



New York City  
Fire Officers' Variable Supplements Fund  
Performance Overview as of March 31, 2016

# Total Fund Overview

## **New York City Fire Officers' Variable Supplements Fund**

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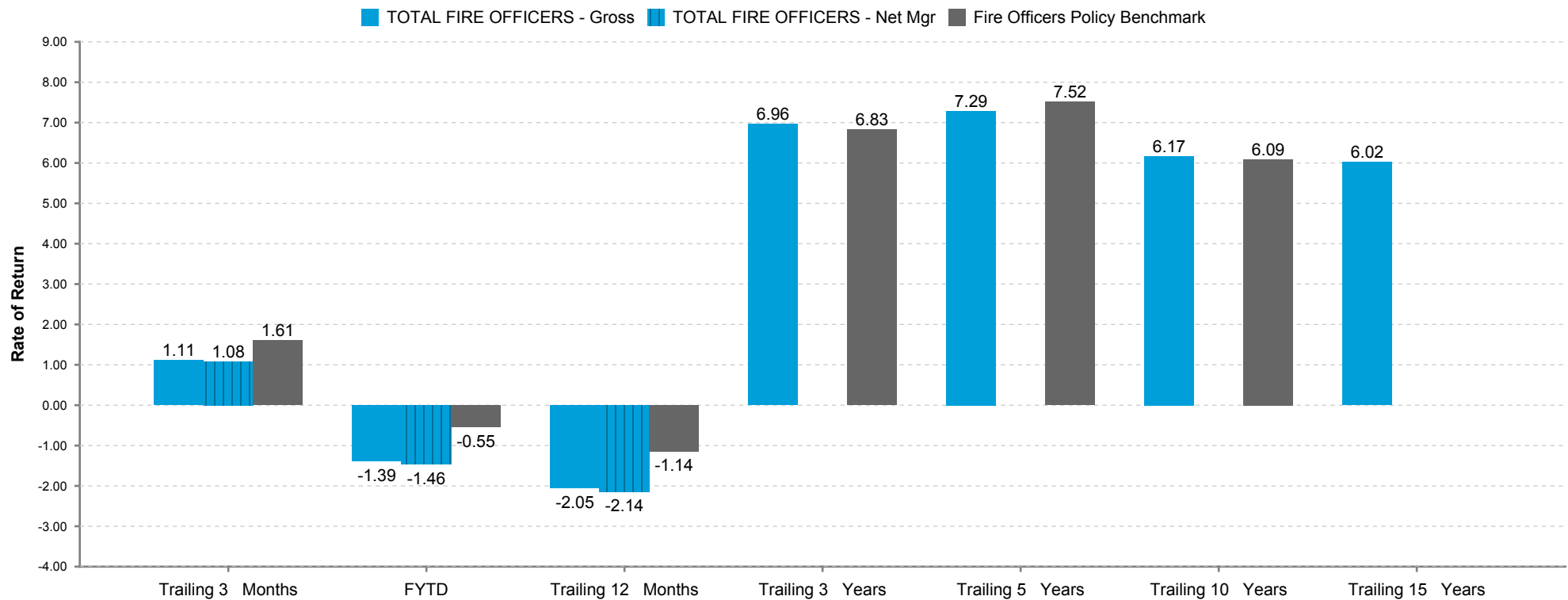
## Total Portfolio Returns: March 31, 2016



TOTAL FIRE OFFICERS

Market Value (Millions)

\$278.4



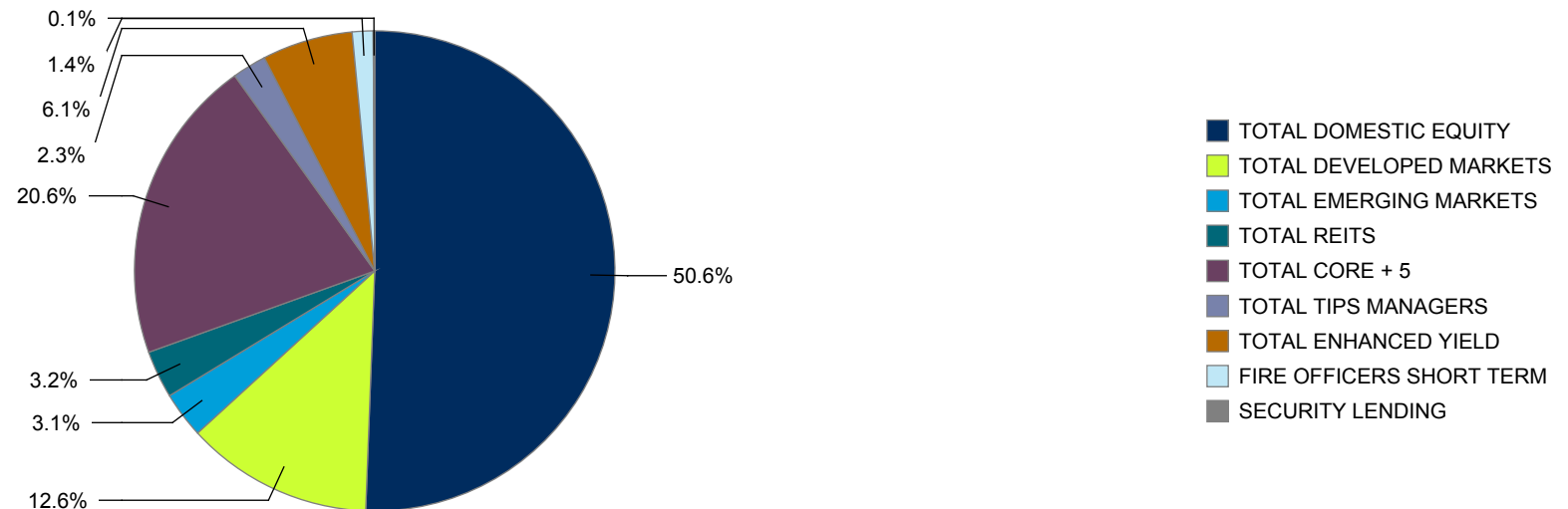
	Plan 3 Years	Benchmark 3 Years	Plan 5 Years	Benchmark 5 Years	Plan 7 Years	Benchmark 7 Years	Plan 10 Years
Standard Deviation							
TOTAL FIRE OFFICERS	9.0	8.5	7.3	9.4	10.7	10.4	11.8

