portion of the bars represents the actuarial value of assets, and the lighter blue portion represents the present value of future employee contributions. The remaining portion of each bar shows the amount of liability that is to be paid by the employer: the maroon color shows the amount to be paid in the current year, and the lighter color shows the amount that is deferred based on Chapter 278 of the Laws of 2002.

The following chart illustrates the components of employer costs shown as a percentage of salaries. The actuarially-determined employer normal contribution is shown in two components. The deferred component is the portion of the total calculated

rate that is required by Chapter 278 of the Laws of 2002 (“278/2002”) to be deferred to later years. The 278/2002 component is the portion that is to be contributed by the employer in the current year according to 278/2002. The total employer contribution, including expenses, unfunded actuarial liability, and the normal cost, has, since 1981, declined from almost 50% of salaries to less than 11% of salaries in 2000, and has recently increased to over 40% of salaries. For the next few years, the employer contribution is expected to continue to increase as a percentage of salaries.

NYC Police Department Pension Fund Employer Contribution Rates



10. ACTUARIAL PRESENT VALUE OF BENEFITS AND ANNUAL STATEMENT
LIABILITIES

The liabilities of the Fund as reported in its annual statements to the New York State Insurance Department are summarized in the following table (dollar figures are shown to nearest thousand):

	(1)	(2)	(3)	(4)
Valuation Date	Present Value of Benefits Payable to Beneficiaries Now <u>Drawing Allowances</u>	Present Value of Benefits Provided for Members Now <u>in Active Service</u>	Unfunded Accrued <u>Liability</u>	Present Value of All Other Prospective <u>Contributions</u>
6/30/99	7,317,528	11,178,407	1,365,414	2,941,774
6/30/00	9,733,708	12,728,237	0	4,906,032
6/30/01	10,245,495	13,263,658	0	5,650,191
6/30/02	11,294,438	13,732,415	0	7,112,939
6/30/03	12,020,762	13,586,608	0	8,060,074
6/30/04	12,856,032	13,877,085	0	9,743,878

	(5)	(6)	(7)	(8)
Valuation Date	Present Value of <u>Future Skim a/c VSF</u>	Net Reserves (1) + (2) – (3) – (4) <u>+ (5)</u>	Benefits, Expenses and Other Amounts <u>Due and Unpaid</u>	Net Reserves and All Other Liabilities <u>(6)+(7)</u>
6/30/99	0	14,188,747	12,204	14,200,951
6/30/00	46,000	17,601,913	553,588	18,155,501
6/30/01	282,708	18,141,670	339,826	18,481,496
6/30/02	999,720	18,913,634	477,711	19,391,345
6/30/03	1,234,062	18,781,358	582,748	19,364,106
6/30/04	1,521,399	18,510,638	585,913	19,096,551

	(9)	(10)
Valuation Date	Admitted <u>Assets</u>	Excess of Assets over Reserves and Liabilities <u>(9) – (8)</u>
6/30/99	17,290,640	3,089,689
6/30/00	18,483,236	327,735
6/30/01	16,180,859	(2,300,637)
6/30/02	14,522,671	(4,868,674)
6/30/03	14,212,424	(5,151,682)
6/30/04	16,184,068	(2,912,483)

Funding calculations are generally completed after the annual statement is filed. Values in the annual statement may not reflect benefit changes and assumption and methodology changes that are then finalized and incorporated in the funding calculations. Therefore some of the items in the table above may differ from the corresponding values shown in funding calculations.

11. UNFUNDED ACTUARIAL ACCRUED LIABILITY

The unfunded actuarial accrued liability (UAAL) of a pension plan refers to the present value of required employer contributions other than normal contributions. UAAL is not a measure of the overall funding status of the pension plan. Such measures are discussed elsewhere in this report in the section titled Funding Ratios.

The items to be funded through UAAL contributions, and the computation of the initial UAAL balance, are affected by the choice of funding method. Under the System's funding method, new unfunded accrued liability balances generally are established in connection with improvements in member benefits attributable to past service and in connection with changes in actuarial assumptions. The amount of such new UAAL balances is computed by the Entry Age Normal Cost Method.

The System's total UAAL at any point in time is the aggregate present value of the remaining payments in amortization of all previously established UAAL balances.

