MARKET INDICATORS

As of September 2013

NYC Office of the Comptroller

Bureau of Asset Management

Trade Weighted US Dollar Index

15

- Note: The market indicators contained in the board materials are a subset of indicators relevant to Fund performance and strategic planning and are not intended as the exclusive indicators.

USD/EUR Exchange Rate

16

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USD Three Month LIBOR Rates

17

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VOLATILITY INDEX (THE "VIX")

18

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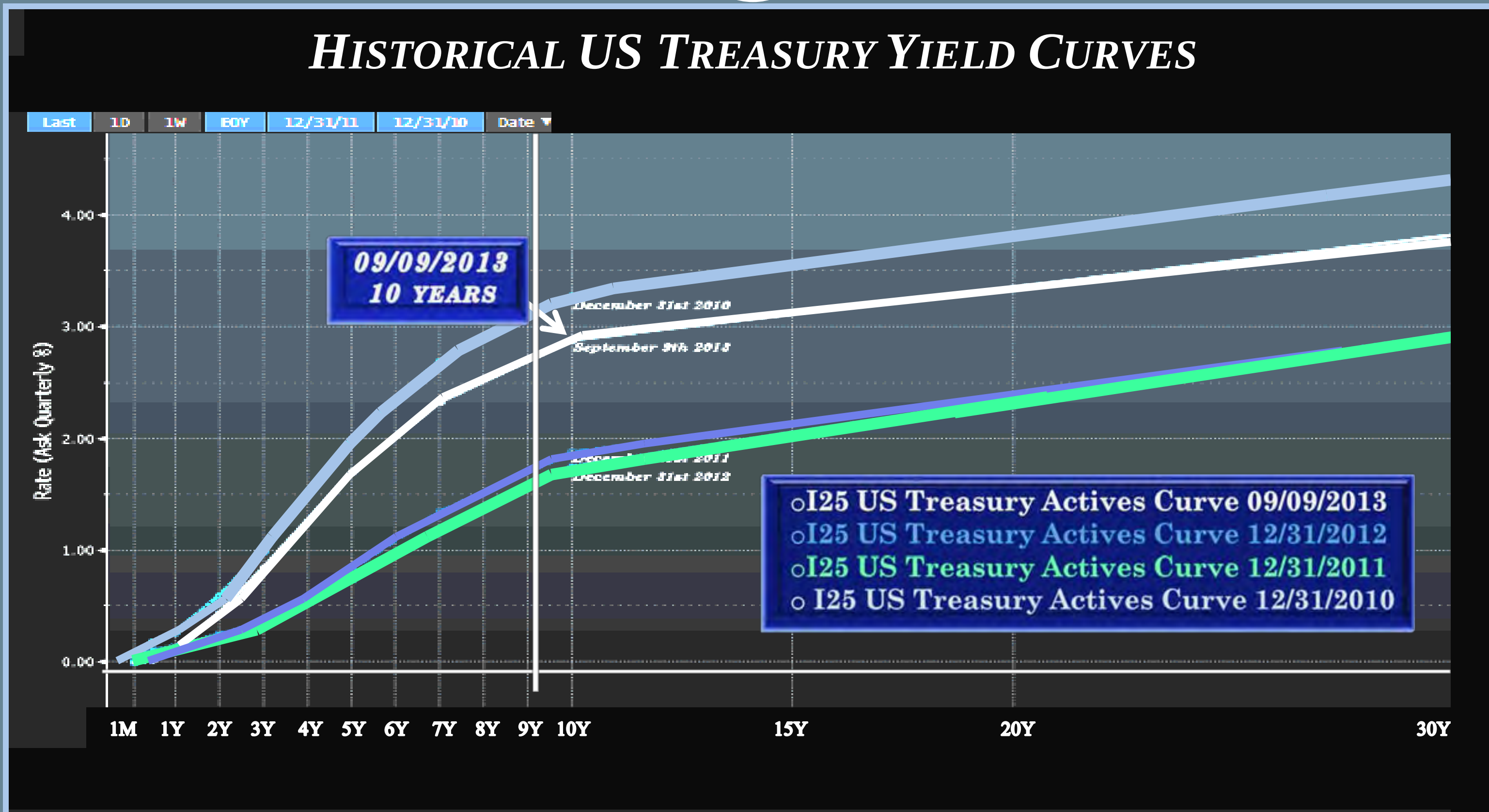
US Treasury Yield Curves

19



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10 YEAR TREASURY RATES

20

- NOTE: THE MARKET INDICATORS CONTAINED IN THE BOARD MATERIALS ARE A SUBSET OF INDICATORS RELEVANT TO FUND PERFORMANCE AND STRATEGIC PLANNING AND ARE NOT INTENDED AS THE EXCLUSIVE INDICATORS.

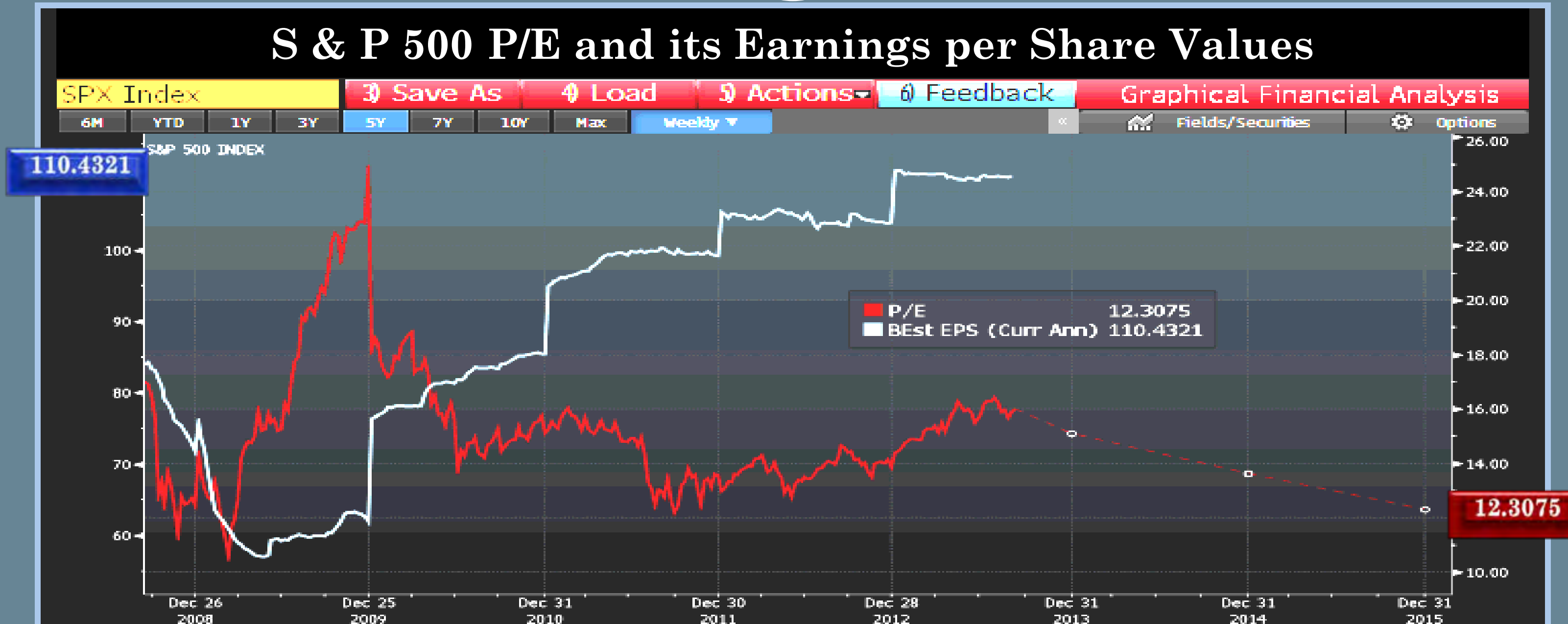
Investment Grade and HY Spreads

21

- Note: The market indicators contained in the board materials are a subset of indicators relevant to Fund performance and strategic planning and are not intended as the exclusive indicators.

Corporate Earnings
S & P 500 Earnings Per Share & P/E Ratio

22



Price	1667.80	BEst EPS (Y)	110.43	BEst P/E	15.10	High	111.18 on 1/11/2013
52 Week High	1709.67	BEst EPS (Y+1)	122.42	BEst P/B	2.33	Low	57.01 on 5/15/2009
52 Week Low	1343.35	BEst EPS (Y+2)	135.50	BEst Sales	1.12B	Average	89.28
Price Chg 1Yr	229.88	CAGR	11.15	BEst EBITDA	219.71M	Median	96.77

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Price to Earning Ratios Including Estimates

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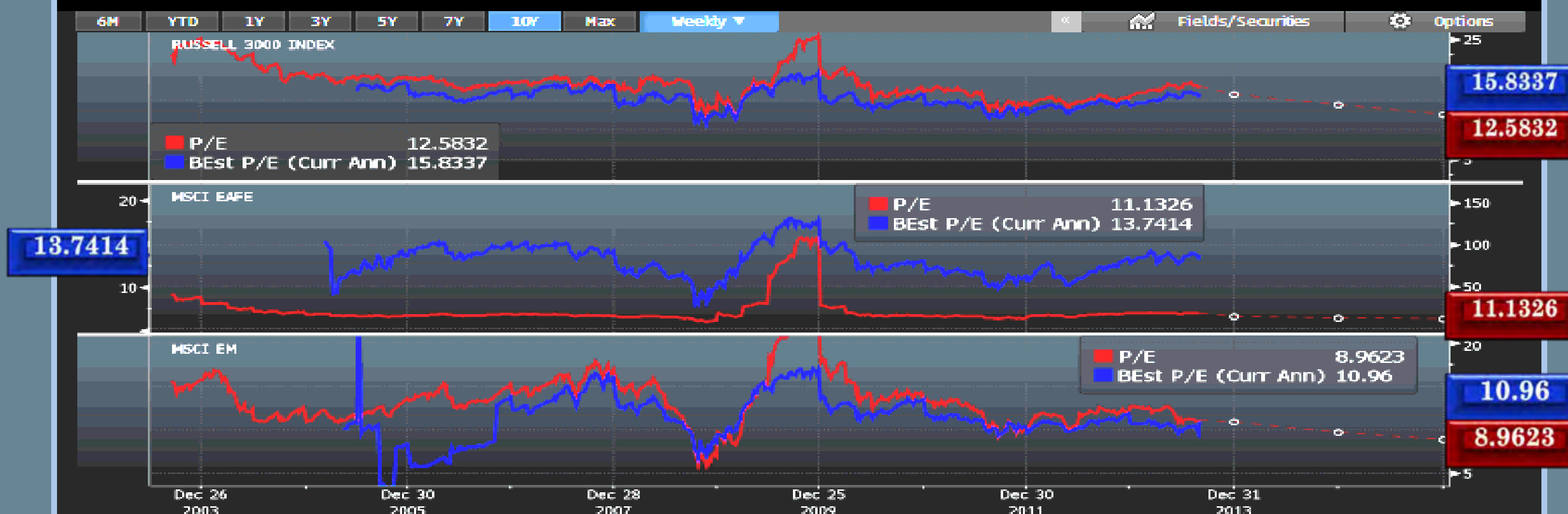
Russell-3000 Index, MSCI EAFE and MSCI Emerging Markets



Russell 3000 Index | 2 - P/E (MSCI EAFE)

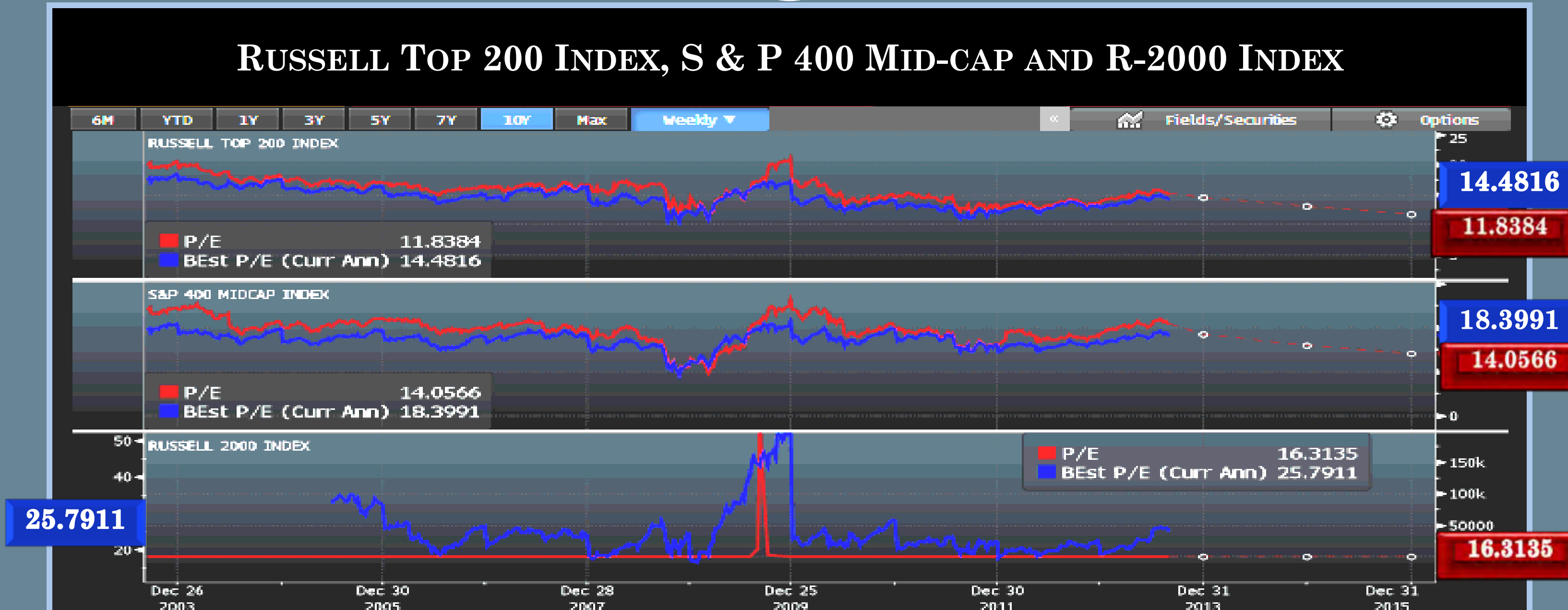
Price	988.30	BEst EPS (Y)	62.43	BEst P/E	15.83	High	109.44 on 12/25/2009
52 Week High	1022.04	BEst EPS (Y+1)	70.03	BEst P/B	2.24	Low	7.71 on 11/21/2008
52 Week Low	792.85	BEst EPS (Y+2)	78.57	BEst Sales	697.91M	Average	20.83
Price Chg 1Yr	142.79	CAGR	10.42	BEst EBITDA	130.44M	Median	15.68

Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2013 Bloomberg Finance L.P.
SN 884688 H336-5398-0 06-Sep-13 10:39:13 EDT GMT-4:00

- Note: The market indicators contained in the board materials are a subset of indicators relevant to Fund performance and strategic planning and are not intended as the exclusive indicators.

Price to Earning Ratios Including Estimates

24



Russell Top 200 Index — 2 - BEst P/E (RUSSELL TOP 200 INDEX)(C

Price	385.91	BEst EPS (Y)	26.65	BEst P/E	14.48	High	18.45 on 12/26/2003
52 Week High	399.56	BEst EPS (Y+1)	29.47	BEst P/B	2.30	Low	10.61 on 11/21/2008
52 Week Low	316.47	BEst EPS (Y+2)	32.62	BEst Sales	249.00M	Average	14.55
Price Chg 1Yr	47.72	CAGR	10.69	BEst EBITDA	51.71M	Median	14.52

- Note: The market indicators contained in the board materials are a subset of indicators relevant to Fund performance and strategic planning and are not intended as the exclusive indicators.