**Market Value (Millions)**

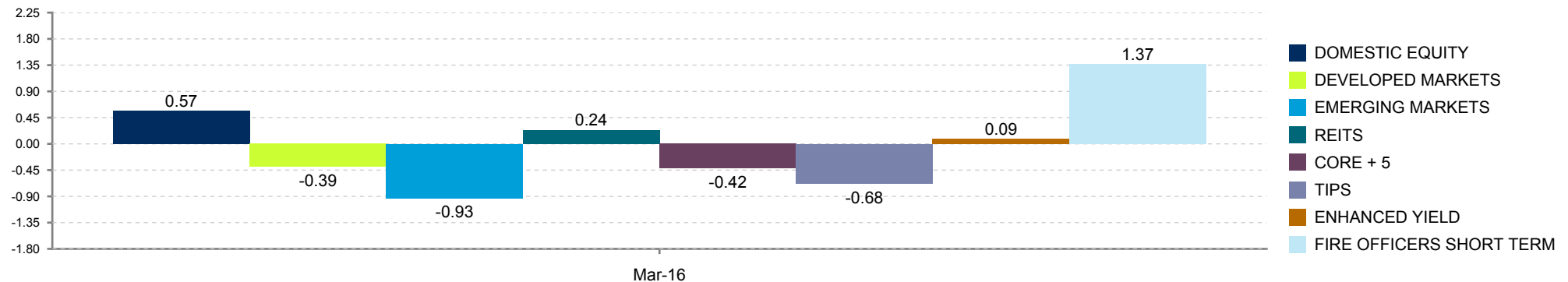
TOTAL FIRE OFFICERS

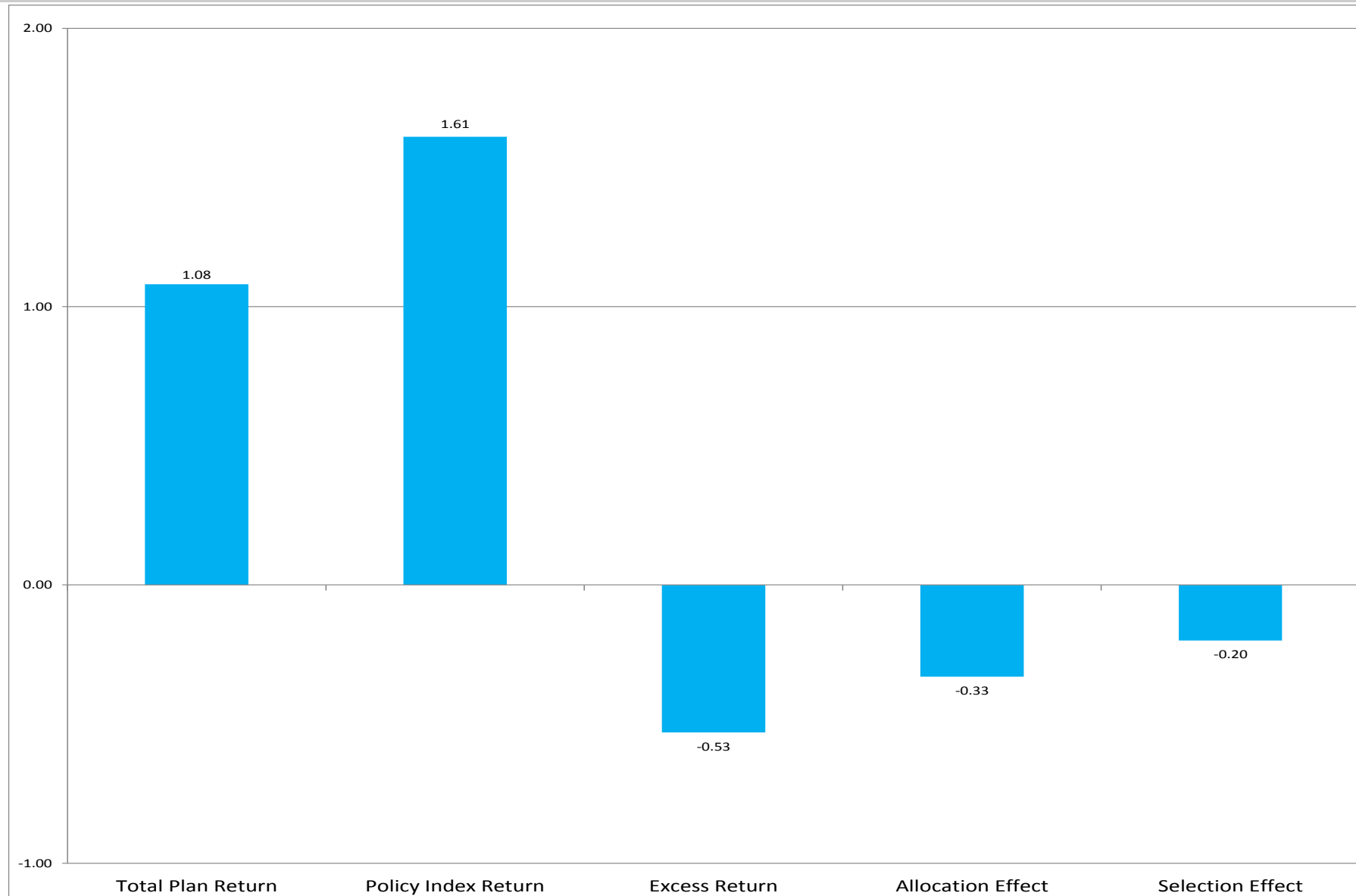
\$278.4

**Asset Allocation**

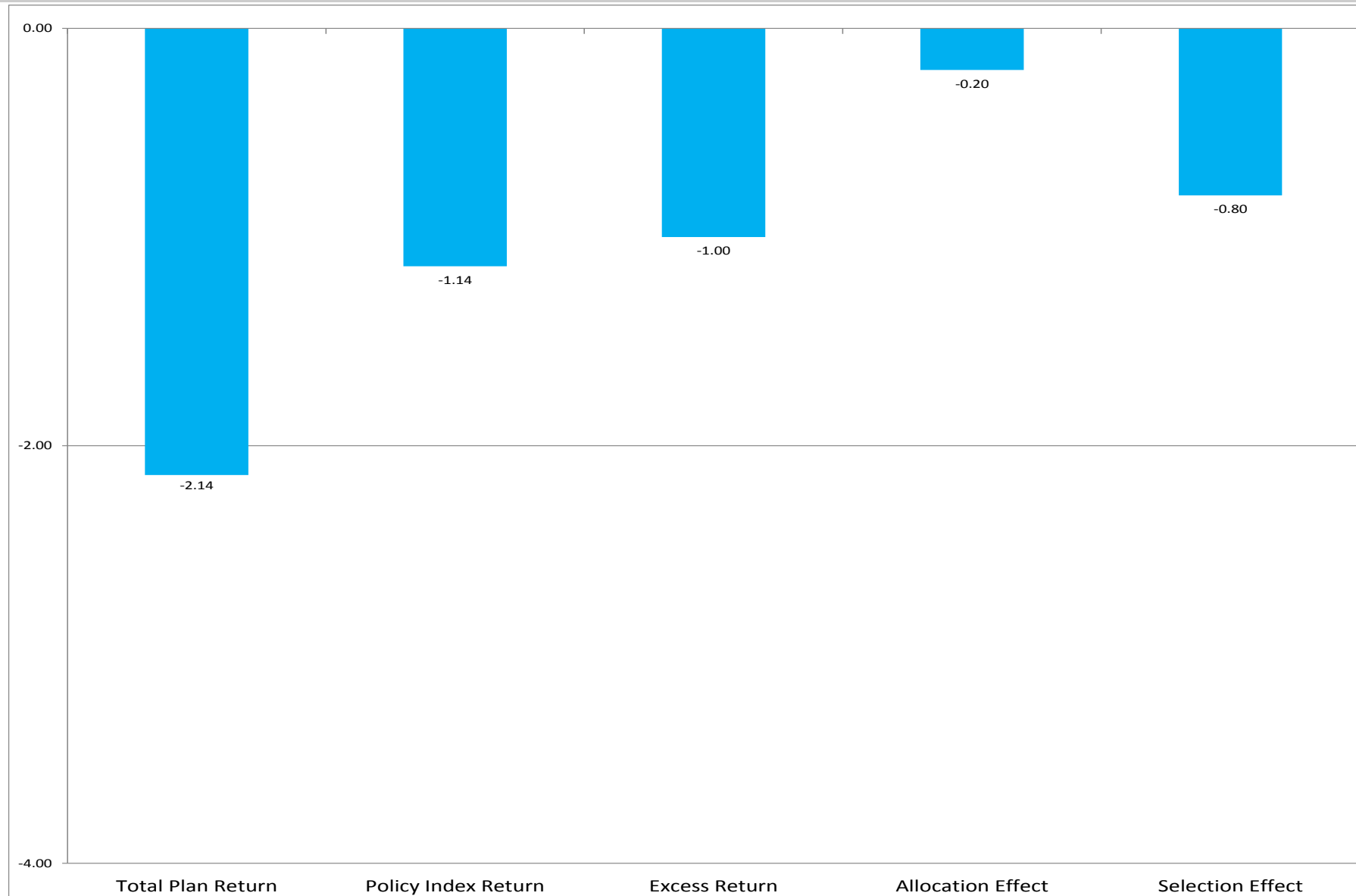


**Relative Mix to Asset Weights**

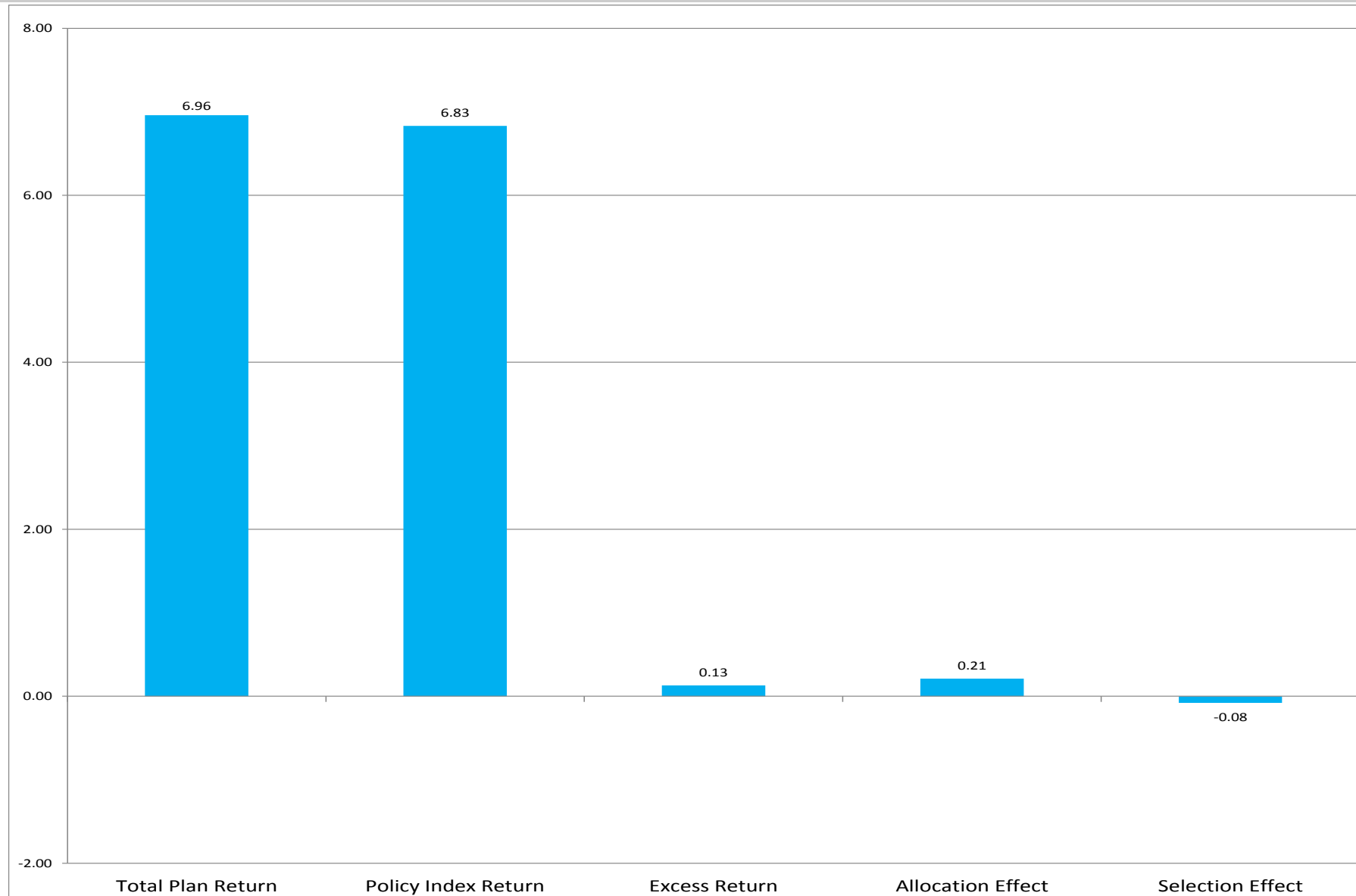




## Performance Attribution: Total Plan - 12 Month Ending March 31, 2016



## Performance Attribution: Total Plan Gross of Investment Advisory Fees- 3 Years Ending March 31, 2016



Allocation Effect - Asset Class Breakdown				
	<u>Quarter</u>	<u>12 Months</u>	<u>3 Years*</u>	<u>Benchmark</u>
TOTAL FIRE OFFICERS	-0.33	-0.20	0.21	Fire Officers Policy Benchmark
TOTAL DOMESTIC EQUITY	-0.07	-0.04	0.12	RUSSELL 3000
TOTAL DEVELOPED EQUITY	0.03	0.03	0.00	MSCI EAFE NET
TOTAL EMERGING MARKETS	-0.05	0.10	0.07	MSCI EMERGING MARKETS
TOTAL REAL ESTATE SECURITIES	0.00	0.01	0.01	DJ U.S. Select REIT
TOTAL STRUCTURED	-0.15	-0.23	0.00	NYC - CORE PLUS FIVE
TOTAL TIPS MANAGERS	-0.04	-0.04	0.05	BARCLAYS U.S TIPS INDEX
TOTAL ENHANCED YIELD	-0.01	0.00	0.01	CITIGROUP BB & B
TOTAL CASH	-0.04	-0.01	-0.06	