As of June 30, 1999, just prior to the examination period, the UAAL was \$0. This amount resulted from Chapter 85 of the Laws of 2000, which “reestablished” previously-existing UAAL components based on revised actuarial assumptions

As mentioned above, the UAAL as of 6/30/99 was \$0. During the five subsequent years, there were no benefit changes that generated any additional components of UAAL.

12. ACTUARIAL ASSET VALUATION METHOD

Assets are reported in the System's annual statements at amortized value for bonds and market value for stocks. More than half of the System's total assets are invested in stocks, and their market value is considered too volatile to use directly in computing employer contributions. Accordingly, for purposes of computing employer contributions, market values are smoothed by the use of an actuarial asset valuation (AAV) method.

The AAV method (adopted with the June 30, 1991 valuation) adjusts the current year's market value to recognize "unexpected return" over a five year period. "Unexpected return" is defined as the excess of actual investment income, including realized and unrealized changes in market value, over expected investment income. Expected investment income, in turn, is defined to be the valuation interest rate multiplied by the mean actuarial value of investable assets.

Within a short period prior to this examination period, a "market value restart" was implemented two times, on June 30, 1995 and June 30, 1999. In a market value restart, the actuarial value of assets is set equal to the market value of assets. On both of those dates, prior to the restart, the actuarial value of assets was less than the market value of assets. Therefore, as a result of the restarts, the new actuarial value of assets was higher than what it otherwise would have been. It is recognized that the change in actuarial asset valuation method is being made in conjunction with other changes in actuarial assumptions and methods. However, the actuarial standard of practice regarding actuarial asset valuation methods promulgated by the Actuarial Standards Board requires that the general effect of this recent change in the actuarial asset valuation method be disclosed. (This standard was discussed beginning in 2002, and has since become effective.) While the published reports on the 1995 and 1999 actuarial valuations stated that the actuarial asset valuation method was changed, there was no mention of the general effect of that change, as would be required by the actuarial standard of practice. In fact, the consequence of both changes was a reduction in current employer contribution requirements, and therefore an increase in later employer contribution

requirements; i.e., a deferral of employer contribution requirements to later years. During this examination period there were no market value restarts.

In the annual statements filed by the System with the New York Insurance Department, the balance sheet entry, "Excess of admitted assets over total net reserves and all other liabilities," embodies the difference between admitted assets and the actuarial value of assets. To arrive at the actuarial asset value used in computing pension expense, it is necessary to deduct amounts not available for future benefits, such as benefits due and unpaid and mortgage escrow.

Until the June 30, 2002 valuation, it had been the System's practice to deduct member loans from both assets and liabilities in the pension expense computations. That practice was changed with the June 30, 2002 valuation: member loans were viewed as another form of investment for the fund, and were thus included in the determination of plan assets.

The table below shows the relationship between the value of assets for pension expense purposes and the assets in the annual statement. The values for Assets Available shown in the table reflect market values of assets; as described at the beginning of this section, the market values are modified to develop an Actuarial Asset Value used in the funding calculations.

	(\$000)				
	<u>June 30</u>				
	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
Assets Available	17,813,418	15,765,300	14,504,868	14,271,631	16,136,719
Accrued Employee	(6,668)	(7,736)	(8,377)	(8,720)	(10,222)
Accrued Benefits Payable	8,288	5,783	22,765	38,080	43,598
Deferred Employer	189,225	0	0	0	0
Payable for Security Lending	0	0	0	2,169,691	2,886,693
Collateral for Security	0	0	0	(2,154,691)	(2,872,785)
Member Loans Receivable	356,075	334,042	(96,175)	96,175	-
BV – MV of Bonds	113,075	72,740	86,811	(209,867)	(17,703)
Expenses Due and Accrued	<u>9,824</u>	<u>10,730</u>	<u>12,778</u>	<u>10,126</u>	<u>17,768</u>
Assets Annual Statement	<u>18,483,237</u>	<u>16,180,859</u>	<u>14,522,670</u>	<u>14,212,425</u>	<u>16,184,068</u>

13. INTEREST EARNED AND INTEREST REQUIRED

Included in the System's annual statements to the Insurance Department are the amount of interest required to maintain funds and the total investment income actually earned during the year, including realized and unrealized changes in market values. Interest required to maintain funds is computed by applying the assumed valuation interest rate to the mean actuarial value of assets. Thus, the amount reported as interest required to maintain funds represents the expected investment income for the fiscal year. The amounts reported for the five years of the examination period, as well as the year immediately preceding, were as follows:

Fiscal Year ending <u>6/30</u>	(1)	(2)	(3)	(4)
	<u>Interest Earned</u>	<u>Interest Required</u>	Excess <u>(1) - (2)</u>	Ratio <u>(1) ÷ (2)</u>
1999	\$2,056,133,399	\$1,088,200,354	\$ 967,933,045	189%
2000	1,593,816,076	1,230,505,420	363,310,656	130%
2001	(1,514,452,063)	1,526,057,926	(3,040,509,989)	(99%)
2002	(1,218,513,195)	1,563,654,141	(2,782,167,336)	(78%)
2003	261,196,981	1,539,770,194	(1,278,573,213)	17%
2004	<u>2,526,606,484</u>	<u>1,437,362,058</u>	<u>1,089,244,426</u>	<u>176%</u>
TOTAL	\$1,569,290,270	\$8,385,550,091	\$(4,680,762,413)	19%

As the table indicates, actual investment earnings were almost twice the expected investment income during the 1999 fiscal year, then began a significant drop. The magnitude of the investment losses during each of the 2001 and 2002 fiscal years was almost as large as the expected investment earnings (but in the opposite direction).

14. FUNDING RATIOS

Attachment B of the System's annual statements to the Insurance Department provides, as a measure of funding adequacy, the ratio of assets available for active members to the projected benefit obligation (PBO) for active members.

The PBO is the present value of pension benefits resulting from employee service up to the date of the annual statement, based on salaries projected to the date of retirement. (PBO thus is different from the annual statement's "Present Value of Benefits for Members now in Active Service," which is based on members' total anticipated service as of the date of retirement.) The PBO includes vested benefits for terminated members.

The PBO was developed according to Statement No. 5 of the Government Accounting Standards Board (GASB 5), even though GASB 5 has been largely superseded by GASB 27. However, according to both GASB 5 and GASB 27, where the actuarial cost method is the Frozen Entry Age, for purposes of computing the PBO, the member's total projected benefit at retirement is prorated uniformly over total anticipated service, even if the plan's benefit formula provides a non-uniform pattern of benefit accrual. For many members the System's benefits accrue more rapidly in the earlier years of a member's service than in the later years. For such members the uniform prorate required by GASB produces a lower PBO, and hence a more favorable funding ratio, than would be produced by prorating benefits strictly according to the benefit formula.

Assets available for active members are the System's admitted assets reduced by the following: present value of benefits to beneficiaries now drawing allowances, accumulated member contributions, benefits due and unpaid and other miscellaneous liabilities. Amounts relating to group life insurance benefits are excluded from assets as well as from the PBO.

A strength of this funding ratio as a measure of funding adequacy is that it is independent of the actuarial cost method used for determining contributions to the pension plan. However, it is still dependent on the actuarial assumptions used for

determining those contributions. Actuarial assumptions that are more optimistic, lead to a lower level of future funding requirements and produce a more favorable funding ratio.

Funding ratios, as reported in Schedule B of the Annual Statement, are shown below:

Valuation <u>Date</u>	(1) Assets Available for <u>Active Members</u>	(2) Projected Benefit <u>Obligation</u>	(3) Funding Ratio <u>(1) ÷ (2)</u>
6/30/99	\$9,569,354,439	\$6,368,786,405	150%
6/30/00	8,139,099,144	7,341,561,620	111%
6/30/01	5,532,986,175	7,864,446,796	70%
6/30/02	2,682,617,151	8,686,986,926	31%
6/30/03	1,535,226,478	8,841,488,348	17%
6/30/04	2,662,950,019	9,288,883,704	29%