Recent Global Equity Market Returns

<HELP> for explanation.
Enter all values and hit <Go>

1) Settings | 2) Actions | Page 1/19 | Comparative Return

Range 09/07/2012 - 09/06/2013 | Period Daily | No. of Period 364 Day(s)

	Price Change	Total Return	Difference	Annual Eq
Russell 3000 Index	16.68%	19.13%	-.20%	19.19%
MSCI EAFE	15.20%	19.33%		19.38%
MSCI Emerging Markets	-1.35%	1.41%	-17.92%	1.41%

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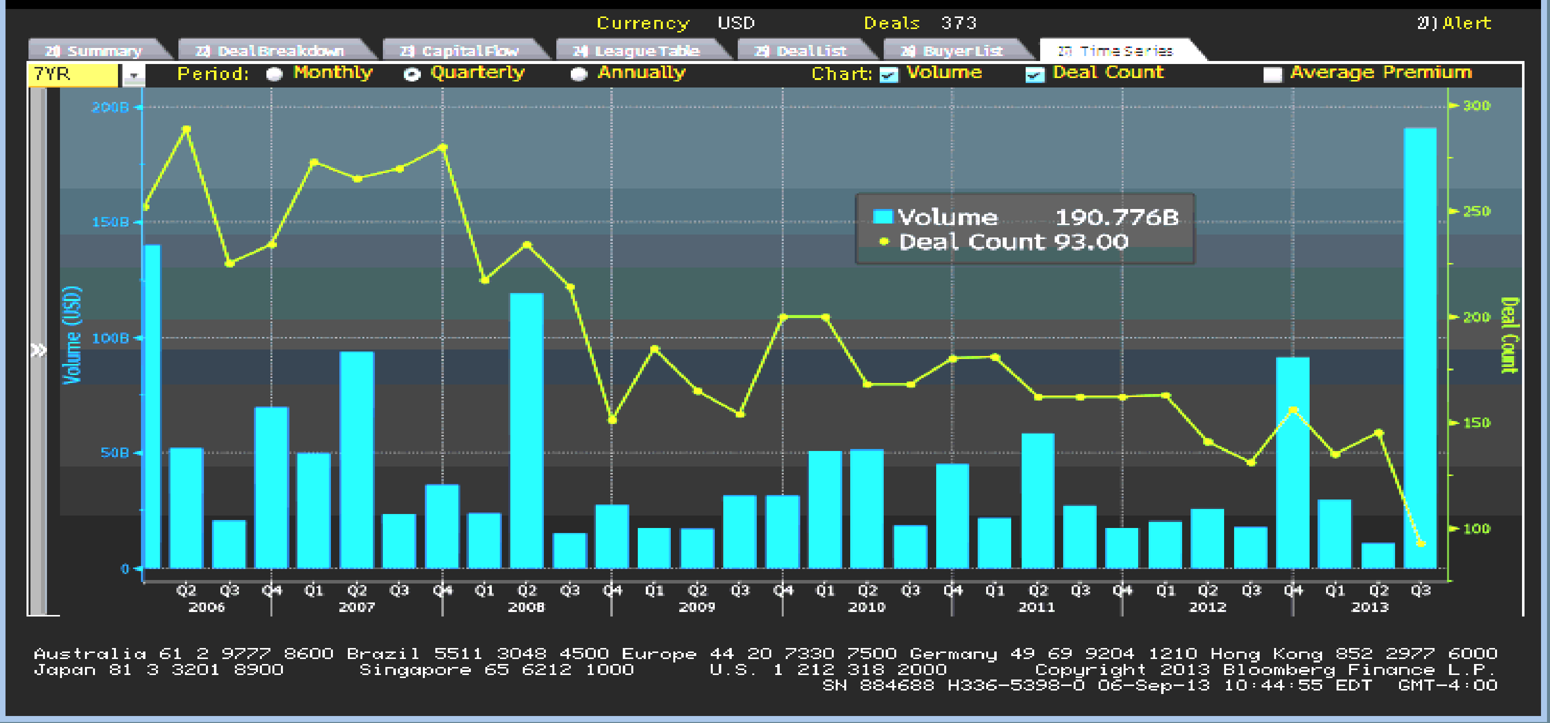
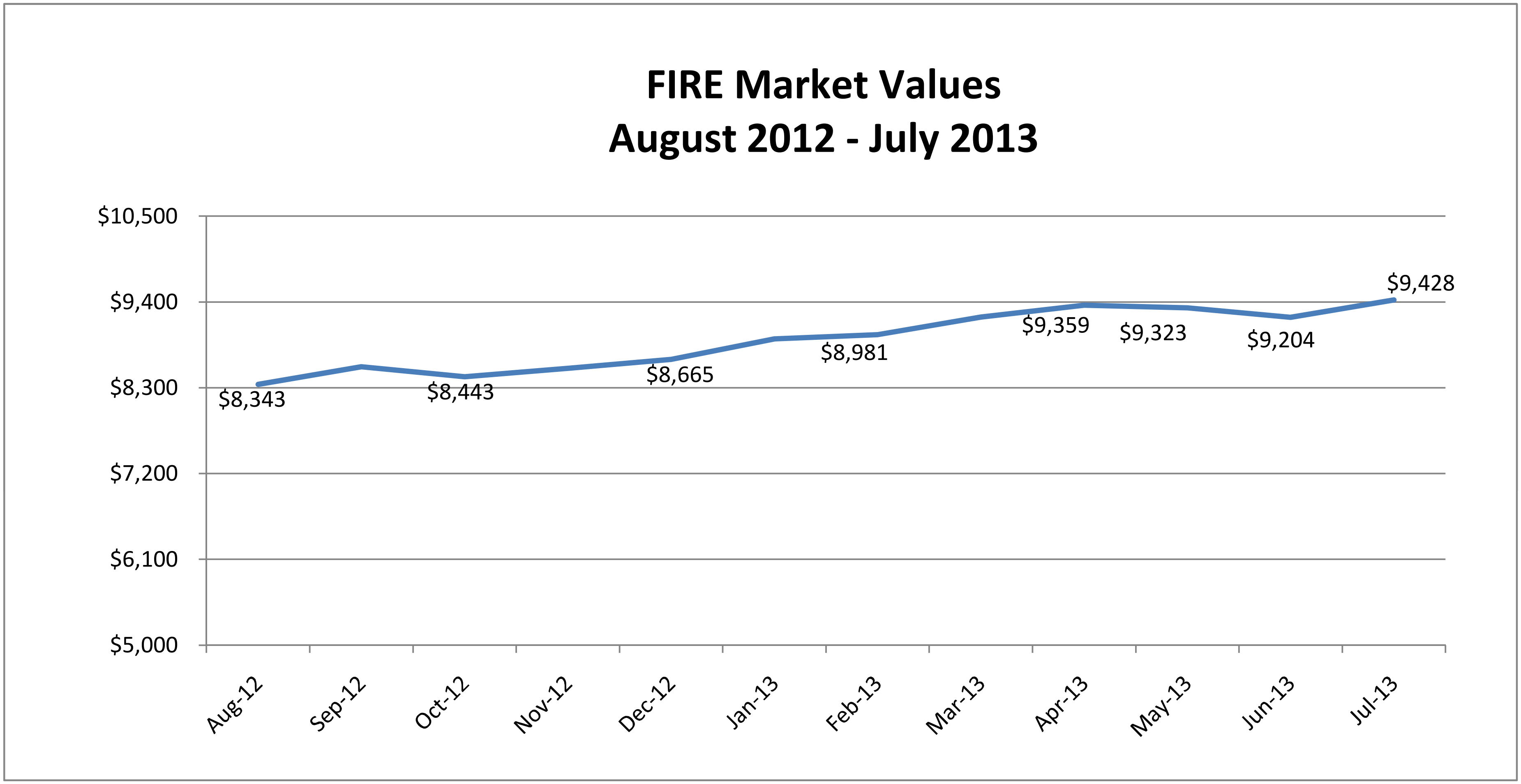
Mergers & Acquisitions Activity

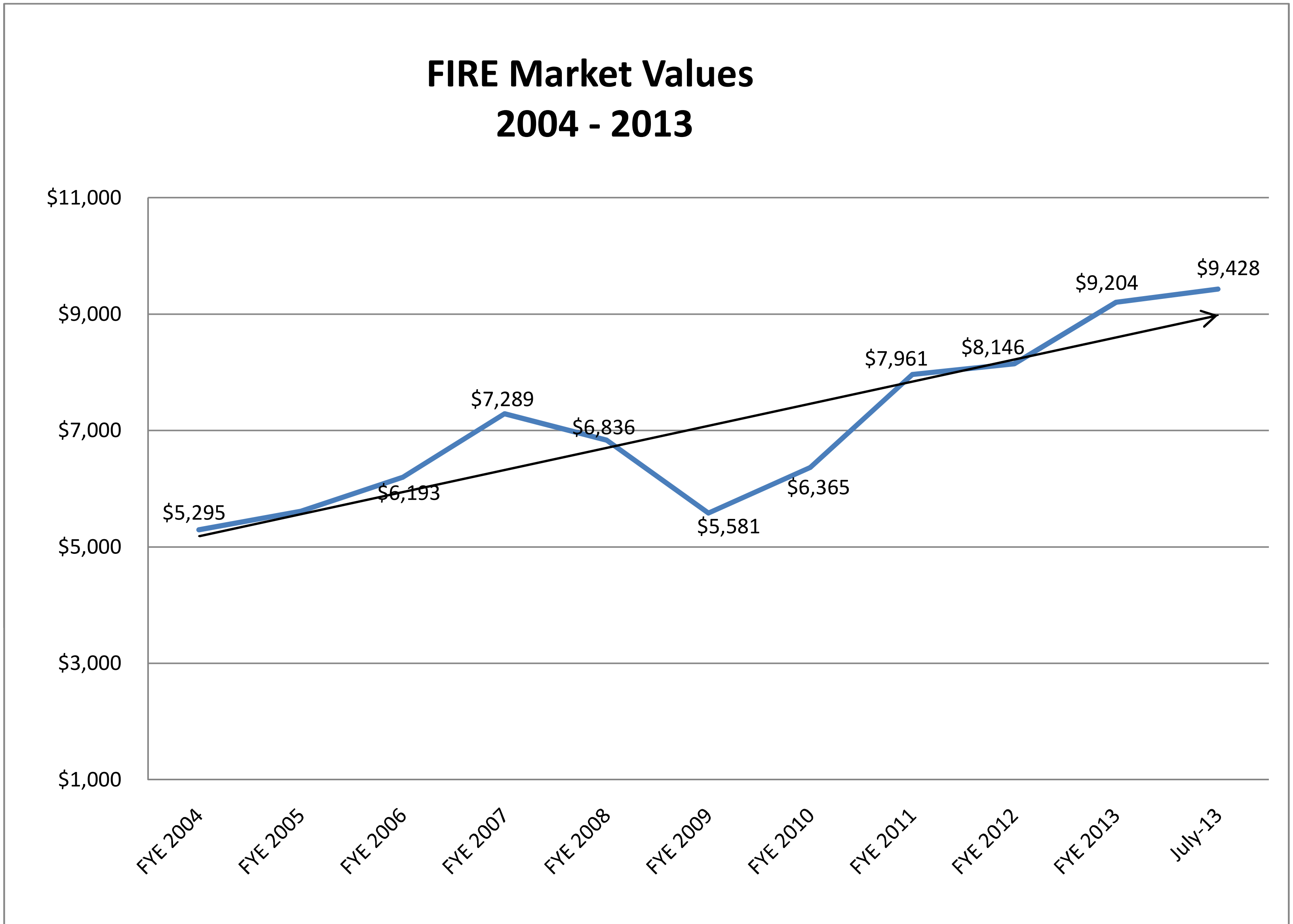
26

Mergers & Acquisitions



- **Note:** The market indicators contained in the board materials are a subset of indicators relevant to Fund performance and strategic planning and are not intended as the exclusive indicators.


FIRE Market Values
August 2012 - July 2013
$10,500
$9,400
$8,300
$7,200
$6,100
$5,000
$8,343
$8,443
$8,665
$8,981
$9,359
$9,323
$9,204
$9,428
Aug-12
Sep-12
Oct-12
Nov-12
Dec-12
Jan-13
Feb-13
Mar-13
Apr-13
May-13
Jun-13
Jul-13

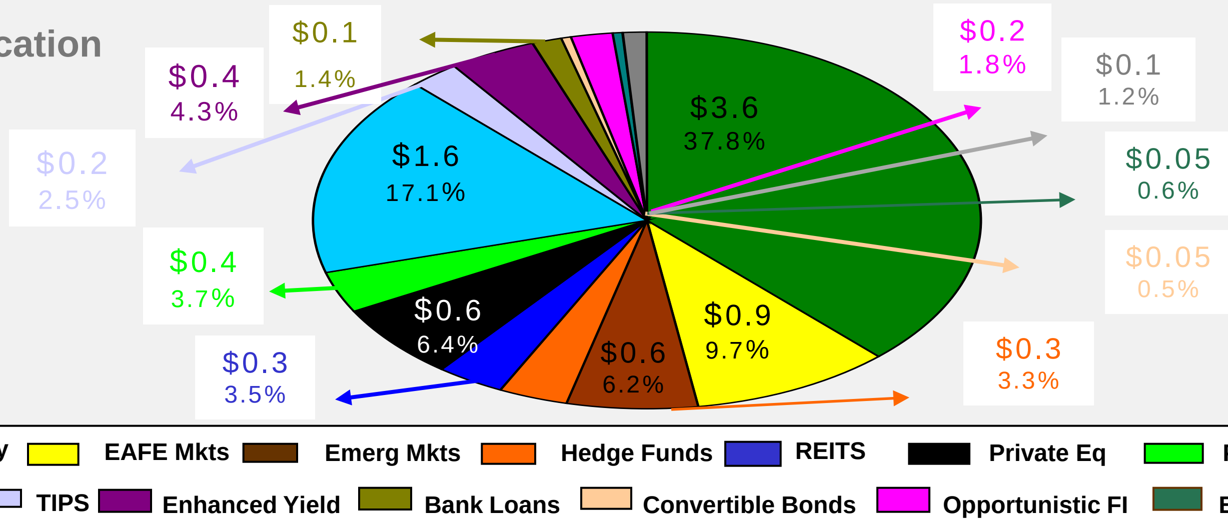


The 10 Year Return for FIRE as of July 31, 2013 is 7.86%.

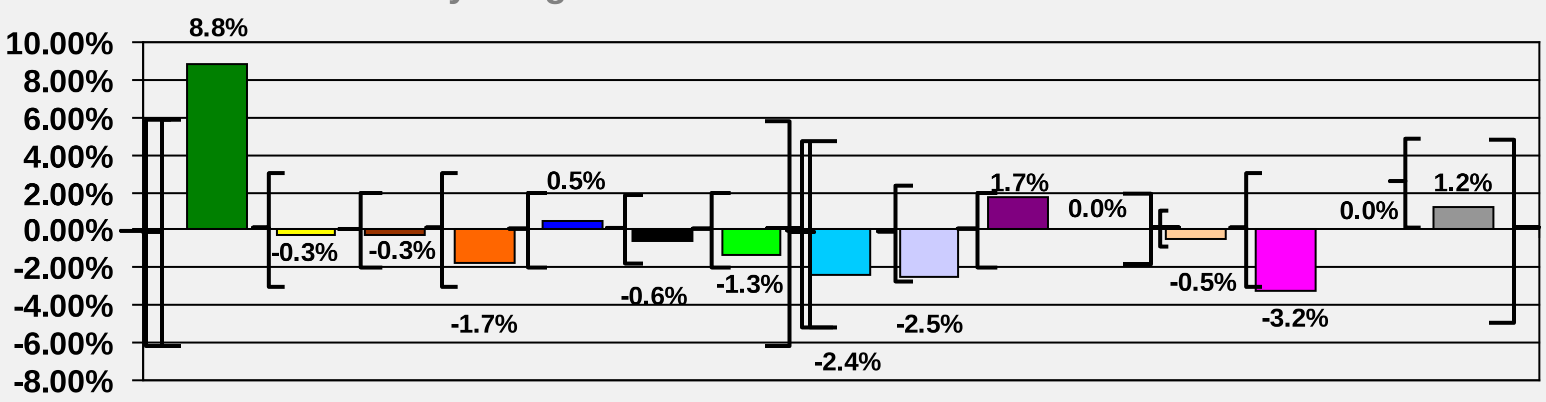
Portfolio Asset Allocation: July 31, 2013

$9.4B Under Management

Asset Allocation



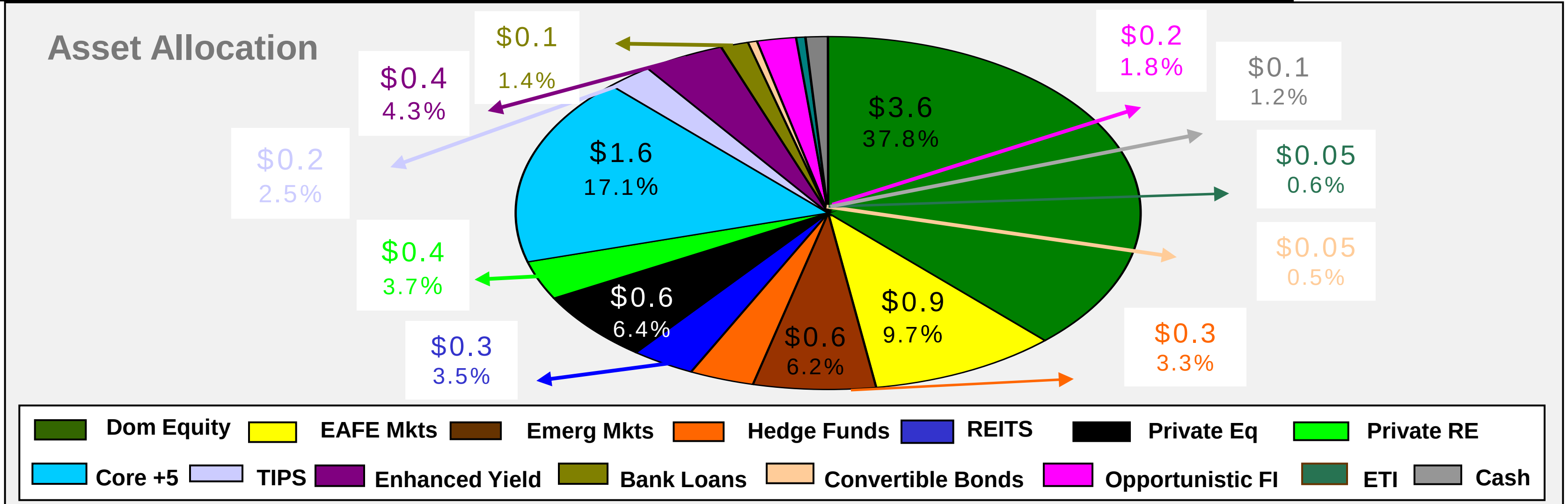
Relative Mix to New Policy Weights

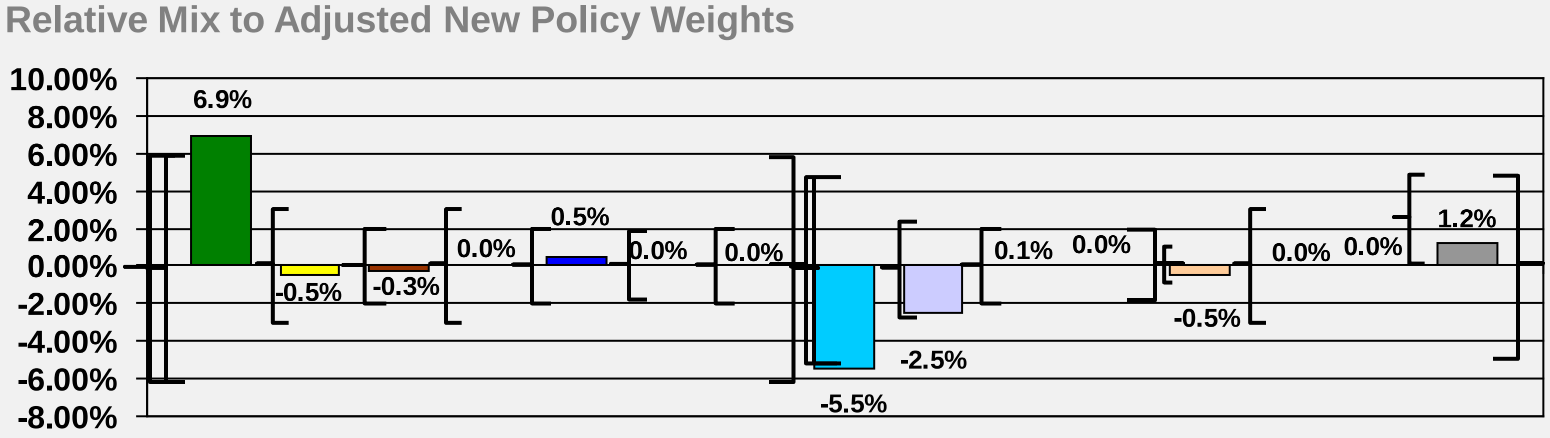


Note: Brackets represent rebalancing ranges versus Policy.