Selection Effect - Asset Class Breakdown				
	<u>Quarter</u>	<u>12 Months</u>	<u>3 Years*</u>	<u>Benchmark</u>
TOTAL FIRE OFFICERS	-0.20	-0.80	-0.08	Fire Officers Policy Benchmark
TOTAL DOMESTIC EQUITY	0.00	0.08	0.06	RUSSELL 3000
TOTAL DEVELOPED EQUITY	-0.09	-0.59	-0.13	MSCI EAFE NET
TOTAL EMERGING MARKETS	0.00	-0.16	-0.09	MSCI EMERGING MARKETS
TOTAL REAL ESTATE SECURITIES	-0.03	-0.26	-0.07	DJ U.S. Select REIT
TOTAL STRUCTURED	-0.06	0.00	0.07	NYC - CORE PLUS FIVE
TOTAL TIPS MANAGERS	0.00	0.00	0.00	BARCLAYS U.S TIPS INDEX
TOTAL ENHANCED YIELD	-0.02	0.13	0.07	CITIGROUP BB & B
TOTAL CASH	0.00	0.00	0.00	

\*Returns are Gross of Investment Advisory Fees



## NYC FIRE OFFICERS' VARIABLE SUPPLEMENTS FUND

### SECURITIES LENDING INCOME

March 31, 2016

	U.S. <u>FIXED INCOME</u>	U.S. <u>EQUITY</u>	INTERNATIONAL <u>EQUITY</u>
2001	32,000	6,000	- 0 -
2002	20,000	6,200	- 0 -
2003	14,000	11,000	31,000
2004	24,000	24,000	24,000
2005	42,000	42,000	32,000
2006	44,000	98,000	32,000
2007	91,000	137,000	28,000
2008	240,000	195,000	37,000
2009	67,000	101,000	25,000
2010	32,000	101,000	20,000
2011	48,000	116,000	34,000
2012	37,000	129,000	25,000
2013	17,000	113,000	25,000
2014	7,900	11,000	131,000
2015	2,000	8,400	209,000
2016 (3 Months)	400	2,000	73,000

**New York City  
Fire Officers' Variable Supplements Fund**

# **Appendix A**

## **Consolidated Performance Report**

# Consolidated Performance Report

Through March 31, 2016



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2015	2014	2013	2012	2011	5 Year	10 Year	ITD	Inception Date
<b>SYSTEM RETURN SUMMARY</b>														
5 FIRE OFFICERS-TOTAL PORTFOLIO - GROSS	278	100.00	1.11	(1.39)	1.11	(0.74)	8.30	19.49	13.79	0.70	7.29	6.17	8.29	01/01/1988
FIRE OFFICERS- ESTIMATED INVESTMENT FEES			(0.02)	(0.06)	(0.02)	(0.09)	(0.11)							
EST MANAGEMENT FEES			(0.02)	(0.06)	(0.02)	(0.09)	(0.11)							
EST INCENTIVE FEES														
EST OTHER FEES														
EST FEE OFFSETS														
FIRE OFFICERS-TOTAL PORTFOLIO - NET MGR			1.08	(1.46)	1.08	(0.83)	8.19							
FIRE OFFICERS POLICY BENCHMARK			1.61	(0.55)	1.61	(0.34)	8.29	18.23	14.09	1.33	7.52	6.09		
EXCESS RETURN			(0.52)	(0.90)	(0.52)	(0.49)	(0.10)	1.26	(0.30)	(0.63)	(0.23)	0.08		
<b>EQUITY RETURN DETAIL</b>														
17 FOVSF-TOTAL EQUITY - GROSS	193	69.49	0.57	(2.69)	0.57	(1.18)	9.13	27.60	16.30	(2.13)	8.25	5.67	5.45	08/01/2001
ESTIMATED INVESTMENT FEES			(0.02)	(0.05)	(0.02)	(0.08)	(0.10)							
EST MANAGEMENT FEES			(0.02)	(0.05)	(0.02)	(0.08)	(0.10)							
EST INCENTIVE FEES														
EST OTHER FEES														
EST FEE OFFSETS														
FOVSF-TOTAL EQUITY - NET MGR			0.56	(2.74)	0.56	(1.25)	9.03							
25 FOVSF-TOTAL DOMESTIC EQUITY - GROSS	141	50.57	0.97	(0.35)	0.97	0.62	12.73	33.59	16.43	1.02	11.08	7.07	9.82	01/01/1991
ESTIMATED INVESTMENT FEES			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)							
FOVSF-TOTAL DOMESTIC EQUITY - NET MGR			0.97	(0.35)	0.97	0.61	12.73							
RUSSELL 3000/S&P500 04/30/09			0.97	(0.48)	0.97	0.48	12.56	33.55	16.42	1.03	11.01	6.99	9.77	
EXCESS RETURN			0.00	0.13	0.00	0.14	0.17	0.04	0.02	(0.01)	0.07	0.07	0.06	