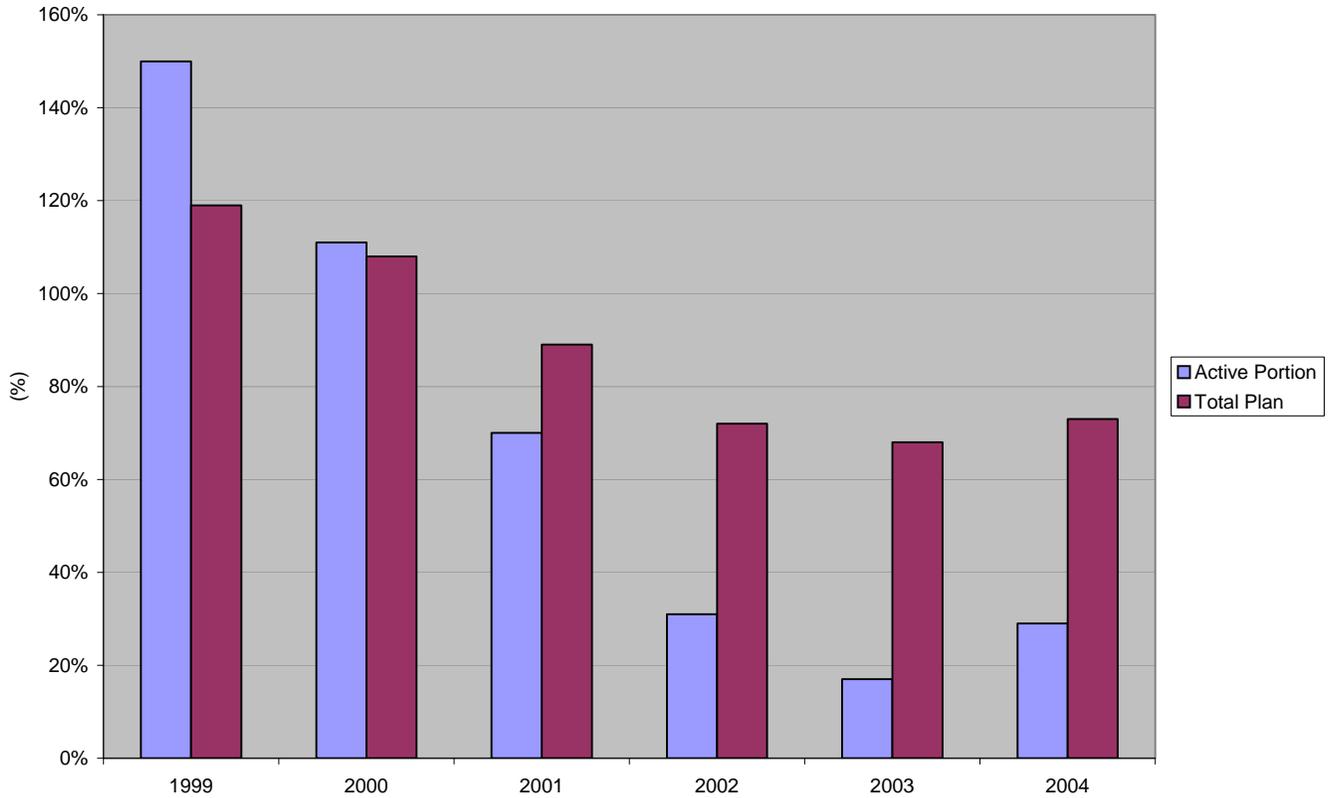
The decrease in Funding Ratio shown above is due primarily to the decrease in investment yield referred to earlier in this report.

The “Assets Available for Active Members” (Column (1)) above decreases significantly over the period shown. However, the total plan assets are not, in reality, segregated into different funds based on member status (e.g., one for active members and one for retirees). The procedure, described above used to develop the Column (1) numbers will magnify the effect of any asset gain or loss. A more meaningful set of numbers to measure the funded status of the plan would be all plan assets and all plan liabilities, for both active and retired members of the plan. The table below shows the funding ratios for total plan assets and liabilities.

Valuation <u>Date</u>	(1) <u>Assets</u>	(2) Projected Benefit <u>Obligation</u>	(3) Funding Ratio <u>(1) ÷ (2)</u>
6/30/99	\$17,238,581,262	\$14,490,342,577	119%
6/30/00	18,426,395,087	17,075,270,068	108%
6/30/01	16,118,306,853	18,098,134,069	89%
6/30/02	14,454,765,469	19,981,424,503	72%
6/30/03	14,138,736,176	20,862,249,946	68%
6/30/04	16,104,895,106	22,144,915,956	73%

The first table, reflecting only a portion of plan assets and liabilities, shows a decrease in funding ratio from 150% to 29%. The second table, reflecting all plan assets and liabilities, shows a somewhat less steep reduction, from 119% to 73%. This relationship can be seen in the chart below.