Portfolio Asset Allocation: July 31, 2013

$9.4B Under Management





Note: Brackets represent rebalancing ranges versus Policy.

NYC FIRE DEPARTMENT PENSION FUND
CLASSIFICATION OF INVESTMENTS
(as of July 31st, 2013)

ASSET CLASS ALLOCATIONS

	In $MM	Actual	Policy Target	*Adjustment*	*Adjusted Policy*	*Adjusted Target Range******
TOTAL EQUITIES	$6,655.9	70.6%	65.5%	*NA*	*64.0%*	*58.0% - 70.0%*
TOTAL FIXED INCOME	$2,771.6	29.4%	34.5%	*NA*	*36.0%*	*31.0% - 41.0%*
TOTAL ASSETS	$9,427.6	100.0%	100.0%	*NA*	*100.0%*	

	In $MM	Actual	Policy Target	*Adjustment*	*Adjusted Policy*	*Adjusted Target Range******
US Equities	$3,567.1	37.8%	29.0%	*1.9%*	*30.9%*	*24.9% - 36.9%*
Non-US Equities/EAFE	$910.8	9.7%	10.0%	*0.2%*	*10.2%*	*7.2% - 13.2%*
Emerging Markets	$585.6	6.2%	6.5%	*NA*	*6.5%*	*4.5% - 8.5%*
Real Estate Investment Trusts	$328.2	3.5%	3.0%	*NA*	*3.0%*	*1.0% - 5.0%*
TOTAL PUBLIC EQUITY	$5,391.7	57.2%	48.5%	*NA*	*50.6%*	
HEDGE FUNDS	$310.6	3.3%	5.0%	*NA*	*3.3%*	*2.0% - 8.0%*
* ***PRIVATE REAL ESTATE***	$350.4	3.7%	5.0%	*NA*	*3.7%*	*3.0% - 7.0%*
* ***PRIVATE EQUITY***	$603.3	6.4%	7.0%	*NA*	*6.4%*	*5.0% - 9.0%*
TOTAL EQUITIES	$6,655.9	70.6%	65.5%	*NA*	*64.0%*	*58.0% - 70.0%*

	In $MM	Actual	Policy Target	*Adjustment*	*Adjusted Policy*	*Adjusted Target Range******
Core +5: US - Government	$209.7	2.2%	19.5%	*NA*	*22.6%*	*17.6% - 27.6%*
Core +5: US - Mortgage	$642.7	6.8%		*NA*		
Core +5: US - Investment Grade Credit	$722.7	7.7%		*NA*		
TOTAL CORE + 5	$1,611.8	17.1%	19.5%	*3.1%*	*22.6%*	*17.6% - 27.6%*
High Yield	$405.6	4.3%	4.0%	*NA*	*5.6%*	*3.6% - 7.6%*
Bank Loans	$137.1	1.5%		*NA*		*0.0% - 1.9%*
Total High Yield & Bank Loans	$542.7	5.8%	4.0%	*1.6%*	*5.6%*	*3.6% - 7.6%*
TIPS	$234.1	2.5%	5.0%	*NA*	*5.0%*	*2.5% - 7.5%*
Convertible Bonds	$48.8	0.5%	1.0%	*NA*	*1.0%*	*0.0% - 2.0%*
** ETI	$52.8	0.6%	** 2.0%	*NA*	** *0.6%*	** *0.6%*
Cash	$109.4	1.2%	0.0%	*NA*	*0.0%*	*0.0% - 5.0%*
TOTAL PUBLIC FIXED INCOME	$2,599.6	27.6%	29.5%	*NA*	*34.2%*	
* ***OPPORTUNISTIC FIXED INCOME***	$172.0	1.8%	5.0%	*NA*	*1.8%*	*2.0% - 8.0%*
TOTAL FIXED INCOME	$2,771.6	29.4%	34.5%	*NA*	*36.0%*	31.0% - 41.0%

* Ranges for illiquid asset classes represent minimums and maximums which will be monitored and will influence pacing analysis but will not necessarily result in purchases or sales.

** ETIs have a policy of 2% of the total Fund. The ETI adjusted policy % is shown for illustrative purposes only and is not included in the sub-totals. The ETI policy % is included within the policy % of the other asset classes.

*** Adjusted Target Ranges are calculated as follows: Total Equities: +/-6%; Total Fixed Income: +/-5%; US Equities: +/-6%; Non-US Equities/EAFE: +/-3%; Emerging Markets: +/-2%; REITs: +/-2%; Hedge Funds: +/-3%; Real Estate: +/-2%; Private Equity: +/-2%; Core +5: +/-5%; TIPS: +/-2.5%; High Yield & Bank Loans: +/-2% (Bank Loans up to 1/3 of Adjusted Policy); Convertible Bonds: +/-1%; Cash: 0-5%; OFI: +/-3%.

NYC FIRE DEPARTMENT PENSION FUND
CLASSIFICATION OF INVESTMENTS
(as of July 31st, 2013)

Adjustments to Long-Term Asset Allocation

1) **Private Equity**
75% of uninvested commitments will be invested in Domestic Equity and 25% of uninvested commitments will be invested in International Equity.

2) **Real Estate**
50% of uninvested commitments will be invested in Domestic Equity and 50% of uninvested commitments will be invested in Fixed Income Core +5.

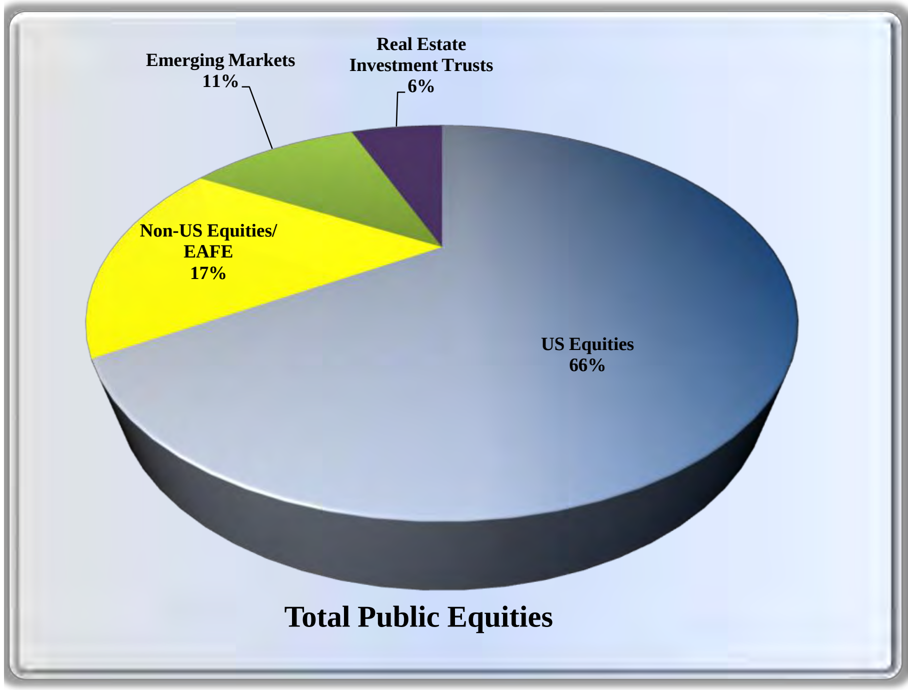
3) **Opportunistic Fixed Income**
50% of uninvested commitments will be invested in Fixed Income Core +5 and 50% of uninvested commitments will be invested in High Yield.

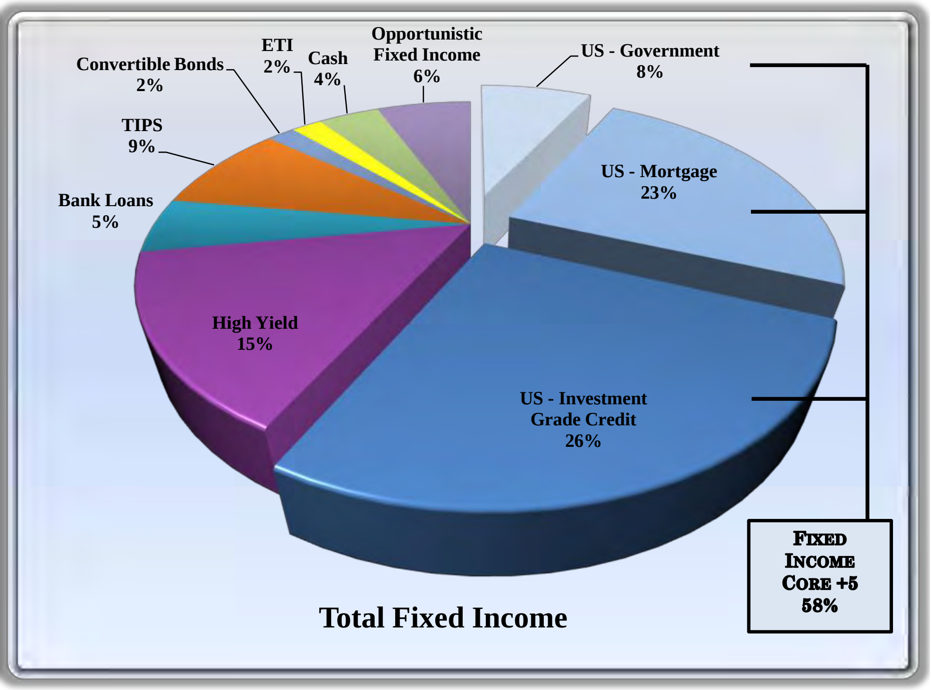
4) **Hedge Funds**
50% of uninvested commitments will be invested in Domestic Equity and 50% of uninvested commitments will be invested in Fixed Income Core +5.

Impact of Adjustments

1) Core +5 Policy Target %	**19.5%**
Adjustment: 50% of uninvested Opportunistic Fixed Income	1.6%
Adjustment: 50% of uninvested Real Estate	0.6%
Adjustment: 50% of uninvested Hedge Funds	0.9%
Adjusted Core+5 Policy Target %	**22.6%**
2) High Yield Policy Target %	**4.0%**
Adjustment: 50% of uninvested Opportunistic Fixed Income	1.6%
Adjusted High Yield Policy Target %	**5.6%**
3) Domestic Equity Policy Target %	**29.0%**
Adjustment: 50% of uninvested Real Estate	0.6%
Adjustment: 75% of uninvested Private Equity	0.5%
Adjustment: 50% of uninvested Hedge Funds	0.9%
Adjusted Domestic Equity Policy Target %	**30.9%**
4) Non-US Equity/EAFE	**10.0%**
Adjustment: 25% of uninvested Private Equity	0.2%
Adjusted Non-US Equity/EAFE Policy Target %	**10.2%**

NYC FIRE DEPARTMENT PENSION FUND
CLASSIFICATION OF INVESTMENTS
(as of July 31st, 2013)





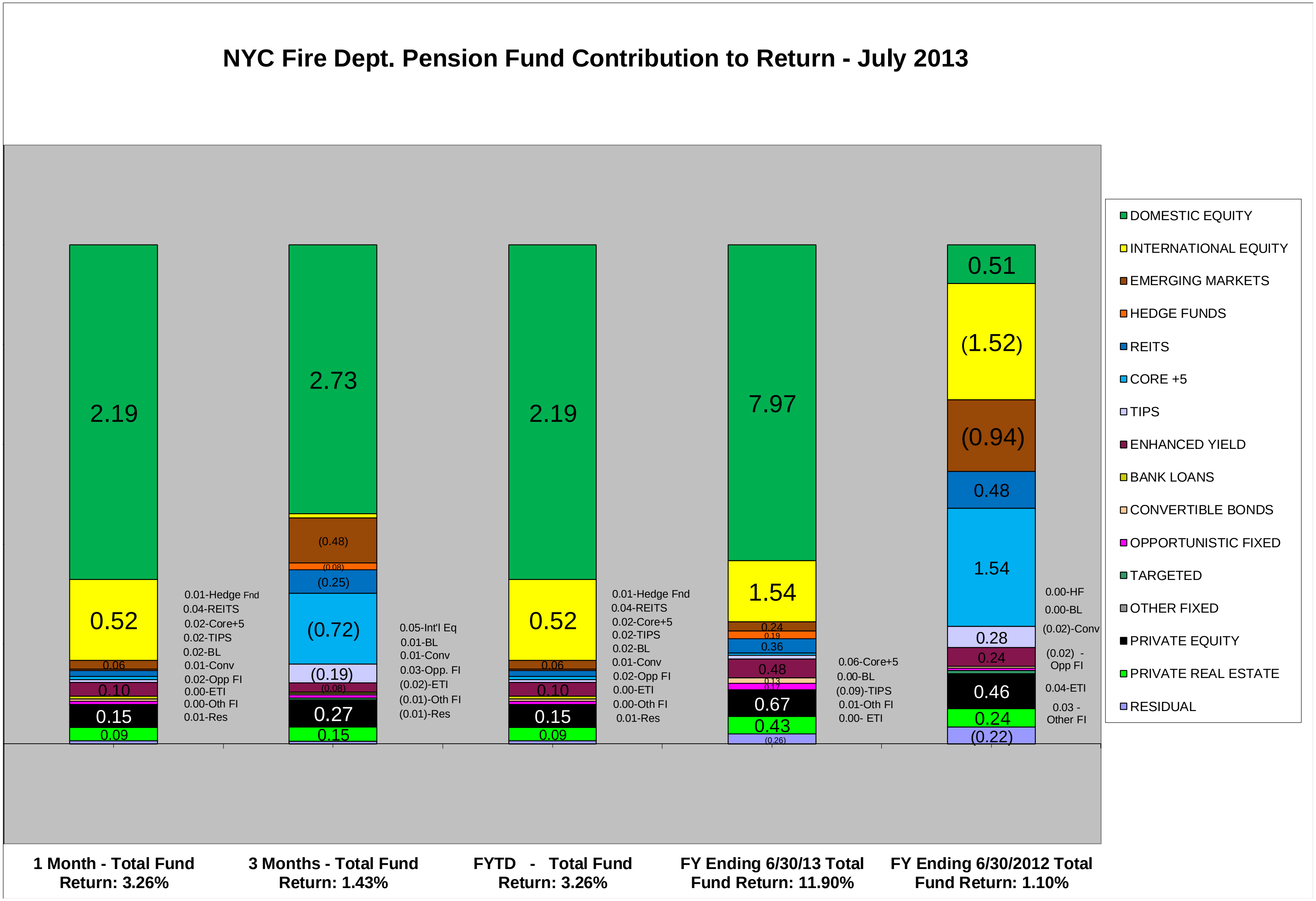
Note: Totals may not equal 100% due to rounding

THE BANK OF NEW YORK MELLON
CITY OF NEW YORK
Market Indicator Page *NYC Fire Department Pension Fund
July 31, 2013

	Trailing 1 Month	Trailing 3 Months	06/30/13 07/31/13	Trailing 1 Year	Trailing* 2 Years	Trailing* 3 Years	Trailing* 5 Years	Trailing* 10 Years
MARKET INDICATORS								
STANDARD & POORS 500	5.09	6.10	5.09	25.00	16.78	17.73	8.26	7.64
S&P MIDCAP INDEX 400	6.20	6.59	6.20	33.00	16.00	19.17	10.64	11.02
RUSSELL 1000	5.35	6.23	5.35	26.23	16.72	18.03	8.50	8.02
RUSSELL 2000	7.00	10.71	7.00	34.76	16.18	18.71	9.45	9.60
RUSSELL 3000	5.48	6.57	5.48	26.86	16.67	18.08	8.57	8.14
RUSSELL 3000 GROWTH	5.48	5.78	5.48	22.65	14.84	18.17	9.09	7.84
RUSSELL 3000 VALUE	5.48	7.31	5.48	30.99	18.43	17.92	7.96	8.29
MSCI EAFE (NET DIVIDEND)	5.28	-0.92	5.28	23.48	4.57	8.61	1.05	7.97
MSCI EMERGING MARKETS FREE	1.10	-7.67	1.10	2.29	-6.01	1.33	0.86	13.45
FTSE CUSTOM BENCHMARK	0.29	-8.86	0.29	0.99	-6.17	1.75	1.64	****
MSCI WORLD INDEX	5.29	2.87	5.29	23.96	10.55	13.35	4.88	8.16
MSCI EUROPE SMID CAP INDEX	8.94	6.12	8.94	35.34	7.43	11.90	3.80	****
MSCI AC WORLD FRONTIER MARKETS EX USA	4.39	-2.41	4.39	17.03	1.39	6.43	0.71	****
1 YEAR TREASURY BILL YIELD + 4%	0.40	1.06	0.40	4.28	****	****	****	****
HFRI FUND OF FUNDS COMPOSITE INDEX + 1%	1.33	0.79	1.33	8.89	****	****	****	****
NYC - TREASURY AGENCY PLUS FIVE	-0.76	-7.02	-0.76	-7.09	4.39	4.54	6.38	6.21
CITIGROUP MORTGAGE	-0.05	-2.52	-0.05	-1.96	1.42	2.24	4.94	4.94
NYC - INVESTMENT GRADE CREDIT INDEX	0.62	-4.22	0.62	-0.88	4.26	4.93	7.03	5.54
NYC - CORE PLUS FIVE	0.09	-4.09	0.09	-2.58	3.17	3.73	6.07	5.52
CITIGROUP BROAD INVESTMENT GRADE	0.13	-3.13	0.13	-1.90	2.61	3.15	5.31	5.01
BARCLAYS CAPITAL AGGREGATE	0.14	-3.17	0.14	-1.91	2.57	3.19	5.23	4.89
CITIGROUP BB & B	1.76	-1.52	1.76	7.48	8.20	9.58	8.75	7.66
BofA MERRILL LYNCH HY MASTER II	1.88	-1.33	1.88	9.53	8.37	9.86	11.40	9.10
CREDIT SUISSE LEVERAGED LOAN INDEX	1.07	0.74	1.07	****	****	****	****	****
BARCLAYS CAPITAL GLOBAL US TIPS (INFLATION NOTES)	0.73	-7.12	0.73	-5.87	1.52	4.84	4.68	5.77
BofA ML ALL CONVERTIBLES EX MANDATORY	4.45	4.73	4.45	21.97	11.02	12.28	9.08	****
DJ WILSHIRE REAL ESTATE SECURITIES INDEX	0.75	-6.93	0.75	6.53	9.65	14.62	6.37	10.24
NCREIF NFI-ODCE NET	0.00	3.60	0.00	11.08	11.18	13.85	-1.07	****
91 DAY TREASURY BILL	0.01	0.02	0.01	0.11	0.09	0.11	0.25	1.72