# Consolidated Performance Report

Through March 31, 2016



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2015	2014	2013	2012	2011	5 Year	10 Year	ITD	Inception Date
<b>EQUITY RETURN DETAIL</b>														
37 FOVSF-TOTAL INTERNATIONAL EQUITY - GROSS	44	15.83	(1.93)	(12.76)	(1.93)	(6.89)	(5.75)	15.03	15.50	(14.06)	(1.22)	0.76	3.58	08/01/2001
ESTIMATED INVESTMENT FEES			(0.05)	(0.15)	(0.05)	(0.23)	(0.30)							
EST MANAGEMENT FEES			(0.05)	(0.15)	(0.05)	(0.23)	(0.30)							
EST INCENTIVE FEES														
EST OTHER FEES														
EST FEE OFFSETS														
FOVSF-TOTAL INTERNATIONAL EQUITY - NET MGR			(1.99)	(12.91)	(1.99)	(7.12)	(6.05)							
MSCI AC WORLD EX US (NET)			(0.38)	(9.66)	(0.38)	(5.66)	(3.87)	15.29	16.83	(13.71)	0.31	1.94	5.29	
EXCESS RETURN			(1.61)	(3.25)	(1.61)	(1.46)	(2.19)	(0.26)	(1.33)	(0.35)	(1.53)	(1.17)	(1.70)	
47 FOVSF-DEVELOPED MARKETS - GROSS	35	12.61	(3.67)	(12.80)	(3.67)	(3.56)	(6.55)	21.44	14.68	(12.70)	0.04	0.33	5.13	07/01/1994
ESTIMATED INVESTMENT FEES			(0.06)	(0.17)	(0.06)	(0.25)	(0.24)							
FOVSF- DEVELOPED MARKETS - NET MGR			(3.73)	(12.97)	(3.73)	(3.81)	(6.79)							
MSCI EAFE			(3.01)	(8.83)	(3.01)	(0.81)	(4.90)	22.78	17.32	(12.14)	2.29	1.80	4.38	
EXCESS RETURN			(0.73)	(4.14)	(0.73)	(2.99)	(1.89)	(1.34)	(2.63)	(0.56)	(2.26)	(1.47)	0.76	
57 FOVSF-EMERGING MARKETS - GROSS	9	3.07	5.89	(12.64)	5.89	(19.53)	(2.57)	(4.84)	18.12	(17.86)	(5.59)	1.52	4.48	08/01/2005
ESTIMATED INVESTMENT FEES			(0.01)	(0.04)	(0.01)	(0.15)	(0.54)							
FOVSF-EMERGING MARKETS - NET MGR			5.88	(12.68)	5.88	(19.68)	(3.11)							
MSCI EMERGING MARKETS			5.71	(12.63)	5.71	(14.92)	(2.19)	(2.60)	18.22	(18.42)	(4.13)	3.02	5.56	
EXCESS RETURN			0.17	(0.05)	0.17	(4.76)	(0.92)	(2.24)	(0.11)	0.57	(1.46)	(1.50)	(1.09)	
<b>EQUITY RETURN DETAIL</b>														
69 FOVSF-TOTAL REAL ESTATE SECURITIES - GROSS	9	3.24	4.53	8.36	4.53	(1.26)	31.20	2.28	18.19	6.78	10.45	6.76	8.33	10/01/2005
ESTIMATED INVESTMENT FEES			(0.11)	(0.31)	(0.11)	(0.37)	(0.48)							
FOVSF-TOTAL REAL ESTATE SECURITIES - NET MGR			4.43	8.05	4.43	(1.63)	30.72							
DJ US SELECT REAL ESTATE SECURITIES INDEX			5.09	16.41	5.09	4.46	31.85	1.31	17.09	8.87	11.88	6.08	7.54	
EXCESS RETURN			(0.66)	(8.36)	(0.66)	(6.09)	(1.13)	0.97	1.10	(2.09)	(1.43)	0.68	0.79	