Funding Ratios



15. ACTUARIAL ASSUMPTIONS AND METHODS

Several changes in assumptions and methods were proposed by the Office of the Actuary for the June 30, 1999 valuation, just prior to the beginning of the five-year period this examination covers. These changes were implemented in Chapter 85 of the Laws of 2000, and included the following:

- The actuarial interest rate was changed from 8.75% to 8.00%.
- The General Wage Increase component of the salary scale assumption was changed from 4% to 3%.
- The assumed rates of mortality, withdrawal, retirement and disability were changed based on recent experience studies.
- The Unfunded Actuarial Accrued Liability was consolidated and reestablished using the Entry Age Actuarial Cost Method and the Balance Sheet Liability (“BSL”) was eliminated.
- The actuarial asset value was reset to market value.
- The investment expenses were reimbursed to the Fund as a separately-identified contribution amount.

During the examination period the System engaged a pension consulting organization (Gabriel, Roeder, Smith & Company) to analyze System experience in relation to the actuarial assumptions. The study reviewed experience data from June 30, 1988 to June 30, 2001. The consulting organization issued a final report dated October, 2003 in which a number of changes in actuarial assumptions were recommended. Because the publication date of the report is a relatively short time before the completion of this examination, it would not be reasonable to expect that any of the changes recommended in the report would have been implemented by the completion of this examination. The recommendations in the consultant’s report included making changes

in the salary scale assumption, withdrawal assumption, and mortality assumption, among others.

The principal actuarial assumptions include an interest assumption (the assumed investment yield, which is also the rate at which liabilities are discounted), a salary scale assumption (the assumed percentage increase in salaries), and assumptions regarding the rate at which members leave active status according to reason: mortality, retirement, withdrawal or disability. A selected summary of the assumptions is shown below:

Interest: 8% per year

Salary Scale:

<u>Years</u> of <u>Service</u>	<u>Annual</u> Percentage <u>Increase</u>
0	9.50%
5	4.00
10	4.30
15	4.50
20	4.00

Withdrawal from active service (for other than service retirement):

<u>Age</u>	<u>Termination</u>	<u>Ordinary</u> <u>Disability</u> <u>Retirement</u>	<u>Accidental</u> <u>Disability</u> <u>Retirement</u>	<u>Ordinary</u> <u>Death</u> <u>M / F</u>	<u>Accidental</u> <u>Death</u>
25	2.50%	.05%	.35%	.0432 / .0245%	.02%
40	.50	.30	1.60	.1151 / .0645	.02
55	.50	1.00	2.50	.5702 / .2465	.01

Withdrawal from active service (for service retirement):

-- Years of service since eligibility --

<u>Age</u>	<u>0-1</u>	<u>1-2</u>	<u>2+</u>
40	40%	20%	12%
45	40	20	12
50	40	20	12
55	40	20	12
60	40	20	12
63	100	100	100

Both the interest assumption and the salary scale assumption are made up of other, more fundamental, components. The interest assumption is composed of a price inflation assumption and a “real” interest rate; i.e., a rate of return in the absence of any price inflation. The salary scale assumption is composed of the price inflation assumption, a “real” wage increase (in the absence of any price inflation), and a merit/promotion increase. The merit/promotion increase assumption varies by age and service. The components of the interest assumption and the salary scale assumption can be illustrated as follows:

<u>Component</u>	<u>Investment Return</u>	<u>Salary Scale</u>
Price Inflation	2.5%	2.5%
Real interest rate	5.5	---
Real wage growth	---	.5
Merit/Promotion	---	varies by service
Total	8.0%	3.0% plus value that varies by service

Actuarial Standard of Practice No. 27 (ASOP 27), “Selection of Economic Assumptions for Measuring Pension Obligations”, provides professional actuarial guidelines for choosing an investment return assumption; generally, the discount rate,

used in determining the present value of expected future plan payments is the same as the investment return assumption. ASOP 27 states that, for the investment return assumption, the actuary should choose a single point that is within a “best-estimate range”, which is also developed by the actuary.

The prior report on examination (for the period July 1, 1994 to June 30, 1999) contained a comment related to the “spread”, or excess of the interest rate assumption over the wage growth assumption. The wage growth assumption is the sum of the price inflation and the real wage growth. The spread for the three-year period of this examination, based on the values shown in the table above, is $8.0 - (2.5 + .5) = 8.0 - 3.0 = 5.0\%$. The comment in the prior report noted that the spread has increased from 2.75% to 5% over the previous eleven years. An increasing spread results in decreasing employer contributions. The comment in the prior report was meant to raise awareness of the fact that the spread has been increasing, resulting in a less conservative funding approach. Although the spread did not increase further during the five years covered by this examination (July 1, 1999 to June 30, 2004), it still remains at a relatively high level compared to the spread for this system for much of its history. The spread is also higher than that of most other public retirement systems in this country during the same time period. As mentioned above, a higher spread results in lower current contributions, but also higher contributions in subsequent years; i.e., a deferral of a portion of the otherwise required employer contribution.