THE BANK OF NEW YORK MELLON
CITY OF NEW YORK
Market Indicator Page *NYC Fire Department Pension Fund
August 31, 2013

	Trailing 1 Month	Trailing 3 Months	06/30/13 08/31/13	Trailing 1 Year	Trailing* 2 Years	Trailing* 3 Years	Trailing* 5 Years	Trailing* 10 Years
MARKET INDICATORS								
STANDARD & POORS 500	-2.90	0.67	2.04	18.70	18.34	18.40	7.32	7.12
S&P MIDCAP INDEX 400	-3.75	0.33	2.22	23.71	18.09	19.67	9.43	10.11
RUSSELL 1000	-2.76	1.05	2.45	19.84	18.56	18.73	7.60	7.50
RUSSELL 2000	-3.18	3.07	3.60	26.27	19.65	20.49	7.98	8.76
RUSSELL 3000	-2.79	1.21	2.54	20.32	18.65	18.87	7.63	7.60
RUSSELL 3000 GROWTH	-1.73	1.81	3.65	17.29	17.14	19.46	8.45	7.36
RUSSELL 3000 VALUE	-3.84	0.57	1.43	23.20	20.07	18.20	6.70	7.68
MSCI EAFE (NET DIVIDEND)	-1.32	0.19	3.88	18.66	8.90	9.27	1.62	7.57
MSCI EMERGING MARKETS FREE	-1.68	-6.88	-0.60	0.87	-2.36	1.41	2.20	12.53
FTSE CUSTOM BENCHMARK	-2.91	-8.72	-2.63	-2.29	-3.38	1.21	2.69	****
MSCI WORLD INDEX	-2.09	0.60	3.10	18.31	13.43	13.97	4.73	7.70
MSCI EUROPE SMID CAP INDEX	-0.33	4.24	8.58	28.99	12.91	13.46	4.14	****
MSCI AC WORLD FRONTIER MARKETS EX USA	-1.39	-1.54	2.94	13.05	5.28	6.92	1.40	****
1 YEAR TREASURY BILL YIELD + 4%	0.34	1.07	0.74	4.28	****	****	****	****
HFRI FUND OF FUNDS COMPOSITE INDEX + 1%	-0.92	-1.20	0.12	6.65	****	****	****	****
NYC - TREASURY AGENCY PLUS FIVE	-0.89	-4.08	-1.64	-7.61	1.22	2.88	5.83	5.99
CITIGROUP MORTGAGE	-0.31	-1.26	-0.36	-2.37	0.61	2.07	4.63	4.84
NYC - INVESTMENT GRADE CREDIT INDEX	-0.73	-2.71	-0.12	-1.90	3.70	3.97	6.72	5.36
NYC - CORE PLUS FIVE	-0.60	-2.39	-0.50	-3.24	1.93	2.97	5.71	5.36
CITIGROUP BROAD INVESTMENT GRADE	-0.50	-1.84	-0.37	-2.46	1.57	2.52	4.99	4.89
BARCLAYS CAPITAL AGGREGATE	-0.51	-1.92	-0.38	-2.47	1.57	2.57	4.93	4.77
CITIGROUP BB & B	-0.77	-1.60	0.98	6.04	9.87	9.40	8.59	7.53
BofA MERRILL LYNCH HY MASTER II	-0.62	-1.42	1.25	7.55	10.26	9.58	11.19	8.89
CREDIT SUISSE LEVERAGED LOAN INDEX	0.04	0.55	1.11	****	****	****	****	****
BARCLAYS CAPITAL GLOBAL US TIPS (INFLATION NOTES)	-1.45	-4.29	-0.73	-6.97	0.37	3.73	4.20	5.43
BofA ML ALL CONVERTIBLES EX MANDATORY	-1.13	0.95	3.27	18.06	13.44	12.31	8.83	****
DJ WILSHIRE REAL ESTATE SECURITIES INDEX	-6.81	-7.77	-6.11	-0.48	9.00	12.49	4.38	9.35
NCREIF NFI-ODCE NET	0.00	3.60	0.00	11.08	11.18	13.85	-1.07	****
91 DAY TREASURY BILL	0.00	0.02	0.01	0.11	0.08	0.10	0.22	1.71



NYC Fire Dept. Pension Fund Contribution to Return - July 2013
2.19
0.52
0.06
0.10
0.15
0.09
0.01-Hedge Fnd
0.04-REITS
0.02-Core+5
0.02-TIPS
0.02-BL
0.01-Conv
0.02-Opp FI
0.00-ETI
0.00-Oth FI
0.01-Res
2.73
(0.48)
(0.08)
(0.25)
(0.72)
(0.19)
(0.08)
0.27
0.15
0.05-Int'l Eq
0.01-BL
0.01-Conv
0.03-Opp. FI
(0.02)-ETI
(0.01)-Oth FI
(0.01)-Res
2.19
0.52
0.06
0.10
0.15
0.09
0.01-Hedge Fnd
0.04-REITS
0.02-Core+5
0.02-TIPS
0.02-BL
0.01-Conv
0.02-Opp FI
0.00-ETI
0.00-Oth FI
0.01-Res
7.97
1.54
0.24
0.19
0.36
0.48
0.13
0.17
0.67
0.43
(0.26)
0.06-Core+5
0.00-BL
(0.09)-TIPS
0.01-Oth FI
0.00- ETI
0.51
(1.52)
(0.94)
0.48
1.54
0.28
0.24
0.46
0.24
(0.22)
0.00-HF
0.00-BL
(0.02)-Conv
(0.02) - Opp FI
0.04-ETI
0.03 - Other FI
DOMESTIC EQUITY
INTERNATIONAL EQUITY
EMERGING MARKETS
HEDGE FUNDS
REITS
CORE +5
TIPS
ENHANCED YIELD
BANK LOANS
CONVERTIBLE BONDS
OPPORTUNISTIC FIXED
TARGETED
OTHER FIXED
PRIVATE EQUITY
PRIVATE REAL ESTATE
RESIDUAL
1 Month - Total Fund Return: 3.26%
3 Months - Total Fund Return: 1.43%
FYTD - Total Fund Return: 3.26%
FY Ending 6/30/13 Total Fund Return: 11.90%
FY Ending 6/30/2012 Total Fund Return: 1.10%

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		Assets ($MM)	% of Total	Trailing 1 Month	Trailing 3 Months	Fiscal YTD	Calendar YTD	FY Ending 06/30/13	Calendar Yr Ending 2012	Calendar Yr Ending 2011	Calendar Yr Ending 2010	Calendar Yr Ending 2009	Trailing 1 Year	Trailing* 3 Years	Trailing* 5 Years	Trailing* 10 Years	Since Inception
ASSET CLASS SUMMARY																	
DOMESTIC EQUITY	$	3,567.1	37.84%	5.91%	7.58%	5.91%	21.63%	23.16%	16.67%	-0.69%	17.54%	29.31%	29.84%	18.11%	8.58%	8.10%	12.35%
INTERNATIONAL EAFE		910.8	9.66%	5.73	0.73	5.73	8.17	16.12	17.57	-11.82	12.76	33.68	21.18	8.88	1.69	****	6.20
EMERGING MARKETS		585.6	6.21%	0.93	-7.35	0.93	-7.04	3.84	16.83	-18.34	19.49	83.26	2.73	1.33	0.55	14.04	7.42
HEDGE FUNDS		310.6	3.29%	0.27	-2.84	0.27	2.00	8.58	7.85	****	****	****	7.25	****	****	****	3.17
REAL ESTATE EQUITY SECURITIES		328.2	3.48%	1.05	-6.66	1.05	4.47	8.71	20.17	8.14	32.08	31.70	7.36	14.78	6.96	11.41	12.76
CORE + 5		1,575.0	16.71%	0.14	-4.04	0.14	-2.66	0.32	6.85	8.91	8.54	9.39	-1.31	4.45	6.70	5.82	8.36
CONVERTIBLE BONDS		48.8	0.52%	2.82	2.53	2.82	9.64	13.39	12.20	-3.87	15.93	35.93	15.70	9.66	7.73	****	7.24
TIPS MANAGERS		234.1	2.48%	0.70	-7.17	0.70	-6.62	-4.56	6.99	13.59	6.42	10.10	-5.60	4.86	4.86	****	5.07
ENHANCED YIELD		405.6	4.30%	2.08	-1.70	2.08	3.12	8.30	13.50	5.89	14.08	41.59	8.76	9.57	10.13	8.43	8.91
BANK LOANS		137.1	1.45%	1.13	0.89	1.13	3.91	****	****	****	****	****	****	****	****	****	4.52
OPPORTUNISTIC FIXED		172.0	1.82%	1.14	2.01	1.14	10.78	15.10	16.32	-2.69	23.60	20.29	15.21	9.97	12.79	****	****
PROGRESS FIXED		26.3	0.28%	0.11	-3.31	0.11	-2.18	0.00	****	****	****	****	-1.30	****	****	****	3.08
CORE PLUS FIXED INCOME		10.5	0.11%	0.57	-3.41	0.57	-1.83	0.57	6.22	8.18	7.57	****	-0.52	4.37	****	****	6.69
ECONOMICALLY TARGETED INVESTMENTS		52.8	0.56%	-0.05	-2.85	-0.05	-2.17	-0.48	4.29	7.16	5.88	6.83	-1.47	3.04	5.04	4.85	8.73
PRIVATE EQUITY		603.3	6.40%	2.33	4.27	2.33	7.89	9.38	11.35	12.50	16.82	-7.47	12.54	12.63	6.27	****	12.69
PRIVATE REAL ESTATE		350.4	3.72%	2.41	4.08	2.41	8.80	13.31	14.84	17.72	4.54	-41.47	15.42	15.52	-4.15	****	5.93
CASH		109.4	1.16%	0.03	0.13	0.03	0.20	0.33	0.35	0.35	0.53	1.14	0.33	0.34	0.86	****	2.31
TOTAL FIRE	**$**	**9,427.6**		**3.26%**	**1.43%**	**3.26%**	**8.42%**	**11.90%**	**13.14%**	**0.84%**	**14.42%**	**22.51%**	**14.38%**	**11.06%**	**6.32%**	**7.86%**	**8.67%**
TOTAL EQUITY		5,391.7	57.19%	5.02	3.68	5.02	14.48	18.56	17.10	-4.16	17.36	32.99	23.36	14.31	6.26	****	7.00
HEDGE FUNDS		310.6	3.29%	0.27	-2.84	0.27	2.00	8.58	7.85	****	****	****	7.25	****	****	****	3.17
TOTAL FIXED INCOME		2,662.2	28.24%	0.64	-3.22	0.64	-0.79	2.56	8.48	8.05	10.00	16.07	1.51	5.96	7.54	****	6.03
TOTAL PRIVATE EQUITY		603.3	6.40%	2.33	4.27	2.33	7.89	9.38	11.35	12.50	16.82	-7.47	12.54	12.63	6.27	****	12.69
TOTAL PRIVATE REAL ESTATE		350.4	3.72%	2.41	4.08	2.41	8.80	13.31	14.84	17.72	4.54	-41.47	15.42	15.52	-4.15	****	5.93
TOTAL CASH		109.4	1.16%	0.03	0.13	0.03	0.20	0.33	0.35	0.35	0.53	1.14	0.33	0.34	0.86	****	2.31

* Returns data throughout the various reports are shown Gross of Fees with the exception of PE, RE, Opp FI, and Hedge Funds.

THE BANK OF NEW YORK MELLON
CITY OF NEW YORK
Manager / Benchmark Comparison Report *NYC Fire Department Pension Fund
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	Assets ($MM)	% of Total	Trailing 1 Month	Trailing 3 Months	Fiscal YTD	Calendar YTD	FY Ending 06/30/13	Calendar Yr Ending 2012	Calendar Yr Ending 2011	Calendar Yr Ending 2010	Calendar Yr Ending 2009	Trailing 1 Year	Trailing* 3 Years	Trailing* 5 Years	Trailing* 10 Years	Since Inception
EQUITY ASSET CLASS SUMMARY																
DOMESTIC EQUITY	$ 3,567.1	37.84%	5.91%	7.58%	5.91%	21.63%	23.16%	16.67%	-0.69%	17.54%	29.31%	29.84%	18.11%	8.58%	8.10%	12.35%
PASSIVE DOMESTIC EQUITY	2,646.0	28.07%	5.53	6.57	5.53	20.42	21.81	16.43	0.35	16.95	28.40	27.43	17.84	8.54	8.14	11.28
RUSSELL 3000			5.48	6.57	5.48	20.31	21.46	16.42	1.03	16.93	28.34	26.86	18.08	8.57	8.14	
+/-			0.05	0.00	0.05	0.11	0.35	0.01	(0.67)	0.02	0.06	0.56	(0.24)	(0.03)	0.00	
TOTAL RUSSELL 3000	2,449.3	25.98%	5.47	6.57	5.47	20.29	21.47	16.42	1.06	16.95	28.40	26.88	18.07	8.67	8.21	9.38
RUSSELL 3000			5.48	6.57	5.48	20.31	21.46	16.42	1.03	16.93	28.34	26.86	18.08	8.57	8.14	
+/-			(0.01)	(0.00)	(0.01)	(0.02)	0.01	0.00	0.04	0.02	0.06	0.02	(0.01)	0.10	0.07	
TOTAL MID CAP PASSIVE	196.7	2.09%	6.18	6.61	6.18	21.66	25.14	17.87	****	****	****	32.93	****	****	****	13.85
S&P MIDCAP INDEX 400			6.20	6.59	6.20	21.69	25.18	17.88	****	****	****	33.00	****	****	****	
+/-			(0.02)	0.02	(0.02)	(0.03)	(0.04)	(0.00)	****	****	****	(0.07)	****	****	****	
ACTIVE DOMESTIC EQUITY	921.2	9.77%	7.03	10.64	7.03	25.10	26.76	17.18	-3.39	18.47	31.54	36.47	18.74	8.80	8.15	10.17
RUSSELL 3000			5.48	6.57	5.48	20.31	21.46	16.42	1.03	16.93	28.34	26.86	18.08	8.57	8.14	
+/-			1.55	4.07	1.55	4.80	5.29	0.76	(4.42)	1.54	3.20	9.60	0.65	0.23	0.01	
TOTAL LARGE CAP	261.7	2.78%	8.44	13.73	8.44	30.16	27.25	13.16	-3.66	16.43	31.04	40.19	18.62	8.84	7.98	8.21
RUSSELL 1000			5.35	6.23	5.35	20.00	21.24	16.42	1.50	16.10	28.43	26.23	18.03	8.50	****	
+/-			3.09	7.50	3.09	10.15	6.01	(3.26)	(5.16)	0.33	2.61	13.97	0.59	0.34	****	
TOTAL MID CAP ACTIVE	305.5	3.24%	5.77	8.17	5.77	23.18	28.57	21.64	-2.82	24.84	35.15	34.84	19.88	10.26	****	7.82
RUSSELL MIDCAP			5.80	6.76	5.80	22.14	25.41	17.28	-1.55	25.47	40.46	32.37	19.01	10.07	****	
+/-			(0.03)	1.40	(0.03)	1.04	3.16	4.36	(1.28)	(0.63)	(5.31)	2.47	0.87	0.19	****	
TOTAL SMALL CAP ACTIVE	141.4	1.50%	7.88	11.25	7.88	22.48	22.79	16.41	-4.86	20.91	35.75	33.64	18.14	8.34	****	6.04
RUSSELL 2000			7.00	10.71	7.00	23.97	24.21	16.35	-4.18	26.85	27.18	34.76	18.71	9.45	****	
+/-			0.88	0.55	0.88	(1.49)	(1.42)	0.06	(0.68)	(5.94)	8.57	(1.13)	(0.57)	(1.11)	****	
TOTAL EMERGING MGRS (Program changed 6/1/2012)	142.3	1.51%	6.66	11.27	6.66	24.04	25.90	17.69	-1.92	17.14	29.51	35.18	18.91	8.73	8.78	7.21
RUSSELL 2000			7.00	10.71	7.00	23.97	24.21	****	****	****	****	****	****	****	****	
RUSSELL 3000			5.48	6.57	5.48	20.31	21.46	16.42	1.03	16.93	28.34	26.86	18.08	8.57	8.14	
+/-			(0.34)	0.56	-0.34	0.07	1.69	****	****	****	****	****	****	****	****	
+/-			1.18	4.70	1.18	3.73	4.43	1.27	(2.95)	0.21	1.17	8.31	0.82	0.16	0.64	
TOTAL SMALL MID CAP	70.2	0.74%	6.46	7.96	6.46	23.22	29.19	18.02	-5.50	****	****	38.46	****	****	****	15.91
RUSSELL 2500 VALUE			5.73	7.07	5.73	21.69	26.88	19.21	-3.36	****	****	34.73	****	****	****	
+/-			0.73	0.90	0.73	1.53	2.31	(1.19)	(2.14)	****	****	3.74	****	****	****	
INTERNATIONAL EQUITY	1,496.4	15.87%	3.80	-2.61	3.80	1.75	10.93	17.16	-14.05	14.46	31.78	13.35	5.85	0.70	9.00	6.95
PASSIVE DEVELOPED MARKETS	78.4	0.83%	5.20	-0.84	5.20	9.85	18.80	17.54	-11.59	8.14	32.45	23.80	9.01	1.47	8.33	5.93
MSCI EAFE (NET DIVIDEND)			5.28	-0.92	5.28	9.60	18.62	17.32	-12.14	7.75	31.78	23.48	8.61	1.05	7.97	
+/-			(0.08)	0.07	(0.08)	0.26	0.17	0.22	0.55	0.39	0.67	0.32	0.40	0.42	0.36	
PASSIVE EMERGING MARKETS	168.8	1.79%	1.04	-7.59	1.04	-8.37	3.21	18.27	****	****	****	2.32	****	****	****	-6.19
MSCI EMERGING MARKETS FREE			1.10	-7.67	1.10	-8.40	3.23	18.63	****	****	****	2.29	****	****	****	
+/-			(0.06)	0.09	(0.06)	0.04	(0.02)	(0.36)	****	****	****	0.02	****	****	****	
ACTIVE DEVELOPED MARKETS	809.1	8.58%	5.68	0.63	5.68	7.76	15.60	17.56	-11.50	13.48	34.18	20.35	8.84	2.03	8.34	6.93
MSCI EAFE (NET DIVIDEND)			5.28	-0.92	5.28	9.60	18.62	17.32	-12.14	7.75	31.78	23.48	8.61	1.05	7.97	
+/-			0.40	1.54	0.40	(1.84)	(3.02)	0.24	0.64	5.73	2.40	(3.14)	0.23	0.98	0.37	
ACTIVE EMERGING MARKETS	416.8	4.42%	0.88	-7.23	0.88	-6.40	4.13	16.19	-18.38	19.49	83.26	2.92	1.35	0.56	****	10.83
MSCI EMERGING MARKETS FREE			1.10	-7.67	1.10	-8.40	3.23	18.63	-18.17	19.20	79.02	2.29	1.33	0.86	****	
+/-			(0.22)	0.44	(0.22)	2.00	0.90	(2.43)	(0.20)	0.29	4.24	0.63	0.02	(0.30)	****	
NON-U.S. ACTIVIST	23.3	0.25%	9.46	10.37	9.46	16.84	27.47	22.10	-23.54	36.64	****	43.63	11.63	****	****	25.56
MSCI EUROPE SMID CAP INDEX			8.94	6.12	8.94	14.92	25.26	25.81	-17.56	16.03	****	35.34	11.90	****	****	
+/-			0.52	4.25	0.52	1.92	2.21	(3.71)	(5.99)	20.61	****	8.28	(0.27)	****	****	