# Consolidated Performance Report

Through March 31, 2016



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2015	2014	2013	2012	2011	5 Year	10 Year	ITD	Inception Date
<b>FIXED INCOME RETURN DETAIL</b>														
81 FOVSF-TOTAL FIXED INCOME - GROSS	85	30.36	3.13	2.68	3.13	0.27	6.59	(0.76)	8.19	8.14	4.74	5.99	6.31	08/01/1993
ESTIMATED INVESTMENT FEES			(0.03)	(0.10)	(0.03)	(0.12)	(0.14)							
EST MANAGEMENT FEES			(0.03)	(0.10)	(0.03)	(0.12)	(0.14)							
EST INCENTIVE FEES														
EST OTHER FEES														
EST FEE OFFSETS														
FOVSF-TOTAL FIXED INCOME - NET MGR			3.10	2.59	3.10	0.14	6.45							
89 FOVSF-TOTAL STRUCTURED - GROSS	57	20.58	3.26	4.16	3.26	1.13	8.37	(2.02)	7.50	8.76	5.14	6.21	6.33	09/01/2000
ESTIMATED INVESTMENT FEES			(0.02)	(0.06)	(0.02)	(0.08)	(0.08)							
FOVSF-TOTAL STRUCTURED - NET MGR			3.24	4.10	3.24	1.05	8.29							
NYC - CORE PLUS FIVE			3.53	4.34	3.53	0.41	7.66	(2.79)	5.41	9.40	4.54	5.56	5.88	
EXCESS RETURN			(0.28)	(0.23)	(0.28)	0.65	0.63	0.76	2.09	(0.64)	0.60	0.65	0.45	
99 FOVSF-TOTAL TIPS MANAGERS - GROSS	6	2.32	4.48	2.56	4.48	(0.85)	3.37	(8.52)	7.67	13.34	3.28	4.82	4.28	06/01/2005
ESTIMATED INVESTMENT FEES			(0.00)	(0.00)	(0.00)	(0.02)	(0.10)							
FOVSF-TOTAL TIPS MANAGERS - NET MGR			4.48	2.55	4.48	(0.87)	3.27							
BARCLAYS GLOBAL INFLATION LINKED: US TIPS (DAILY)			4.46	2.60	4.46	(1.44)	3.64	(8.61)	6.98	13.56	3.02	4.62	4.09	
EXCESS RETURN			0.02	(0.05)	0.02	0.57	(0.37)	0.09	0.69	(0.22)	0.26	0.20	0.19	
109 FOVSF-TOTAL ENHANCED YIELD - GROSS	17	6.09	2.85	(1.45)	2.85	(0.92)	3.29	7.09	13.27	5.12	5.18	6.46	6.86	02/01/2001
ESTIMATED INVESTMENT FEES			(0.09)	(0.27)	(0.09)	(0.36)	(0.37)							
FOVSF-TOTAL ENHANCED YIELD - NET MGR			2.76	(1.72)	2.76	(1.27)	2.91							
CITIGROUP BB & B			3.04	(3.94)	3.04	(4.21)	2.78	6.17	14.45	6.58	4.83	5.64	6.13	
EXCESS RETURN			(0.28)	2.22	(0.28)	2.94	0.13	0.92	(1.18)	(1.46)	0.35	0.82	0.73	
<b>CASH SUMMARY</b>														
121 FIRE OFFICERS SHORT TERM - GROSS	4	1.44	0.11	0.21	0.11	0.18	0.15	0.14	0.27	0.31	0.21	1.46		01/01/1988
ESTIMATED INVESTMENT FEES			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
FIRE OFFICERS SHORT TERM - NET MGR			0.11	0.21	0.11	0.18	0.15	0.14	0.27	0.31	0.21	1.46		
125 C/D - FAIL FLOAT EARNINGS	0	0.01												
127 SECURITY LENDING	0	0.14												

**New York City  
Fire Officers' Variable Supplements Fund**

# **Appendix B**

## **Public Markets Manager Performance Detail**

# Public Markets Manager Performance Detail

Net Returns Through March 31, 2016



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2015	2014
EQUITY SUMMARY							
US EQUITY							
BLACKROCK R2000 GROWTH	5	1.91	(4.65)	(13.44)	(4.65)	(1.30)	5.47
RUSSELL 2000 GROWTH DAILY			(4.68)	(13.55)	(4.68)	(1.38)	5.60
Excess			0.03	0.12	0.03	0.08	(0.14)
BLACKROCK R2000 VALUE	6	2.03	1.70	(6.68)	1.70	(7.38)	4.11
RUSSELL 2000 VALUE DAILY			1.70	(6.60)	1.70	(7.47)	4.22
Excess			(0.00)	(0.08)	(0.00)	0.09	(0.11)
BLACKROCK R1000 GROWTH	64	23.10	0.74	2.50	0.74	5.77	12.90
RUSSELL 1000 GROWTH - DAILY			0.74	2.39	0.74	5.67	13.05
Excess			0.00	0.10	0.00	0.11	(0.15)
BLACKROCK R1000 VALUE	65	23.53	1.64	(1.50)	1.64	(3.66)	13.38
RUSSELL 1000 VALUE (DAILY)			1.64	(1.65)	1.64	(3.83)	13.45
Excess			0.00	0.15	0.00	0.17	(0.08)
NON - US EQUITY							
Baillie Gifford	35	12.60	(3.74)	(12.98)	(3.74)	(3.81)	(6.77)
MSCI EAFE GROWTH			(2.07)	(4.66)	(2.07)	4.09	(4.43)
Excess			(1.66)	(8.32)	(1.66)	(7.90)	(2.34)
EMERGING MARKETS							
BLACKROCK MSCI EMERGING MARKETS	9	3.07	5.88	(12.68)	5.88		
MSCI EMERGING MARKETS			5.71	(12.63)	5.71		
Excess			0.17	(0.05)	0.17		