16. TRANSFERABLE EARNINGS

Associated with the Fund are two so-called variable supplements funds, the Police Officers’ Variable Supplements Fund (POVSF) and the Police Superior Officers’ Variable Supplements Fund (PSOVSF). As originally conceived, the POVSF and PSOVSF (VSFs) were to use favorable earnings from the Fund’s equity investments to provide supplemental benefits to retired members. The amounts to be transferred from

the Fund into the VSFs in order to provide the supplemental benefits became known as “transferable earnings” or as “skim.”

Prior to 1988 the supplemental benefits to be paid each year were determined by the Boards of Trustees of the VSFs, consistent with the amount of transferable earnings received. Starting in 1988, pursuant to Chapter 247 of the Laws of 1988, the indeterminate benefits of the POVSF were replaced by a fixed, defined schedule of benefits. Likewise, in 1993, pursuant to Chapter 479 of the Laws of 1993, a fixed, defined schedule of benefits was enacted for the PSOVSF.

The computation of transferable earnings is a multi-step process, involving:

- Determining actual earnings, including capital gains and losses, on the Fund’s equity portfolio;
- Determining what those earnings would have amounted to had the assets been invested in grade Aa corporate utility bonds instead of equities (“hypothetical earnings”);
- Keeping track of any negative differentials between actual and hypothetical earnings, including interest thereon;
- Comparing positive differentials between actual and hypothetical earnings with the Accumulated Benefit Obligation (ABO) of the POVSF and the PSOVSF separately, and with accumulated negative earnings differentials, if any; and
- Computing ratios of weighted salaries of members of the POVSF and PSOVSF separately to salaries of members of both variable supplement funds in combination.

Although payment of the fixed supplemental benefit schedule is guaranteed by those chapters of law, the mechanism for funding both variable supplements funds continues to be transferable earnings. However, transferable earnings will not, other than by pure coincidence, equal the amount needed to fund the guaranteed benefits. In order to allow for funding of the benefits provided by the VSFs in a more actuarial manner, beginning with the June 30, 1995 valuation an amount called “present value of future skim” was added to the total present value of benefits; this was consistent with Section 2

of Chapter 598 of the Laws of 1996. This “present value of future skim” was the Projected Benefit Obligation (PBO) of the VSF reduced by the assets of the VSF. The “present value of future skim” is not less than \$0, so that if the assets of the VSF exceed the PBO of the VSF, no additional amount is added to the liability of the Pension Fund.

The table below shows the calculation of the present value of future assets, or skim, (if any) that was to be transferred from the Fund to the VSFs. The first row shows the present value of benefits to be provided by the VSFs. The second row shows the actuarial value of assets. The third row shows the resulting excess, if any, of the liabilities over the assets. The excess is then added to the liability figure for the Fund. Amounts are shown to the nearest thousand.

	<u>6/30/99</u>	<u>6/30/00</u>	<u>6/30/01</u>	<u>6/30/02</u>	<u>6/30/03</u>	<u>6/30/04</u>
Police Officers						
PV Benefits	1,254,409	1,158,566	1,197,379	1,522,275	1,567,582	1,617,281
Assets	<u>1,184,772</u>	<u>1,228,596</u>	<u>1,249,742</u>	<u>1,272,679</u>	<u>1,255,523</u>	<u>1,207,885</u>
PV Future Skim	<u>69,637</u>	<u>0</u>	<u>0</u>	<u>249,596</u>	<u>312,059</u>	<u>409,396</u>
Police Superior Officers						
PV Benefits	1,533,782	1,519,384	1,715,098	2,191,846	2,325,238	2,440,680
Assets	<u>1,348,545</u>	<u>1,403,354</u>	<u>1,432,390</u>	<u>1,441,722</u>	<u>1,403,235</u>	<u>1,328,677</u>
PV Future Skim	<u>185,237</u>	<u>116,030</u>	<u>282,708</u>	<u>750,124</u>	<u>922,003</u>	<u>1,112,003</u>
Total PV Skim	<u>254,874</u>	<u>116,030</u>	<u>282,708</u>	<u>999,720</u>	<u>1,234,062</u>	<u>1,521,399</u>

The total liability of the VSFs, about \$4,058 million, is about 14% of the liability of the Fund.