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FIXED INCOME ASSET CLASS SUMMARY																
TOTAL FIXED INCOME	**2,662.2**	**28.24%**	**0.64%**	**-3.22%**	**0.64%**	**-0.79%**	**2.56%**	**8.48%**	**8.05%**	**10.00%**	**16.07%**	**1.51%**	**5.96%**	**7.54%**	********	**6.03%**
CORE + 5	1,575.0	16.71%	0.14	-4.04	0.14	-2.66	0.32	6.85	8.91	8.54	9.39	-1.31	4.45	6.70	5.82	8.36
NYC - CORE PLUS FIVE			0.09	-4.09	0.09	-3.12	-0.95	5.41	9.40	7.13	6.28	-2.58	3.73	6.07	5.52	
+/-			0.04	0.04	0.04	0.46	1.27	1.44	(0.50)	1.41	3.11	1.27	0.72	0.63	0.30	
ALL MORTGAGE	642.7	6.82%	-0.17	-2.84	-0.17	-2.00	-0.15	4.37	6.26	7.64	8.84	-1.17	3.14	5.65	5.22	7.19
CITIGROUP MORTGAGE INDEX			-0.05	-2.52	-0.05	-2.06	-1.15	2.60	6.38	5.50	5.76	-1.96	2.24	4.94	4.94	
+/-			(0.12)	(0.32)	(0.12)	0.07	0.99	1.78	(0.12)	2.14	3.08	0.79	0.90	0.71	0.28	
ALL INVESTMENT GRADE CREDIT	722.7	7.67%	0.67	-4.23	0.67	-2.32	2.33	10.56	8.04	9.38	20.85	0.27	5.69	7.67	5.91	7.54
NYC - INVESTMENT GRADE CREDIT			0.62	-4.22	0.62	-2.88	1.19	9.52	7.80	8.36	16.36	-0.88	4.93	7.03	5.54	
+/-			0.05	(0.01)	0.05	0.56	1.14	1.04	0.24	1.02	4.49	1.15	0.76	0.64	0.37	
ALL TREASURY / AGENCY	209.7	2.22%	-0.76	-6.96	-0.76	-5.74	-4.38	4.07	18.42	9.45	-5.66	-6.90	4.56	6.53	6.31	7.82
NYC - TREASURY AGENCY PLUS FIVE			-0.76	-7.02	-0.76	-5.77	-4.52	3.84	18.44	9.24	-7.44	-7.09	4.54	6.38	6.21	
+/-			0.00	0.06	0.00	0.03	0.14	0.23	(0.02)	0.21	1.78	0.19	0.02	0.15	0.09	
ENHANCED YIELD	405.6	4.30%	2.08	-1.70	2.08	3.12	8.30	13.50	5.89	14.08	41.59	8.76	9.57	10.13	8.43	8.91
CITIGROUP BB & B			1.76	-1.52	1.76	2.58	8.11	14.45	6.58	13.35	40.37	7.98	9.75	8.85	7.71	
+/-			0.31	(0.18)	0.31	0.54	0.19	(0.95)	(0.69)	0.73	1.22	0.78	(0.18)	1.28	0.73	
BANK LOANS	137.1	1.45%	1.13	0.89	1.13	3.91	****	****	****	****	****	****	****	****	****	4.52
CREDIT SUISSE LEVERAGED LOAN INDEX			1.07	0.74	1.07	3.91	****	****	****	****	****	****	****	****	****	
+/-			0.07	0.15	0.07	0.00	****	****	****	****	****	****	****	****	****	
TIPS	234.1	2.48%	0.70	-7.17	0.70	-6.62	-4.56	6.99	13.59	6.42	10.10	-5.60	4.86	4.86	****	5.07
BARCLAYS CAPITAL US TIPS INDEX			0.73	-7.12	0.73	-6.72	-4.78	6.98	13.56	6.37	11.41	-5.87	4.84	4.68	****	
+/-			(0.03)	(0.06)	(0.03)	0.09	0.22	0.01	0.03	0.05	(1.31)	0.27	0.02	0.18	****	
CONVERTIBLE BONDS	48.8	0.52%	2.82	2.53	2.82	9.64	13.39	12.20	-3.87	15.93	35.93	15.70	9.66	7.73	****	7.24
BofA ML ALL CONVERTIBLES EX MANDATORY			4.45	4.73	4.45	14.67	17.48	14.41	-3.42	16.52	47.19	21.97	12.28	9.08	****	
+/-			(1.63)	(2.20)	(1.63)	(5.03)	(4.09)	(2.21)	(0.45)	(0.59)	(11.26)	(6.27)	(2.62)	(1.35)	****	
OPPORTUNISTIC FIXED	172.0	1.82%	1.14	2.01	1.14	10.78	15.10	16.32	-2.69	23.60	20.29	15.21	9.97	12.79	****	****
NYC - JP MORGAN HY PLUS 3%			2.02	-1.79	2.02	4.40	12.47	19.20	8.73	18.05	61.90	12.44	13.40	14.67	****	
+/-			(0.89)	3.79	(0.89)	6.38	2.63	(2.88)	(11.42)	5.55	(41.61)	2.77	(3.43)	(1.88)	****	
PROGRESS FIXED	26.3	0.28%	0.11	-3.31	0.11	-2.18	0.00	****	****	****	****	-1.30	****	****	****	3.08
BARCLAYS CAPITAL AGGREGATE			0.14	-3.17	0.14	-2.31	-0.69	****	****	****	****	-1.91	****	****	****	
+/-			(0.03)	(0.14)	(0.03)	0.13	0.69	****	****	****	****	0.60	****	****	****	
CORE PLUS FIXED INCOME	10.5	0.11%	0.57	-3.41	0.57	-1.83	0.57	6.22	8.18	7.57	****	-0.52	4.37	****	****	6.69
BARCLAYS CAPITAL AGGREGATE			0.14	-3.17	0.14	-2.31	-0.69	4.21	7.84	6.54	****	-1.91	3.19	****	****	
+/-			0.43	(0.24)	0.43	0.48	1.25	2.01	0.34	1.03	****	1.38	1.18	****	****	
ECONOMICALLY TARGETED INVESTMENTS	52.8	0.56%	-0.05	-2.85	-0.05	-2.17	-0.48	4.29	7.16	5.88	6.83	-1.47	3.04	5.04	4.85	8.73
FIRE CUSTOM BENCHMARK (NO CASH)			0.10	-2.87	0.10	-2.06	-0.61	3.79	7.17	6.10	5.15	-1.68	2.94	4.90	4.77	
+/-			(0.16)	0.02	(0.16)	(0.11)	0.12	0.50	(0.00)	(0.22)	1.68	0.21	0.11	0.13	0.09	
CASH ASSET CLASS SUMMARY																
CASH	109.4	1.16%	0.03	0.13	0.03	0.20	0.33	0.35	0.35	0.53	1.14	0.33	0.34	0.86	****	2.31
ML 91 DAY TREASURY BILL INDEX			0.01	0.02	0.01	0.05	0.11	0.11	0.10	0.13	0.21	0.11	0.11	0.25	****	
+/-			0.02	0.10	0.02	0.15	0.22	0.23	0.25	0.40	0.93	0.22	0.23	0.61	****	

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US EQUITY																
TOTAL RUSSELL 3000	2,449.3	25.98%	5.47	6.57	5.47	20.29	21.47	16.42	1.06	16.95	28.40	26.88	18.07	8.67	8.21	9.38
RUSSELL 3000			5.48	6.57	5.48	20.31	21.46	16.42	1.03	16.93	28.34	26.86	18.08	8.57	8.14	
+/-			(0.01)	(0.00)	(0.01)	(0.02)	0.01	0.00	0.04	0.02	0.06	0.02	(0.01)	0.10	0.07	
BLACKROCK R3000	1,433.9	15.21%	5.46	6.56	5.46	20.28	21.45	16.40	0.96	16.88	28.30	26.83	18.02	8.60	8.17	3.73
STATE STREET R3000	1,015.4	10.77%	5.48	6.58	5.48	20.30	21.51	16.44	1.17	****	****	26.96	****	****	****	17.56
RUSSELL 3000			5.48	6.57	5.48	20.31	21.46	16.42	1.03	16.93	28.34	26.86	18.08	8.57	8.14	
BLACKROCK R3000 +/-			(0.02)	(0.01)	(0.02)	(0.03)	(0.02)	(0.02)	(0.06)	(0.05)	(0.04)	(0.03)	(0.07)	0.03	0.03	
STATE STREET R3000 +/-			0.00	0.01	0.00	(0.01)	0.05	0.03	0.14	****	****	0.09	****	****	****	
TOTAL SMALL CAP	141.4	1.50%	7.88	11.25	7.88	22.48	22.79	15.20	-5.25	20.91	35.75	33.64	17.57	8.03	7.51	8.25
RUSSELL 2000			7.00	10.71	7.00	23.97	24.21	16.35	-4.18	26.85	27.18	34.76	18.71	9.45	9.60	
+/-			0.88	0.55	0.88	(1.49)	(1.42)	(1.15)	(1.07)	(5.94)	8.57	(1.13)	(1.14)	(1.43)	(2.10)	
TOTAL SMALL CAP ACTIVE	141.4	1.50%	7.88	11.25	7.88	22.48	22.79	16.41	-4.86	20.91	35.75	33.64	18.14	8.34	****	6.04
RUSSELL 2000			7.00	10.71	7.00	23.97	24.21	16.35	-4.18	26.85	27.18	34.76	18.71	9.45	****	
+/-			0.88	0.55	0.88	(1.49)	(1.42)	0.06	(0.68)	(5.94)	8.57	(1.13)	(0.57)	(1.11)	****	
TOTAL SMALL CAP GROWTH ACTIVE	30.2	0.32%	9.06	14.01	9.06	27.28	24.75	13.93	-3.99	22.98	35.75	37.84	19.74	10.36	****	7.44
BROWN AM (D)	30.2	0.32%	9.06	14.01	9.06	28.32	27.86	21.40	0.61	29.19	****	44.47	25.99	****	****	27.50
RUSSELL 2000 GROWTH			7.56	12.32	7.56	26.32	23.67	14.59	-2.91	29.09	34.47	35.39	20.32	9.98	****	
TOTAL SMALL CAP GROWTH +/-			1.49	1.69	1.49	0.95	1.08	(0.66)	(1.08)	(6.11)	1.28	2.45	(0.58)	0.38	****	
BROWN AM (D) +/-			1.49	1.69	1.49	1.99	4.19	6.81	3.51	0.10	****	9.09	5.68	****	****	
TOTAL SMALL CAP VALUE ACTIVE	111.2	1.18%	7.56	10.53	7.56	21.23	23.36	19.05	-5.76	****	****	33.28	17.66	****	****	14.77
CEREDEX	67.5	0.72%	7.95	10.63	7.95	21.23	****	****	****	****	****	****	****	****	****	21.23
DALTON GREINER	43.8	0.46%	6.97	10.36	6.97	21.23	25.66	20.60	-5.76	****	****	35.02	18.17	****	****	15.21
RUSSELL 2000 VALUE			6.43	9.16	6.43	21.74	24.77	18.05	-5.50	****	****	34.15	17.07	****	****	
TOTAL SMALL CAP VALUE +/-			1.13	1.36	1.13	(0.51)	(1.40)	1.00	(0.26)	****	****	(0.87)	0.60	****	****	
CEREDEX +/-			1.52	1.47	****	(0.51)	****	****	****	****	****	****	****	****	****	
DALTON GREINER +/-			0.55	1.20	0.55	(0.51)	0.89	2.55	(0.26)	****	****	0.87	1.11	****	****	
TOTAL SMALL MID CAP	70.2	0.74%	6.46	7.96	6.46	23.22	29.19	18.02	-5.50	****	****	38.46	****	****	****	15.91
RUSSELL 2500 VALUE			5.73	7.07	5.73	21.69	26.88	19.21	-3.36	****	****	34.73	****	****	****	
+/-			0.73	0.90	0.73	1.53	2.31	(1.19)	(2.14)	****	****	3.74	****	****	****	
SECURITY GLOBAL INV	70.2	0.74%	6.46	7.96	6.46	23.22	29.19	18.02	-5.50	****	****	38.46	****	****	****	15.91
RUSSELL 2500 VALUE			5.73	7.07	5.73	21.69	26.88	19.21	-3.36	****	****	34.73	****	****	****	
+/-			0.73	0.90	0.73	1.53	2.31	(1.19)	(2.14)	****	****	3.74	****	****	****	
TOTAL MID CAP	502.2	5.33%	5.94	7.48	5.94	22.51	27.05	19.96	-3.90	24.84	35.15	34.00	18.67	9.59	8.91	9.40
RUSSELL MIDCAP			5.80	6.76	5.80	22.14	25.41	17.28	-1.55	25.47	40.46	32.37	19.01	10.07	10.91	
+/-			0.15	0.72	0.15	0.37	1.65	2.68	(2.35)	(0.63)	(5.31)	1.63	(0.34)	(0.48)	(2.00)	
TOTAL MID CAP PASSIVE	196.7	2.09%	6.18	6.61	6.18	21.66	25.14	17.87	****	****	****	32.93	****	****	****	13.85
SSGA S&P 400	196.7	2.09%	6.18	6.61	6.18	21.66	25.14	17.87	****	****	****	32.93	****	****	****	13.85
S&P MIDCAP INDEX 400			6.20	6.59	6.20	21.69	25.18	17.88	****	****	****	33.00	****	****	****	
TOTAL MID CAP PASSIVE +/-			(0.02)	0.02	(0.02)	(0.03)	(0.04)	(0.00)	****	****	****	(0.07)	****	****	****	
SSGA S&P 400 +/-			(0.02)	0.02	(0.02)	(0.03)	(0.04)	(0.00)	****	****	****	(0.07)	****	****	****	
TOTAL MID CAP ACTIVE	305.5	3.24%	5.77	8.17	5.77	23.18	28.57	21.64	-2.82	24.84	35.15	34.84	19.88	10.26	****	7.82
RUSSELL MIDCAP			5.80	6.76	5.80	22.14	25.41	17.28	-1.55	25.47	40.46	32.37	19.01	10.07	****	
+/-			(0.03)	1.40	(0.03)	1.04	3.16	4.36	(1.28)	(0.63)	(5.31)	2.47	0.87	0.19	****	