# Public Markets Manager Performance Detail



Net Returns Through March 31, 2016

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2015	2014
<b>REAL ESTATE SECURITIES</b>							
FOVSF-MORGAN STANLEY REITS	9	3.24	4.43	8.05	4.43	(1.63)	30.72
Morgan Stanley Custom RESI Index			4.77	9.46	4.77	(1.53)	31.85
Excess			(0.35)	(1.41)	(0.35)	(0.10)	(1.13)
<b>FIXED INCOME SUMMARY</b>							
<b>STRUCTURED FIXED INCOME</b>							
Blackrock Government	11	3.97	5.52	7.23	5.52	0.62	
NYC - Treasury Agency Plus Five			5.55	7.72	5.55	0.72	
Excess			(0.03)	(0.49)	(0.03)	(0.11)	
Blackrock - Mortgage	25	9.02	1.96	3.11	1.96	1.94	6.80
CITIGROUP MORTGAGE INDEX			1.97	3.18	1.97	1.56	6.12
Excess			(0.01)	(0.08)	(0.01)	0.38	0.68
T Rowe Price - Credit	21	7.59	3.63	3.72	3.63	0.23	8.06
NYC - Investment Grade Credit			3.85	3.72	3.85	(0.65)	7.04
Excess			(0.23)	0.00	(0.23)	0.88	1.02
<b>ENHANCED YIELD</b>							
FOVSF T ROWE MANAGED	17	6.09	2.76	(1.72)	2.76	(1.27)	2.91
CITIGROUP BB & B			3.04	(3.94)	3.04	(4.21)	2.78
Excess			(0.28)	2.22	(0.28)	2.94	0.13
<b>TIPS</b>							
SSGA TIPS	6	2.32	4.48	2.55	4.48		
Barclays Global Inflation Linked: US TIPS (Daily)			4.46	2.60	4.46		
Excess			0.02	(0.05)	0.02		



## Public Markets Manager Performance Detail

Net Returns Through March 31, 2016



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2015	2014
CASH							
FIRE OFFICERS SHORT TERM	4	1.37	0.11	0.21	0.11	0.18	0.15
91 DAY TREASURY BILL (DAILY)			0.07	0.12	0.07	0.05	0.03
Excess			0.04	0.09	0.04	0.13	0.11
C/D - Fail Float Earnings	0	0.01					
SECURITY LENDING	0	0.14					

**New York City  
Fire Officers' Variable Supplements Fund**

# Appendix C

## Footnotes

Through March 31, 2016



- Effective 4/1/03, the name of the Core +5 benchmark index provider was changed from Salomon to Citigroup.
- Effective 5/31/09, the US Passive Equity sector S&P 500 Index was replaced with the Russell 3000 benchmark index.
- Effective 7/1/09, the Core+5 program was restructured.
  - The U.S. Gov't sector benchmark Index was changed from the Citigroup Core+5 Treasury/Gov't Sponsored Index to the Citigroup Core+5 Treasury/Agency Index.
  - The Corporate and Yankee sectors were combined to form the new Investment Grade Credit sector. The benchmark for the new combined sector is the customized Citigroup Credit Index. For historical performance purposes, the old Corporate sector Index is linked to the new Credit sector Index.
  - There were no changes to the Mortgage sector Index.
  - The total Core+5 results and benchmark returns combine the three sectors. Historical total Core+5 returns continue to include the old Corporate and Yankee sector returns.

### General Notes

- Returns are Net of Manager Fees for periods after January 2014 and Gross of investment advisory fees for other periods unless otherwise indicated.

### Page Specific

#### Page 4 - Portfolio Asset Allocation

- Rebalancing Ranges: the minimum and maximum weights that actual Asset Allocation may reach before rebalancing between Asset Classes is necessary.

#### Pages 5 - 7 - Performance Attribution: Total Plan

- Plan Return at Policy Weights: the return of the Total Plan assuming actual Asset Class results were maintained at target (Adjusted Policy) weights. *Figure = (Return of Asset Class 1 \* Target Weight) plus (Return Of Asset Class 2 \* Target Weight) plus (.....)*
- **Allocation Effect** = Total Plan Return minus Plan Return At Adjusted Policy Weights. Allocation is the Contribution to Performance resulting from an overweight or underweight to an asset class. E.g. an underweight to an Asset Class that under-performs results in a positive Allocation Effect and vice versa.
- **Selection Effect** = Equal to the Custom Benchmark (Adjusted Policy Index) Return minus Plan Return at Adjusted Policy Weights. This illustrates how the Managers have added or removed value based on their Security Selection decisions, e.g., *If the manager's Actual Returns are higher than the Implied Return there will be a positive Selection Effect.*
- **Policy Index = Custom Benchmark**  
*The "policy index" is a custom benchmark representing the weighted average return of the weighted benchmark indexes for each major investment program. Weights may reflect an adjustment of actual policy for outstanding commitments for new or revised programs, such as for private market programs, which are invested gradually, or for any new or updated program requiring the completion of RFPs and contracts. The policy index/custom benchmark is calculated monthly based on adjusted policy weights at the beginning of each month.*

Through March 31, 2016



*The indexes and most recent policy weights are as follows:*

*U.S. Equity: Russell 3000 \* 50.00%*

*International Developed (EAFE) Markets: MSCI EAFE \* 13.00%*

*International Emerging Markets: MSCI Emerging Markets \* 4.00%*

*REITs: Dow Jones Select Real Estate Securities \* 3.00%*

*Domestic Fixed Income: NYC Core +5 \* 21.00%*

*TIPS: Lehman U.S. TIPS \* 3.00%*

*Enhanced Yield: Citigroup BB&B \* 6.00%*

### **Page 8 – Allocation and Selection Effects - Asset Class Breakdown**

- This chart aims to break down the Allocation and Selection Effects shown on the Performance Attribution pages. The aim of the Page is to show the asset classes where Managers are either out performing or under performing their benchmark and to show the basis point effect that this is having on Plan performance.