17. INVESTMENT MANAGEMENT OPERATIONS

The highest governing body at the Fund is its board of trustees. The trustees are fiduciaries for the Fund, its members and its retirees. The trustees delegate the Fund's investment functions to the New York City Comptroller, pursuant to Section 13-702 of the New York City Administrative Code. The investment powers transferred to the Comptroller are subject to written delegations which may not exceed one year. Although this authority is renewed annually, the System is not required to use the Comptroller for investment services. The investment services provided to the Fund by the Comptroller are provided through the Bureau of Asset Management (BAM), a division of the Comptroller's office. The delegated powers authorize the Comptroller of the City of New York to make any investment which the Fund trustees are authorized to make. Also, the Comptroller is authorized to hold, sell, assign, transfer, or dispose of any of the properties, securities or investments in which any of the funds of the System have been invested.

Section 136.2 of Department Regulation No. 85 states in part:

(b) "*Administrative head* shall mean,...the board of trustees of a retirement system, in their individual and collective capacities"

Section 136.6 of Department Regulation No. 85 states in part:

"(a) The administrative heads are fiduciaries and as such shall act solely in the interests of the members and beneficiaries of the systems they administer. They shall perform their responsibilities in a manner consistent with those of a reasonably prudent person exercising care, skill and caution. (b) The assets of a system shall at all times be under the control of the administrative head. (c) No investment or loan transaction shall be made by a system unless the same has been approved by the administrative head. The administrative head may delegate its powers of investment to a committee or agent of the administrative head within well-defined established guidelines. Such committee or agent shall render timely written reports of its activities to the administrative head under a schedule to be established by the administrative head and shall render special reports whenever requested by the administrative head. (d) In respect to the delegation of investment powers, the administrative head shall periodically review: (1) the present holdings in the investment

account; (2) any marked changes in the account during the preceding period; (3) the reasons for such changes and the results achieved thereby; (4) the investment activity in the account including the rate of turnover; and (5) any other factors the administrative head considers pertinent to an analysis of the financial performance and planning, consistent with its obligation as a fiduciary.”

As outlined in Department Regulation No. 85, the trustees are the fiduciaries of the System and as such must act solely in the interests of its members and beneficiaries. No board collectively, no trustee individually, nor any administrative head, can delegate their fiduciary obligations to others. They must perform their responsibilities in a manner consistent with those of a reasonably prudent person exercising care, skill and caution. The Regulation requires that the assets, at all times, be under the control of the trustees and that investments and loan transactions be approved by the trustees. Department Regulation No. 85 allows the trustees to delegate its investment powers within well-defined established guidelines and with the rendering of timely written reports of its activities to the trustees under a schedule established by the trustees. At a minimum, the Department believes that appropriate implementation of such guidelines requires a comprehensive Investment Policy Statement.

Investment Policy Statement

The examiner reviewed a sample of the transcripts of the meetings of the board of trustees for the period under examination, and made the following findings:

1. The sampled transcripts revealed instances where the trustees were concerned about the lack of an overall Investment Policy Statement.
2. The sampled transcripts show that the board began to formulate a comprehensive investment policy statement only toward the end of the period that is the subject of this review. The transcripts reveal no material substantive consideration of an investment policy statement’s specific contents or provisions before the end of that period. Similarly, in the following areas, where the responsibility to establish standards belongs to the trustees, the board meeting transcripts reveal little board discussion:

- a. The sampled transcripts reveal no board discussion of establishing an investment policy statement of sufficient detail to guide a third party when trying to implement the trustees' instructions.
- b. The sampled transcripts do not reveal a clear definition of the duties and responsibilities of the investment committee, the Comptroller's office (either as custodian or as fund manager), the investment consultants, or the separate account managers.

Based on the examiner's review, it was revealed that during the period of examination the System did not have a comprehensive Investment Policy Statement that governed, controlled, and monitored its investment activities. However, subsequent to the examination period the System did develop a comprehensive Investment Policy Statement which the Department believes satisfies its concerns about proper governance of the System's investment activities. It is noted that the System and the Comptroller maintain that the System did have various policies and guidelines in place governing investment activities, and that in an effort to consolidate those guidelines an Investment Policy Statement was adopted starting in 2004.