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TOTAL MID CAP GROWTH ACTIVE	141.8	1.50%	5.31	6.87	5.31	21.76	26.06	19.47	-1.62	****	****	33.06	****	****	****	16.33
TIMESSQUARE CAPITAL	141.8	1.50%	5.31	6.87	5.31	21.76	26.06	19.47	-1.62	****	****	33.06	****	****	****	16.33
RUSSELL MIDCAP GROWTH INDEX			6.22	7.68	6.22	21.84	22.88	15.81	-1.65	****	****	30.69	****	****	****	
TOTAL MID CAP GROWTH +/-			(0.91)	(0.81)	(0.91)	(0.08)	3.18	3.66	0.03	****	****	2.37	****	****	****	
TIMESSQUARE CAPITAL +/-			(0.91)	(0.81)	(0.91)	(0.08)	3.18	3.66	0.03	****	****	2.37	****	****	****	
TOTAL MID CAP VALUE ACTIVE	79.3	0.84%	5.44	9.72	5.44	23.70	36.85	27.87	-0.32	26.17	27.64	40.20	24.01	13.16	****	9.64
IRIDIAN ASSET	79.3	0.84%	5.44	9.72	5.44	23.70	36.85	27.87	-0.32	****	****	40.20	****	****	****	21.86
RUSSELL MIDCAP VALUE			5.33	5.88	5.33	22.28	27.65	18.51	-1.38	24.75	34.20	33.71	18.73	10.26	****	
TOTAL MID CAP VALUE +/-			0.11	3.83	0.11	1.41	9.20	9.36	1.06	1.42	(6.56)	6.48	5.28	2.90	****	
IRIDIAN ASSET MCV +/-			0.11	3.83	0.11	1.41	9.20	9.36	1.06	****	****	6.48	****	****	****	
TOTAL MID CAP CORE ACTIVE	84.4	0.90%	6.85	8.96	6.85	25.15	25.60	19.87	-6.88	25.45	38.91	33.05	18.22	9.06	****	7.60
WELLINGTON MGMT	84.4	0.90%	6.85	8.96	6.85	25.15	25.60	19.87	-6.88	****	****	33.05	****	****	****	16.57
S&P MIDCAP INDEX 400			6.20	6.59	6.20	21.69	25.18	17.88	-1.73	26.64	37.38	33.00	19.17	10.64	****	
TOTAL MID CAP CORE +/-			0.66	2.36	0.66	3.46	0.42	1.99	(5.15)	(1.19)	1.53	0.06	(0.95)	(1.58)	****	
WELLINGTON MGMT +/-			0.66	2.36	0.66	3.46	0.42	1.99	(5.15)	****	****	0.06	****	****	****	
TOTAL LARGE CAP	261.7	2.78%	8.44	13.73	8.44	30.16	27.25	13.16	-3.66	16.43	31.04	40.19	18.62	8.84	7.98	8.21
RUSSELL 1000			5.35	6.23	5.35	20.00	21.24	16.42	1.50	16.10	28.43	26.23	18.03	8.50	8.02	
+/-			3.09	7.50	3.09	10.15	6.01	(3.26)	(5.16)	0.33	2.61	13.97	0.59	0.34	(0.04)	
TOTAL LARGE CAP GROWTH	214.6	2.28%	9.08	15.10	9.08	32.08	26.42	10.51	-6.19	17.54	40.93	42.26	17.86	8.69	6.97	9.53
RUSSELL 1000 GROWTH			5.30	5.24	5.30	17.73	17.07	15.26	2.64	16.71	37.22	21.64	17.99	9.01	7.69	
+/-			3.78	9.86	3.78	14.35	9.35	(4.75)	(8.83)	0.83	3.71	20.62	(0.13)	(0.33)	(0.73)	
ZEVENBERGEN	169.2	1.79%	9.91	17.24	9.91	35.73	27.72	8.46	-10.01	23.04	56.81	46.92	18.50	10.76	****	9.16
RUSSELL 3000 GROWTH			5.48	5.78	5.48	18.38	17.56	15.21	2.18	17.64	37.00	22.65	18.17	9.09	****	
+/-			4.43	11.46	4.43	17.34	10.15	(6.75)	(12.19)	5.40	19.81	24.27	0.32	1.67	****	
PROFIT INV MGMT (D)	45.4	0.48%	6.09	7.76	6.09	20.06	21.95	17.87	2.98	9.55	****	27.23	18.34	****	****	18.93
RUSSELL 1000 GROWTH			5.30	5.24	5.30	17.73	17.07	15.26	2.64	16.71	****	21.64	17.99	****	****	
+/-			0.79	2.52	0.79	2.33	4.88	2.61	0.34	(7.16)	****	5.59	0.34	****	****	
TOTAL LARGE CAP CORE	47.1	0.50%	5.60	7.86	5.60	22.26	25.65	15.25	-0.02	15.84	****	31.55	17.33	****	****	23.77
SEIZERT CAPITAL PTNRS (D)	47.1	0.50%	5.60	7.86	5.60	22.26	25.65	15.25	-0.02	15.84	****	31.55	17.33	****	****	19.76
RUSSELL 1000			5.35	6.23	5.35	20.00	21.24	16.42	1.50	16.10	****	26.23	18.03	****	****	
TOTAL LARGE CAP CORE +/-			0.25	1.64	0.25	2.26	4.41	(1.17)	(1.52)	(0.26)	****	5.32	(0.71)	****	****	
SEIZERT CAPITAL PTNRS +/-			0.25	1.64	0.25	2.26	4.41	(1.17)	(1.52)	(0.26)	****	5.32	(0.71)	****	****	
EMERGING MANAGERS																
TOTAL EMERGING MGRS (Program changed 6/1/2012)	142.3	1.51%	6.66	11.27	6.66	24.04	25.90	17.69	-1.92	17.14	29.51	35.18	18.91	8.73	8.78	7.21
RUSSELL 2000			7.00	10.71	7.00	23.97	24.21	****	****	****	****	34.76	****	****	****	
RUSSELL 3000			5.48	6.57	5.48	20.31	21.46	16.42	1.03	16.93	28.34	26.86	18.08	8.57	8.14	
PROGRESS	86.0	0.91%	6.72	11.03	6.72	23.75	25.74	****	****	****	****	35.09	****	****	****	32.12
CAPITAL PROSPECTS	33.8	0.36%	6.67	11.88	6.67	24.41	25.61	****	****	****	****	35.92	****	****	****	33.63
ATTUCKS	22.5	0.24%	6.44	11.30	6.44	24.57	26.91	****	****	****	****	34.42	****	****	****	33.12
RUSSELL 2000			7.00	10.71	7.00	23.97	24.21	****	****	****	****	34.76	****	****	****	
PROGRESS +/-			(0.28)	0.32	(0.28)	(0.22)	1.54	****	****	****	****	0.33	****	****	****	
CAPITAL PROSPECTS +/-			(0.33)	1.17	(0.33)	0.44	1.41	****	****	****	****	1.16	****	****	****	
ATTUCKS +/-			(0.56)	0.59	(0.56)	0.61	2.71	****	****	****	****	(0.34)	****	****	****	

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NON - US EQUITY																
EAFE GROWTH	280.1	2.97%	6.69	0.54	6.69	9.34	17.77	21.24	-11.43	10.69	33.91	-43.34	10.67	2.49	****	-0.25
MSCI EAFE (NET DIVIDEND)			5.28	-0.92	5.28	9.60	18.62	17.32	-12.14	7.75	31.78	23.48	8.61	1.05	****	8.93
MSCI EAFE GROWTH			4.71	-0.63	4.71	10.74	19.05	17.28	-11.82	12.60	29.91	22.56	9.96	1.62	****	
+/-			1.41	1.46	1.41	(0.26)	(0.85)	3.92	0.72	2.94	2.13	(66.82)	2.06	1.44	****	
+/-			1.98	1.17	1.98	(1.41)	(1.28)	3.96	0.40	(1.91)	4.00	(65.90)	0.71	0.87	****	
TOTAL INTL GROWTH	280.1	2.97%	6.69	0.54	6.69	9.34	17.77	21.24	-11.43	10.69	33.91	-43.34	10.67	2.49	****	-0.25
BAILLIE GIFFORD	177.5	1.88%	8.66	3.09	8.66	****	****	****	****	****	****	****	****	****	****	3.09
WALTER SCOTT EAFE LARGE CAP	102.6	1.09%	3.45	-3.57	3.45	****	****	****	****	****	****	****	****	****	****	-3.57
MSCI EAFE GROWTH			4.71	-0.63	4.71	10.74	19.05	17.28	-11.82	12.60	29.91	22.56	9.96	1.62	****	
TOTAL INTL GROWTH +/-			1.98	1.17	1.98	(1.41)	(1.28)	3.96	0.40	(1.91)	4.00	(65.90)	0.71	0.87	****	
BAILLIE GIFFORD +/-			3.95	3.72	3.95	****	****	****	****	****	****	****	****	****	****	
WALTER SCOTT EAFE LARGE CAP +/-			(1.26)	(2.94)	(1.26)	****	****	****	****	****	****	****	****	****	****	
EAFE VALUE	296.2	3.14%	5.09	1.00	5.09	9.83	17.34	17.83	-9.91	16.94	31.16	22.27	10.59	2.88	****	6.79
MSCI EAFE (NET DIVIDEND)			5.28	-0.92	5.28	9.60	18.62	17.32	-12.14	7.75	31.78	23.48	8.61	1.05	****	8.93
MSCI EAFE VALUE			5.86	-0.93	5.86	9.21	19.21	18.43	-11.65	3.81	35.06	25.46	8.19	1.40	****	
+/-			(0.18)	1.91	(0.18)	0.23	(1.28)	0.52	2.23	9.19	(0.62)	(1.21)	1.98	1.83	****	
+/-			(0.77)	1.93	(0.77)	0.62	(1.87)	(0.60)	1.73	13.13	(3.90)	(3.19)	2.40	1.48	****	
TOTAL INTL VALUE	296.2	3.14%	5.09	1.00	5.09	9.83	17.34	17.83	-9.91	16.94	31.16	22.27	10.59	2.88	****	6.79
CAUSEWAY EAFE LARGE CAP	112.0	1.19%	6.60	****	6.60	****	****	****	****	****	****	****	****	****	****	5.48
SPRUCEGROVE	184.2	1.95%	4.19	-1.55	4.19	5.86	14.07	17.84	-9.92	18.56	34.34	17.85	9.24	4.34	****	9.42
MSCI EAFE VALUE			5.86	-0.93	5.86	9.21	19.21	18.43	-11.65	3.81	35.06	25.46	8.19	1.40	****	
TOTAL INTL VALUE +/-			(0.77)	1.93	(0.77)	0.62	(1.87)	(0.60)	1.73	13.13	(3.90)	(3.19)	2.40	1.48	****	
CAUSEWAY EAFE LARGE CAP +/-			0.74	****	0.74	****	****	****	****	****	****	****	****	****	****	
SPRUCEGROVE +/-			(1.67)	(0.62)	(1.67)	(3.36)	(5.14)	(0.60)	1.73	14.75	(0.72)	(7.61)	1.05	2.93	****	
TOTAL INTL CORE	113.2	1.20%	5.09	0.51	5.09	6.52	14.82	16.43	-12.38	12.62	37.28	18.49	7.70	1.75	****	-1.50
THORNBURG	110.8	1.18%	5.21	0.48	5.21	6.58	14.01	17.67	-12.15	15.67	33.68	17.01	8.57	2.59	****	-0.51
MSCI EAFE (NET DIVIDEND)			5.28	-0.92	5.28	9.60	18.62	17.32	-12.14	7.75	31.78	23.48	8.61	1.05	****	
TOTAL INTL CORE +/-			(0.18)	1.43	(0.18)	(3.08)	(3.81)	(0.89)	(0.24)	4.87	5.50	(4.99)	(0.92)	0.70	****	
THORNBURG +/-			(0.07)	1.39	(0.07)	(3.02)	(4.62)	0.35	(0.01)	7.92	1.90	(6.48)	(0.04)	1.54	****	
TOTAL EAFE SMALL CAP	119.3	1.27%	5.42	-0.11	5.42	****	****	****	****	****	****	****	****	****	****	-0.11
ACADIAN	60.5	0.64%	5.55	-1.00	5.55	****	****	****	****	****	****	****	****	****	****	-1.00
PYRAMIS	58.8	0.62%	5.29	0.82	5.29	****	****	****	****	****	****	****	****	****	****	0.82
S&P EPAC SMALL CAP			6.33	0.51	6.33	****	****	****	****	****	****	****	****	****	****	
TOTAL EAFE SMALL CAP +/-			(0.91)	(0.62)	(0.91)	****	****	****	****	****	****	****	****	****	****	
ACADIAN +/-			(0.78)	(1.51)	(0.78)	****	****	****	****	****	****	****	****	****	****	
PYRAMIS +/-			(1.05)	0.31	(1.05)	****	****	****	****	****	****	****	****	****	****	
TOTAL ACTIVE DEVELOPED MARKETS	809.1	8.58%	5.68	0.63	5.68	7.76	15.60	17.56	-11.50	13.48	34.18	20.35	8.84	2.03	8.34	6.93
MSCI EAFE (NET DIVIDEND)			5.28	-0.92	5.28	9.60	18.62	17.32	-12.14	7.75	31.78	23.48	8.61	1.05	7.97	
+/-			0.40	1.54	0.40	(1.84)	(3.02)	0.24	0.64	5.73	2.40	(3.14)	0.23	0.98	0.37	

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TOTAL NON-U.S. ACTIVIST	23.3	0.25%	9.46	10.37	9.46	16.84	27.47	22.10	-23.54	36.64	****	43.63	11.63	****	****	25.56
GOVERNANCE FOR OWNERS	23.3	0.25%	9.46	10.37	9.46	16.84	27.47	22.10	-23.54	36.64	****	43.63	11.63	****	****	25.56
MSCI EUROPE SMID CAP INDEX			8.94	6.12	8.94	14.92	25.26	25.81	-17.56	16.03	****	35.34	11.90	****	****	
TOTAL NON-U.S. ACTIVIST +/-			0.52	4.25	0.52	1.92	2.21	(3.71)	(5.99)	20.61	****	8.28	(0.27)	****	****	
GOVERNANCE FOR OWNERS +/-			0.52	4.25	0.52	1.92	2.21	(3.71)	(5.99)	20.61	****	8.28	(0.27)	****	****	
TOTAL PASSIVE DEVELOPED	78.4	0.83%	5.20	-0.84	5.20	9.85	18.80	17.54	-11.59	8.14	32.45	23.80	9.01	1.47	8.33	5.93
SSGA	78.4	0.83%	5.20	-0.84	5.20	9.85	18.80	17.54	****	****	****	23.80	****	****	****	4.39
MSCI EAFE (NET DIVIDEND)			5.28	-0.92	5.28	9.60	18.62	17.32	-12.14	7.75	31.78	23.48	8.61	1.05	7.97	
TOTAL PASSIVE DEVELOPED +/-			(0.08)	0.07	(0.08)	0.26	0.17	0.22	0.55	0.39	0.67	0.32	0.40	0.42	0.36	
SSGA +/-			(0.08)	0.07	(0.08)	0.26	0.17	0.22	****	****	****	0.32	****	****	****	
TOTAL DEVELOPED- ENVIRONMENTAL-ACTVIST	910.8	9.66%	5.73	0.73	5.73	8.17	16.12	17.57	-11.82	12.76	33.68	21.18	8.88	1.69	5.33	6.20
MSCI EAFE (NET DIVIDEND)			5.28	-0.92	5.28	9.60	18.62	17.32	-12.14	7.75	31.78	23.48	8.61	1.05	7.97	
+/-			0.45	1.64	0.45	(1.43)	(2.50)	0.26	0.32	5.01	1.90	(2.31)	0.27	0.64	(2.64)	
EMERGING MARKETS																
TOTAL EMERGING MARKETS	585.6	6.21%	0.93	-7.35	0.93	-7.04	3.84	16.83	-18.34	19.49	83.26	2.73	1.33	0.55	14.04	7.42
ACTIVE EMERGING MARKETS	416.8	4.42%	0.88	-7.23	0.88	-6.40	4.13	16.19	-18.38	19.49	83.26	2.92	1.35	0.56	****	10.83
BAILLIE GIFFORD	149.0	1.58%	0.39	-5.83	0.39	-6.04	2.41	14.27	-19.78	19.87	99.04	0.19	0.01	1.42	****	9.97
ACADIAN	102.0	1.08%	0.00	-9.49	0.00	-6.46	7.68	20.27	-16.65	23.72	83.09	5.21	3.93	2.16	****	9.09
EATON VANCE	90.3	0.96%	1.86	-5.79	1.86	-5.48	4.71	****	****	****	****	5.35	****	****	****	10.02
DFA	75.6	0.80%	1.89	-8.69	1.89	-8.79	2.34	****	****	****	****	3.47	****	****	****	6.69
MSCI EMERGING MARKETS FREE			1.10	-7.67	1.10	-8.40	3.23	18.63	-18.17	19.20	79.02	2.29	1.33	0.86	****	
ACTIVE EMERGING MARKETS +/-			(0.22)	0.44	(0.22)	2.00	0.90	(2.43)	(0.20)	0.29	4.24	0.63	0.02	(0.30)	****	
BAILLIE GIFFORD +/-			(0.71)	1.85	(0.71)	2.36	(0.82)	(4.36)	(1.61)	0.67	20.02	(2.10)	(1.33)	0.55	****	
ACADIAN +/-			(1.10)	(1.82)	(1.10)	1.94	4.45	1.65	1.52	4.52	4.07	2.91	2.60	1.30	****	
EATON VANCE +/-			0.77	1.89	0.77	2.92	1.48	****	****	****	****	3.06	****	****	****	
DFA +/-			0.79	(1.02)	0.79	(0.39)	(0.89)	****	****	****	****	1.18	****	****	****	
PASSIVE EMERGING MARKETS	168.8	1.79%	1.04	-7.59	1.04	-8.37	3.21	18.27	****	****	****	2.32	****	****	****	-6.19
BLACKROCK-EM	168.8	1.79%	1.04	-7.59	1.04	-8.37	3.21	18.27	****	****	****	2.32	****	****	****	-6.19
MSCI EMERGING MARKETS FREE			1.10	-7.67	1.10	-8.40	3.23	18.63	****	****	****	2.29	****	****	****	
PASSIVE EMERGING MARKETS +/-			(0.06)	0.09	(0.06)	0.04	(0.02)	(0.36)	****	****	****	0.02	****	****	****	
BLACKROCK-EM +/-			(0.06)	0.09	(0.06)	0.04	(0.02)	(0.36)	****	****	****	0.02	****	****	****	
TOTAL INTERNATIONAL EQUITY	1,496.4	15.87%	3.80	-2.61	3.80	1.75	10.93	17.16	-14.05	14.46	31.78	13.35	5.85	0.70	9.00	6.95
MSCI AC WORLD FRONTIER MARKETS EX USA			4.39	-2.41	4.39	4.42	13.70	16.77	-13.75	11.25	41.17	17.03	6.43	0.71	****	
+/-			(0.59)	(0.20)	(0.59)	(2.66)	(2.76)	0.39	(0.30)	3.21	(9.39)	(3.68)	(0.58)	(0.01)	****	
HEDGE FUNDS																
TOTAL HEDGE FUNDS	310.6	3.29%	0.27	-2.84	0.27	2.00	8.58	7.85	****	****	****	7.25	****	****	****	3.17
1 YEAR TREASURY BILL YIELD + 4%			0.40	1.06	0.40	2.50	4.32	4.24	****	****	****	4.28	****	****	****	
HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			1.33	0.79	1.33	5.31	8.37	5.81	****	****	****	8.89	****	****	****	
+/-			(0.13)	(3.90)	(0.13)	(0.49)	4.26	3.61	****	****	****	2.96	****	****	****	
+/-			(1.06)	(3.63)	(1.06)	(3.31)	0.21	2.04	****	****	****	(1.64)	****	****	****	

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TOTAL DIRECT HEDGE FUNDS	256.9	2.73%	0.17	-3.73	0.17	1.16	8.16	8.64	****	****	****	6.67	****	****	****	5.82
BLUE TREND FD	20.2	0.21%	****	-18.00	-0.79	-10.84	-6.09	****	****	****	****	-12.19	****	****	****	-6.31
BREVAN HOWARD LP	20.7	0.22%	****	-3.36	-0.39	3.19	11.44	3.68	****	****	****	8.44	****	****	****	4.13
BREVAN HOWARD OPP	20.8	0.22%	****	****	****	****	****	****	****	****	****	****	****	****	****	****
BRIGADE LEV CAP STR	23.8	0.25%	****	0.06	1.45	3.25	4.96	****	****	****	****	6.10	****	****	****	5.61
CARLSON BLK DIA FD LP	27.0	0.29%	****	****	0.00	****	****	****	****	****	****	****	****	****	****	0.00
CASPIAN SELECT CF	18.0	0.19%	****	0.96	0.42	6.77	10.99	****	****	****	****	11.45	****	****	****	9.67
CCP QUANT FD LP	17.6	0.19%	****	-17.57	0.00	****	****	****	****	****	****	****	****	****	****	-19.89
D.E. SHAW COMPOSITE FD	50.2	0.53%	****	3.54	0.00	9.58	22.19	16.98	****	****	****	22.28	****	****	****	16.06
FIR TREE VAL FD LP	20.9	0.22%	****	2.76	1.57	****	****	****	****	****	****	****	****	****	****	6.61
PERRY CAPITAL LP	21.7	0.23%	****	-1.45	1.40	****	****	****	****	****	****	****	****	****	****	-1.45
PHARO MACRO FD LTD	16.0	0.17%	****	****	0.00	****	****	****	****	****	****	****	****	****	****	0.00
HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			1.33	0.79	1.33	5.31	8.37	5.81	****	****	****	8.89	****	****	****	
MSCI AC WORLD INDEX STD NET			4.79	1.45	4.79	11.13	16.57	16.13	****	****	****	20.50	****	****	****	
BARCLAYS CAPITAL AGGREGATE			0.14	-3.17	0.14	-2.31	-0.69	4.21	****	****	****	-1.91	****	****	****	
TOTAL DIRECT HEDGE FUNDS +/-			(1.16)	(4.52)	(1.16)	(4.15)	(0.21)	2.83	****	****	****	(2.22)	****	****	****	
BLUE TREND FD +/-			****	(18.79)	(2.11)	(16.15)	(14.45)	****	****	****	****	****	****	****	****	
BREVAN HOWARD LP +/-			****	(4.15)	(1.71)	(2.12)	3.07	(2.13)	****	****	****	(0.44)	****	****	****	
BREVAN HOWARD OPP +/-			****	****	****	****	****	****	****	****	****	****	****	****	****	
BRIGADE LEV CAP STR +/-			****	(0.73)	0.12	(2.06)	(3.41)	****	****	****	****	(2.79)	****	****	****	
CARLSON BLK DIA FD LP +/-			****	****	(1.33)	****	****	****	****	****	****	2.57	****	****	****	
CASPIAN SELECT CF +/-			****	0.17	(0.91)	1.46	2.62	****	****	****	****	****	****	****	****	
CCP QUANT FD LP +/-			****	(18.36)	(1.33)	****	****	11.17	****	****	****	13.39	****	****	****	
D.E. SHAW COMPOSITE FD +/-			****	2.75	(1.33)	4.27	13.83	****	****	****	****	****	****	****	****	
FIR TREE VAL FD LP +/-			****	1.97	0.24	****	****	****	****	****	****	****	****	****	****	
PERRY CAPITAL LP +/-			****	(2.24)	0.08	****	****	****	****	****	****	****	****	****	****	
PHARO MACRO FD LTD +/-			****	****	(1.33)	****	****	****	****	****	****	****	****	****	****	
TOTAL PERMAL HEDGE FUNDS OF FUNDS	53.6	0.57%	0.72	0.66	0.72	5.15	10.32	5.73	****	****	****	9.63	****	****	****	3.69
HFRI FUND OF FUNDS COMPOSITE INDEX + 1%			1.33	0.79	1.33	5.31	8.37	5.81	****	****	****	8.89	****	****	****	
+/-			(0.60)	(0.13)	(0.60)	(0.16)	1.95	(0.08)	****	****	****	0.74	****	****	****	

REITS

	Assets ($MM)	% of Total	Trailing 1 Month	Trailing 3 Months	Fiscal YTD	Calendar YTD	FY Ending 06/30/13	Calendar Yr Ending 2012	Calendar Yr Ending 2011	Calendar Yr Ending 2010	Calendar Yr Ending 2009	Trailing 1 Year	Trailing* 3 Years	Trailing* 5 Years	Trailing* 10 Years	Since Inception
TOTAL REAL ESTATE EQUITY SECURITIES	328.2	3.48%	1.05	-6.66	1.05	4.47	8.71	20.17	8.14	32.08	31.70	7.36	14.78	6.96	11.41	12.76
MS REIT MTA	163.0	1.73%	0.93	-6.12	0.93	5.92	7.85	18.03	6.80	33.22	34.44	7.29	14.36	8.08	****	10.41
ADELANTE CAPITAL MANAGEMENT	58.9	0.62%	0.42	-5.85	0.42	5.99	7.19	17.13	10.19	30.65	28.67	5.61	14.78	5.50	10.24	11.51
DJ U.S. SELECT REAL ESTATE SECURITIES INDEX			0.75	-6.93	0.75	6.48	7.67	17.09	8.87	28.47	29.01	6.53	14.62	6.37	10.24	
TOTAL REAL ESTATE EQUITY SECURITIES +/-			0.29	0.27	0.29	(2.01)	1.04	3.08	(0.73)	3.61	2.69	0.83	0.17	0.60	1.17	
MS REIT MTA +/-			0.18	0.81	0.18	(0.55)	0.18	0.94	(2.07)	4.75	5.43	0.77	(0.26)	1.72	****	
ADELANTE CAPITAL MANAGEMENT +/-			(0.33)	1.08	(0.33)	(0.49)	(0.48)	0.05	1.31	2.18	(0.34)	(0.91)	0.16	(0.87)	(0.01)	
EUROPEAN REIT MTA	106.3	1.13%	1.58	-7.90	1.58	1.53	12.11	****	****	****	****	9.28	****	****	****	11.19
FTSE EPRA/NAREIT Developed			1.20	-9.10	1.20	3.64	14.27	****	****	****	****	11.62	****	****	****	
EUROPEAN REIT MTA +/-			0.37	1.20	0.37	(2.10)	(2.16)	****	****	****	****	2.75	****	****	****	

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FIXED INCOME																
TOTAL STRUCTURED FIXED INCOME	1,575.0	16.71%	0.14	-4.04	0.14	-2.66	0.32	6.85	8.91	8.54	9.39	-1.31	4.45	6.70	5.82	8.36
NYC - CORE PLUS FIVE			0.09	-4.09	0.09	-3.12	-0.95	5.41	9.40	7.13	6.28	-2.58	3.73	6.07	5.52	
+/-			0.04	0.04	0.04	0.46	1.27	1.44	(0.50)	1.41	3.11	1.27	0.72	0.63	0.30	
ALL MORTGAGE	642.7	6.82%	-0.17	-2.84	-0.17	-2.00	-0.15	4.37	6.26	7.64	8.84	-1.17	3.14	5.65	5.22	7.19
PIMCO	225.3	2.39%	-0.29	-3.04	-0.29	-2.22	-0.31	4.05	6.36	8.00	9.30	-1.49	2.96	5.73	5.40	7.33
BLACKROCK	220.3	2.34%	-0.11	-2.68	-0.11	-1.61	0.56	5.65	5.95	8.43	10.93	-0.35	3.80	6.35	5.49	5.61
NEUBERGER BERMAN -MORT	109.9	1.17%	-0.07	-2.75	-0.07	-2.09	-0.90	2.88	6.36	****	****	-1.83	2.46	****	****	3.54
GOLDMAN SACHS -MORT	87.1	0.92%	-0.11	-2.85	-0.11	-2.27	-0.62	3.78	6.67	5.80	****	-1.60	2.79	****	****	3.95
CITIGROUP MORTGAGE INDEX			-0.05	-2.52	-0.05	-2.06	-1.15	2.60	6.38	5.50	5.76	-1.96	2.24	4.94	4.94	
ALL MORTGAGE +/-			(0.12)	(0.32)	(0.12)	0.07	0.99	1.78	(0.12)	2.14	3.08	0.79	0.90	0.71	0.28	
PIMCO +/-			(0.24)	(0.51)	(0.24)	(0.15)	0.84	1.46	(0.01)	2.50	3.54	0.48	0.72	0.79	0.47	
BLACKROCK +/-			(0.06)	(0.16)	(0.06)	0.45	1.71	3.05	(0.43)	2.93	5.17	1.61	1.56	1.42	0.55	
NEUBERGER BERMAN -MORT +/-			(0.03)	(0.23)	(0.03)	(0.03)	0.25	0.29	(0.01)	****	****	0.14	0.22	****	****	
GOLDMAN SACHS -MORT +/-			(0.07)	(0.33)	(0.07)	(0.20)	0.52	1.18	0.30	0.30	****	0.36	0.55	****	****	
ALL INVESTMENT GRADE CREDIT	722.7	7.67%	0.67	-4.23	0.67	-2.32	2.33	10.56	8.04	9.38	20.85	0.27	5.69	7.67	5.91	7.54
TAPLIN,CANIDA -CREDIT	220.0	2.33%	0.49	-4.46	0.49	-2.44	3.17	11.18	8.21	9.21	22.51	0.94	5.88	7.73	5.79	6.51
T.ROWE PRICE -CREDIT	203.4	2.16%	0.77	-4.42	0.77	-2.39	2.31	11.13	8.08	10.29	19.71	0.31	5.96	8.23	6.39	7.66
BLACKROCK - CREDIT	130.7	1.39%	0.71	-4.12	0.71	-2.40	1.78	10.18	7.59	8.97	****	-0.28	5.33	****	****	6.90
PRUDENTIAL - CREDIT	128.7	1.37%	0.82	-3.94	0.82	-2.38	1.33	9.34	8.12	8.61	****	-0.53	5.22	****	****	7.05
PRUDENTIAL - PRIVEST - CREDIT	39.8	0.42%	0.57	-3.16	0.57	-0.83	****	****	****	****	****	****	****	****	****	-0.51
NYC - INVESTMENT GRADE CREDIT			0.62	-4.22	0.62	-2.88	1.19	9.52	7.80	8.36	16.36	-0.88	4.93	7.03	5.54	
ALL INVESTMENT GRADE CREDIT +/-			0.05	(0.01)	0.05	0.56	1.14	1.04	0.24	1.02	4.49	1.15	0.76	0.64	0.37	
TAPLIN,CANIDA -CREDIT +/-			(0.13)	(0.25)	(0.13)	0.44	1.98	1.65	0.41	0.85	6.15	1.82	0.95	0.70	0.25	
T.ROWE PRICE -CREDIT +/-			0.16	(0.21)	0.16	0.49	1.12	1.61	0.28	1.93	3.35	1.19	1.03	1.20	0.85	
BLACKROCK - CREDIT +/-			0.09	0.10	0.09	0.48	0.59	0.65	(0.20)	0.61	****	0.60	0.41	****	****	
PRUDENTIAL - CREDIT +/-			0.20	0.28	0.20	0.50	0.13	(0.19)	0.33	0.25	****	0.35	0.30	****	****	
PRUDENTIAL - PRIVEST - CREDIT +/-			(0.05)	1.05	(0.05)	2.05	****	****	****	****	****	****	****	****	****	
ALL TREASURY / AGENCY	209.7	2.22%	-0.76	-6.96	-0.76	-5.74	-4.38	4.07	18.42	9.45	-5.66	-6.90	4.56	6.53	6.31	7.82
PIMCO	96.9	1.03%	-0.81	-6.99	-0.81	-5.56	-4.06	4.30	18.37	9.96	-4.81	-6.66	4.75	6.74	6.50	7.23
FISCHER,FRANCIS	57.1	0.61%	-0.73	-6.80	-0.73	-5.77	-4.55	3.77	18.59	9.12	-5.02	-7.00	4.44	6.56	6.40	7.89
STATE STREET -GOVT	55.7	0.59%	-0.70	-7.08	-0.70	-6.02	-4.76	3.98	18.33	8.89	****	-7.21	4.38	****	****	5.93
NYC - TREASURY AGENCY PLUS FIVE			-0.76	-7.02	-0.76	-5.77	-4.52	3.84	18.44	9.24	-7.44	-7.09	4.54	6.38	6.21	
ALL TREASURY / AGENCY +/-			0.00	0.06	0.00	0.03	0.14	0.23	(0.02)	0.21	1.78	0.19	0.02	0.15	0.09	
PIMCO +/-			(0.05)	0.03	(0.05)	0.21	0.46	0.46	(0.07)	0.72	2.63	0.43	0.20	0.35	0.29	
FISCHER,FRANCIS +/-			0.03	0.22	0.03	0.00	(0.04)	(0.08)	0.15	(0.12)	2.42	0.09	(0.10)	0.18	0.18	
STATE STREET -GOVT +/-			0.06	(0.06)	0.06	(0.25)	(0.24)	0.14	(0.12)	(0.35)	****	(0.12)	(0.17)	****	****	
PROGRESS FIXED																
TOTAL PROGRESS FIXED	26.3	0.28%	0.11	-3.31	0.11	-2.18	0.00	****	****	****	****	****	****	****	****	3.08
PIM AMBASSADOR MTA	6.5	0.07%	-0.04	-2.95	-0.04	-2.02	-0.21	****	****	****	****	****	****	****	****	0.16
PIM GIA MTA	5.3	0.06%	0.44	-3.34	0.44	-1.75	1.07	****	****	****	****	****	****	****	****	1.91
PIM HILLSWICK MTA	2.6	0.03%	-0.31	-3.99	-0.31	-3.47	-1.66	****	****	****	****	****	****	****	****	-0.16
PIM NEW CENTURY MTA	6.6	0.07%	0.08	-3.23	0.08	-2.07	0.23	****	****	****	****	****	****	****	****	0.89
PIM PUGH CAP MTA	5.2	0.06%	0.21	-3.50	0.21	-2.29	-0.23	****	****	****	****	****	****	****	****	0.43
BARCLAYS CAPITAL AGGREGATE			0.14	-3.17	0.14	-2.31	-0.69	****	****	****	****	****	****	****	****	
TOTAL PROGRESS FIXED +/-			(0.03)	(0.14)	(0.03)	0.13	0.69	****	****	****	****	****	****	****	****	
PIM AMBASSADOR MTA +/-			(0.17)	0.22	(0.17)	0.29	0.48	****	****	****	****	****	****	****	****	
PIM GIA MTA +/-			0.30	(0.17)	0.30	0.56	1.75	****	****	****	****	****	****	****	****	
PIM HILLSWICK MTA +/-			(0.45)	(0.82)	(0.45)	(1.16)	(0.97)	****	****	****	****	****	****	****	****	
PIM NEW CENTURY MTA +/-			(0.05)	(0.06)	(0.05)	0.24	0.92	****	****	****	****	****	****	****	****	
PIM PUGH CAP MTA +/-			0.08	(0.33)	0.08	0.02	0.45	****	****	****	****	****	****	****	****	

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HIGH YIELD																
TOTAL ENHANCED YIELD	405.6	4.30%	2.08	-1.70	2.08	3.12	8.30	13.50	5.89	14.08	41.59	8.76	9.57	10.13	8.43	8.91
CITIGROUP BB & B			1.76	-1.52	1.76	2.58	8.11	14.45	6.58	13.35	40.37	7.98	9.75	8.85	7.71	
+/-			0.31	(0.18)	0.31	0.54	0.19	(0.95)	(0.69)	0.73	1.22	0.78	(0.18)	1.28	0.73	
LOOMIS	111.0	1.18%	2.01	-1.64	2.01	3.61	****	****	****	****	****	****	****	****	****	8.21
BofA MERRILL LYNCH HY MASTER II			1.88	-1.33	1.88	3.41	****	****	****	****	****	****	****	****	****	
LOOMIS +/-			0.12	(0.31)	0.12	0.20	****	****	****	****	****	****	****	****	****	
PENN	115.1	1.22%	2.13	-1.84	2.13	2.23	****	****	****	****	****	****	****	****	****	6.64
T. ROWE PRICE	179.5	1.90%	2.09	-1.65	2.09	3.40	8.78	13.75	5.05	14.23	43.55	9.12	9.56	10.23	****	8.17
CITIGROUP BB & B			1.76	-1.52	1.76	2.58	8.11	14.45	6.58	13.35	40.37	7.98	9.75	8.85	****	
PENN +/-			0.37	(0.33)	0.37	(0.35)	****	****	****	****	****	****	****	****	****	
T. ROWE PRICE +/-			0.32	(0.14)	0.32	0.82	0.67	(0.70)	(1.53)	0.88	3.18	1.14	(0.19)	1.38	****	
BANK LOANS																
TOTAL BANK LOANS	137.1	1.45%	1.13	0.89	1.13	3.91	****	****	****	****	****	****	****	****	****	4.52
BABSON BL MTA	68.7	0.73%	1.13	0.74	1.13	3.70	****	****	****	****	****	****	****	****	****	4.48
GUGGENHEIM BL MTA	68.4	0.73%	1.14	1.04	1.14	****	****	****	****	****	****	****	****	****	****	2.58
CREDIT SUISSE LEVERAGED LOAN INDEX			1.07	0.74	1.07	3.91	****	****	****	****	****	****	****	****	****	
TOTAL BANK LOANS +/-			0.07	0.15	0.07	0.00	****	****	****	****	****	****	****	****	****	
BABSON BL MTA +/-			0.06	(0.00)	0.06	(0.21)	****	****	****	****	****	****	****	****	****	
GUGGENHEIM BL MTA +/-			0.08	0.30	0.08	****	****	****	****	****	****	****	****	****	****	
TIPS																
TOTAL TIPS MANAGERS	234.1	2.48%	0.70	-7.17	0.70	-6.62	-4.56	6.99	13.59	6.42	10.10	-5.60	4.86	4.86	****	5.07
BLACKROCK-TIPS-MTA	87.8	0.93%	0.63	-6.87	0.63	-6.56	-4.63	6.42	13.82	6.34	10.02	-5.77	4.78	4.91	****	5.13
PIMCO-TIPS-MTA	88.0	0.93%	0.81	-7.46	0.81	-6.56	-4.30	7.67	13.34	6.57	10.24	-5.21	4.96	4.95	****	5.09
STATE STREET-TIPS-MTA	58.3	0.62%	0.66	-7.19	0.66	-6.83	-4.83	6.87	13.61	6.34	10.00	-5.92	4.83	4.65	****	5.21
BARCLAYS CAPITAL US TIPS INDEX			0.73	-7.12	0.73	-6.72	-4.78	6.98	13.56	6.37	11.41	-5.87	4.84	4.68	****	
TOTAL TIPS MANAGERS +/-			(0.03)	(0.06)	(0.03)	0.09	0.22	0.01	0.03	0.05	(1.31)	0.27	0.02	0.18	****	
BLACKROCK-TIPS-MTA +/-			(0.10)	0.24	(0.10)	0.16	0.14	(0.56)	0.26	(0.03)	(1.39)	0.10	(0.05)	0.23	****	
PIMCO-TIPS-MTA +/-			0.08	(0.34)	0.08	0.16	0.47	0.69	(0.22)	0.20	(1.17)	0.65	0.12	0.27	****	
STATE STREET-TIPS-MTA +/-			(0.07)	(0.07)	(0.07)	(0.12)	(0.05)	(0.11)	0.05	(0.03)	(1.41)	(0.05)	(0.01)	(0.03)	****	
CONVERTIBLE BONDS																
TOTAL CONVERTIBLE BONDS	48.8	0.52%	2.82	2.53	2.82	9.64	13.39	12.20	-3.87	15.93	35.93	15.70	9.66	7.73	****	7.24
BofA ML ALL CONVERTIBLES EX MANDATORY			4.45	4.73	4.45	14.67	17.48	14.41	-3.42	16.52	47.19	21.97	12.28	9.08	****	
FIRE CUSTOM CONVERTIBLE BOND INDEX			1.76	0.33	1.76	7.08	12.29	13.59	-3.43	14.91	47.71	13.42	8.35	8.23	****	
+/-			(1.63)	(2.20)	(1.63)	(5.03)	(4.09)	(2.21)	(0.45)	(0.59)	(11.26)	(6.27)	(2.62)	(1.35)	****	
+/-			1.06	2.20	1.06	2.56	1.10	(1.39)	(0.44)	1.02	(11.78)	2.28	1.32	(0.50)	****	
ADVENT CONVERTIBLE BONDS	48.8	0.52%	2.82	2.53	2.82	9.55	12.59	11.70	-2.14	14.85	36.73	14.48	9.52	8.95	****	8.53
BofA ML CONVERTIBLES YIELD ALT. INDEX			1.76	0.33	1.76	7.08	12.29	12.21	-1.73	12.98	46.25	13.42	8.35	8.23	****	
+/-			1.06	2.20	1.06	2.47	0.30	(0.51)	(0.42)	1.87	(9.52)	1.06	1.17	0.72	****	