18. PRIOR REPORT SUMMARY AND CONCLUSIONS

Following are the recommendations and the comment contained in the prior report on examination and the subsequent actions taken by the Fund in response to each citation:

<u>Item</u>	<u>Description</u>
A	<p>The examiner recommends that the Fund exercise its prerogative under the Administrative Code and conduct annual physical examinations of disability retirees. This is a repeat recommendation from the prior report on examination.</p> <p>The Fund does not feel it would be effective to conduct physical examinations of disability retirees.</p>
B	<p>The examiner recommends that the Fund update its Rules and Regulations to incorporate the changes that have been instituted since 1940. This is a repeat recommendation from the prior report on examination.</p> <p>The Fund did not update its Rules and Regulations.</p>
C	<p>The examiner recommends that the Fund comply with Section B-18-19.0 of the Administrative Code by annually publishing the requisite reports in the City Record.</p> <p>The Fund published the requisite reports in the City Record.</p>
D	<p>The examiner recommends that the Fund facilitate the Department in obtaining proper confirmations from its custodian.</p> <p>The Examiner obtained proper confirmations during the examination period.</p>
E	<p>Comment that the actuarial value of assets was adjusted twice, as of June 30, 1995 and June 30, 1999, in such a way as to reduce the employer contribution each time. The examiner recommended that, if the System continued to make adjustments to the actuarial value of assets, it do so in such a way as to not consistently bias the level of contributions (in either direction).</p> <p>During the five years of this examination, the System has not made any similar asset adjustments.</p>

19. SUMMARY AND CONCLUSIONS

Following are the violations, recommendations, and comments contained in this report:

<u>Item</u>	<u>Description</u>	<u>Page No.</u>
A	The examiner recommends that the Fund update its Rules and Regulations to incorporate the changes that have been instituted since 1940. This is a repeat recommendation from the prior two reports on examination.	14
B	With regard to loaned securities, it was noted that the board of trustees and the Comptroller's office did not give clear guidance to Citibank on how to deal with downgraded securities in the portfolio. This issue was also a concern raised in the Independent Fiduciary Services, Inc. Management Study and Operations Review report of the New York City Comptroller's Asset Management Function. Subsequent to the examination period, however, the System adopted an Investment Policy Statement which the Department believes has controls that should provide adequate oversight of the Systems Securities Lending Program.	169
C	The examination noted that the "spread" which has increased over the years prior to the examination period still remains at a relatively high level compared to the spread for this system for much of its history.	36
D	Based on the examiner's review, it was revealed that during the period of examination the System did not have a comprehensive Investment Policy Statement that governed, controlled, and monitored its investment activities. However, subsequent to the examination period the System did develop a comprehensive Investment Policy Statement which the Department believes satisfies its concerns about proper governance of the System's investment activities. It is noted that the System and the Comptroller maintain that the System did have various policies and guidelines in place governing investment activities, and that in an effort to consolidate those guidelines an Investment Policy Statement was adopted starting in 2004.	410

Respectfully submitted,

_____/s/_____
Michael J. Lambert
Principal Actuary

STATE OF NEW YORK)

)SS:

COUNTY OF NEW YORK)

Michael J. Lambert, being duly sworn, deposes and says that the foregoing report, subscribed by him, is true to the best of his knowledge and belief.

_____/s/_____
Michael J. Lambert

Subscribed and sworn to before me

this _____ day of _____ 2009

APPOINTMENT NO. 22351

STATE OF NEW YORK
INSURANCE DEPARTMENT

I, HOWARD MILLS, Acting Superintendent of Insurance of the State of New York, pursuant to the provisions of the Insurance Law, do hereby appoint:

JOSHUA WEISS

as a proper person to examine into the affairs of the

NEW YORK CITY POLICE PENSION FUND, SUBCHAPTER 2

and to make a report to me in writing of the condition of the said

FUND

with such other information as he shall deem requisite.

In Witness Whereof, I have hereunto subscribed by name
and affixed the official Seal of the Department
at the City of New York

this 21st day of March, 2005



HOWARD MILLS

Acting Superintendent of Insurance

A handwritten signature in cursive script, appearing to read "Howard Mills", written over a horizontal line.

Acting Superintendent