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OPPORTUNISTIC FIXED																
TOTAL OPPORTUNISTIC FIXED INCOME	172.0	1.82%	1.14	2.01	1.14	10.78	15.10	16.32	-2.69	23.60	20.29	15.21	9.97	12.79	****	****
JP MORGAN GLOBAL HIGH YIELD PLUS 3%			2.02	-1.79	2.02	4.40	12.47	19.20	8.72	18.05	61.90	12.44	13.40	14.67	****	
+/-			(0.89)	3.79	(0.89)	6.38	2.63	(2.88)	(11.41)	5.55	(41.61)	2.77	(3.43)	(1.88)	****	
TOTAL FUND STRATEGIES	41.0	0.43%	****	****	****	****	****	****	****	****	****	****	****	****	****	****
AVE EURO SPECIAL SITUATION FD	0.3	0.00%	15.08	34.49	15.08	36.68	26.18	30.09	-0.87	4.56	72.50	34.52	10.54	****	****	****
AVE SPECIAL SITUATIONS FD V	0.1	0.00%	11.07	0.00	11.07	9.75	37.73	23.38	-4.18	19.07	76.44	42.99	20.91	14.29	****	****
AVE SPECIAL SITUATIONS FD VI	17.0	0.18%	3.88	0.00	3.88	8.23	11.74	15.42	-14.53	****	****	11.64	****	****	****	****
FORTRESS PTNRS LP	8.5	0.09%	0.00	9.74	0.00	15.39	16.19	****	****	****	****	16.19	****	****	****	****
OAKTREE OPP FD IX LP-OD	3.0	0.03%	0.00	-1.37	0.00	****	****	****	****	****	****	****	****	****	****	****
TORCHLIGHT INVESTORS	12.1	0.13%	****	****	****	****	****	****	****	****	****	****	****	****	****	****
JP MORGAN GLOBAL HIGH YIELD PLUS 3%			2.02	-1.79	2.02	4.40	12.47	19.20	8.72	18.05	61.90	12.44	13.40	14.67	****	
TOTAL FUND STRATEGIES +/-			****	****	****	****	****	****	****	****	****	****	****	****	****	
AVE EURO SPECIAL SITUATION FD +/-			13.06	36.28	13.06	32.28	13.71	10.89	(9.59)	(13.49)	10.60	22.08	(2.86)	****	****	
AVE SPECIAL SITUATIONS FD V +/-			9.05	1.79	9.05	5.35	25.26	4.18	(12.90)	1.02	14.54	30.55	7.51	(0.38)	****	
AVE SPECIAL SITUATIONS FD VI +/-			1.86	1.79	1.86	3.83	(0.73)	(3.78)	(23.25)	****	****	(0.80)	****	****	****	
FORTRESS PTNRS LP +/-			(2.02)	11.53	(2.02)	10.99	3.72	****	****	****	****	3.75	****	****	****	
OAKTREE OPP FD IX LP-OD +/-			(2.02)	0.42	(2.02)	****	****	****	****	****	****	****	****	****	****	
TORCHLIGHT INVESTORS +/-			****	****	****	****	****	****	****	****	****	****	****	****	****	
TOTAL STRATEGIC MANDATES	131.0	1.39%	1.50	1.84	1.50	11.58	16.97	16.89	****	****	****	16.85	****	****	****	18.50
ANGELO GORDON PTNRS LP	25.5	0.27%	3.58	2.68	3.58	20.46	****	****	****	****	****	20.53	****	****	****	20.53
APOLLO PTNRS LP	17.8	0.19%	0.00	1.93	0.00	9.76	9.76	****	****	****	****	9.76	****	****	****	7.74
CONTRARIAN C A LLC	1.5	0.02%	0.00	0.00	0.00	****	****	****	****	****	****	****	****	****	****	0.00
GOLDENTREE OD MTA	28.3	0.30%	1.43	1.23	1.43	5.61	13.03	15.67	****	****	****	12.88	****	****	****	13.48
MARATHON OD MTA	38.1	0.40%	1.09	2.08	1.09	13.84	25.15	25.44	****	****	****	22.51	****	****	****	25.26
OAK HILL PARTNERS LP	19.8	0.21%	1.25	1.40	1.25	8.75	****	****	****	****	****	****	****	****	****	7.47
JP MORGAN GLOBAL HIGH YIELD PLUS 3%			2.02	-1.79	2.02	4.40	12.47	19.20	8.72	18.05	61.90	12.44	****	****	****	
TOTAL STRATEGIC MANDATES +/-			(0.53)	3.63	(0.53)	7.19	4.50	(2.31)	****	****	****	4.41	****	****	****	
ANGELO GORDON PTNRS LP +/-			1.56	4.47	1.56	16.07	****	****	****	****	****	8.09	****	****	****	
APOLLO PTNRS LP +/-			(2.02)	3.71	(2.02)	5.36	(2.71)	****	****	****	****	(2.68)	****	****	****	
CONTRARIAN C A LLC +/-			****	****	****	****	****	****	****	****	****	****	****	****	****	
GOLDENTREE OD MTA +/-			(0.60)	3.02	(0.60)	1.21	0.56	(3.54)	****	****	****	0.44	****	****	****	
MARATHON OD MTA +/-			(0.93)	3.87	(0.93)	9.45	12.68	6.24	****	****	****	10.07	****	****	****	
OAK HILL PARTNERS LP +/-			(0.77)	3.19	(0.77)	4.35	****	****	****	****	****	****	****	****	****	
CORE PLUS FIXED INCOME																
TOTAL CORE PLUS FIXED INCOME	10.5	0.11%	0.57	-3.41	0.57	-1.83	0.57	6.22	8.18	7.57	****	-0.52	4.37	****	****	6.69
LM CAPITAL-MTA	10.5	0.11%	0.57	-3.41	0.57	-1.83	0.57	6.22	8.18	7.57	****	-0.52	4.37	****	****	6.69
BARCLAYS CAPITAL AGGREGATE			0.14	-3.17	0.14	-2.31	-0.69	4.21	7.84	6.54	****	-1.91	3.19	****	****	
+/-			0.43	(0.24)	0.43	0.48	1.25	2.01	0.34	1.03	****	1.38	1.18	****	****	
+/-			0.43	(0.24)	0.43	0.48	1.25	2.01	0.34	1.03	****	1.38	1.18	****	****	

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OTHER FIXED INCOME																	
TOTAL ETI		52.8	0.56%	-0.05	-2.85	-0.05	-2.17	-0.48	4.29	7.16	5.88	6.83	-1.47	3.04	5.04	4.85	8.73
FIRE CUSTOM BENCHMARK (NO CASH)				0.10	-2.87	0.10	-2.06	-0.61	3.79	7.17	6.10	5.15	-1.68	2.94	4.90	4.77	
	+/-			(0.16)	0.02	(0.16)	(0.11)	0.12	0.50	(0.00)	(0.22)	1.68	0.21	0.11	0.13	0.09	
AFL-CIO HOUSING INV TRUST		39.7	0.42%	-0.07	-3.34	-0.07	-2.67	-1.06	4.27	7.86	6.16	6.28	-2.10	3.09	5.17	4.89	4.66
BARCLAYS CAPITAL AGGREGATE				0.14	-3.17	0.14	-2.31	-0.69	4.21	7.84	6.54	5.93	-1.91	3.19	5.23	4.89	
	+/-			(0.20)	(0.17)	(0.20)	(0.36)	(0.37)	0.06	0.02	(0.38)	0.35	(0.19)	(0.10)	(0.07)	(0.00)	
ACCESS RBC		9.0	0.10%	-0.25	-2.57	-0.25	-2.38	-0.51	4.15	6.78	5.36	10.99	-1.75	2.78	6.06	****	5.82
ACCESS CUSTOM BENCHMARK				-0.01	-2.25	-0.01	-1.72	-0.90	2.38	6.32	5.52	2.89	-1.64	2.27	4.51	****	
	+/-			(0.24)	(0.32)	(0.24)	(0.65)	0.39	1.78	0.46	(0.16)	8.10	(0.11)	0.51	1.55	****	
CPC TERM LOAN		1.8	0.02%	0.20	0.60	0.20	1.40	2.45	2.51	2.09	2.06	2.21	2.44	2.29	2.43	****	3.30
TOTAL PPAR		2.2	0.02%	0.68	2.16	0.68	4.86	8.70	9.28	4.97	8.51	11.22	8.40	7.52	8.44	****	8.19
GNMA PLUS 65bps				-0.17	-3.28	-0.17	-2.62	-1.53	2.89	8.70	7.32	5.80	-2.60	3.02	5.59	****	
	+/-			0.85	5.44	0.85	7.48	10.23	6.39	(3.73)	1.19	5.42	11.00	4.51	2.85	****	
CFSB-PPAR		0.4	0.00%	0.49	1.53	0.49	2.32	5.55	8.16	3.29	12.80	9.82	4.90	7.02	7.85	****	7.22
CCD-PPAR		1.0	0.01%	0.76	2.45	0.76	5.82	10.30	11.40	5.59	11.58	12.48	10.20	9.31	10.14	****	9.15
CPC-PPAR		0.1	0.00%	****	****	****	****	****	****	****	****	****	****	****	****	****	****
LIIF-PPAR		0.5	0.01%	0.70	2.04	0.70	4.97	8.12	6.84	4.96	4.34	****	8.05	5.74	****	****	6.24
NCBCI-PPAR		0.3	0.00%	0.63	2.28	0.63	5.46	10.42	9.46	8.50	4.10	****	9.41	8.24	****	****	7.59
CASH																	
TOTAL CASH		109.4	1.16%	0.03	0.13	0.03	0.20	0.33	0.35	0.35	0.53	1.14	0.33	0.34	0.86	****	2.31
ML 91 DAY TREASURY BILL INDEX				0.01	0.02	0.01	0.05	0.11	0.11	0.10	0.13	0.21	0.11	0.11	0.25	****	
	+/-			0.02	0.10	0.02	0.15	0.22	0.23	0.25	0.40	0.93	0.22	0.23	0.61	****	
PRIVATE EQUITY																	
TOTAL PRIVATE EQUITY		603.3	6.40%	2.33	4.27	2.33	7.89	9.38	11.35	12.50	16.82	-7.47	12.54	12.63	6.27	****	12.69
RUSSELL 3000 PLUS 3% Lagged				0.00	11.95	0.00	13.24	18.29	35.20	5.55	15.96	-1.42	18.29	17.55	11.31	****	
	+/-			2.33	(7.69)	2.33	(5.35)	(8.91)	(23.86)	6.95	0.86	(6.05)	(5.74)	(4.92)	(5.04)	****	
PRIVATE REAL ESTATE																	
TOTAL PRIVATE REAL ESTATE		350.4	3.72%	2.41	4.08	2.41	8.80	13.31	14.84	17.72	4.54	-41.47	15.42	15.52	-4.15	****	5.93
NCREIF NFI-ODCE NET + 100 BP				0.08	3.85	0.08	6.72	12.08	10.77	15.97	16.26	-29.40	12.08	14.85	-0.04	****	
	+/-			2.33	0.24	2.33	2.08	1.23	5.07	1.75	(11.72)	(12.07)	3.34	0.68	(4.11)	****	
TOTAL FIRE		9,427.6		3.26	1.43	3.26	8.42	11.90	13.14	0.84	14.42	22.51	14.38	11.06	6.32	7.86	8.67
FIRE POLICY BENCHMARK				2.56	0.81	2.56	7.66	11.77	13.45	1.77	14.31	25.75	13.08	11.91	7.49	8.29	
	+/-			0.70	0.63	0.70	0.76	0.14	(0.32)	(0.92)	0.11	(3.24)	1.31	(0.85)	(1.16)	(0.42)	

New York City Fire Department Pension Fund, Subchapter 2
Private Equity Portfolio
As of March 31, 2013 (in USD)

Vintage Year	Investment	First Drawdown	Committed Capital	Net Contributed Capital	Net Distributed Capital	Market Value	Multiple	IRR
Active Investments								
1998	VS&A Communications Partners III, L.P.	12/15/1998	$ 10,000,000	$ 10,012,724	$ 12,822,024	$ 878,821	1.37x	0.0627
1999	Cypress Merchant Banking Partners II, L.P.	3/29/1999	25,000,000	24,931,509	18,562,034	3,122,064	0.87x	(2.8%)
1999	FdG Capital Partners LLC	6/2/1999	25,000,000	24,302,766	38,113,544	5,169,592	1.78x	15.0%
1999	Lincolnshire Equity Fund II, L.P.	10/20/1999	7,500,000	7,016,851	13,383,372	809,652	2.02x	24.9%
2000	Carlyle Partners III, L.P.	3/1/2000	15,000,000	13,666,429	32,579,955	131,591	2.39x	23.3%
2000	SCP Private Equity Partners II, L.P.	6/15/2000	15,000,000	15,256,557	3,399,475	6,150,467	0.63x	(6.0%)
2001	Apollo Investment Fund V, L.P.	4/13/2001	15,000,000	13,963,491	32,892,047	4,508,274	2.68x	39.0%
2001	CVC European Equity Partners III, L.P.	9/4/2001	10,000,000	9,600,528	25,141,644	2,247,126	2.85x	41.0%
2001	New Mountain Partners, L.P.	3/16/2001	10,000,000	8,553,824	11,454,301	946,432	1.45x	12.6%
2001	Prism Venture Partners IV, L.P.	7/12/2001	15,000,000	15,022,654	11,017,733	20,797	0.73x	(6.5%)
2002	Landmark Equity Partners XI, L.P.	10/23/2002	5,000,000	4,736,655	6,279,264	922,519	1.52x	24.2%
2002	Yucaipa American Alliance Fund I, LP	7/1/2002	5,000,000	5,007,686	3,096,153	3,824,498	1.38x	8.2%
2003	Ares Corporate Opportunities Fund, L.P.	4/1/2003	5,000,000	4,838,245	7,102,319	998,190	1.67x	14.3%
2003	Blackstone Capital Partners IV, L.P.	2/26/2003	15,000,000	13,581,024	27,748,042	8,295,685	2.65x	37.2%
2003	FS Equity Partners V, L.P.	1/20/2003	10,000,000	8,025,555	13,991,720	2,994,379	2.12x	16.7%
2004	Aurora Equity Partners III L.P.	11/16/2004	5,000,000	5,058,772	4,587,207	3,195,846	1.54x	12.5%
2004	Celtic Pharmaceutical Holdings L.P.	12/23/2004	2,500,000	2,540,209	40,209	2,303,080	0.92x	(1.4%)
2004	Euro Choice II (Delaware) L.P.	2/25/2004	6,753,678	6,246,109	3,652,751	4,712,413	1.34x	6.4%
2004	FdG Capital Partners II LP	8/30/2004	5,000,000	4,013,064	2,729,934	1,746,360	1.12x	1.8%
2004	Lincolnshire Equity Fund III, L.P.	10/1/2004	5,000,000	4,708,296	5,465,474	3,335,451	1.87x	35.8%
2004	Markstone Capital Partners, LP	1/30/2004	5,000,000	4,912,516	2,100,539	2,074,584	0.85x	(4.2%)
2004	New York/Fairview Emerging Managers Fund, L.P.-Tranche 1	10/21/2004	2,000,000	1,775,000	464,549	1,341,973	1.02x	0.4%
2004	Paladin Homeland Security Fund (NY City), L.P.	9/27/2004	7,500,000	7,577,591	904,606	3,410,149	0.57x	(9.0%)
2004	Trilantic Capital Partners III L.P.	11/18/2004	5,000,000	4,167,106	6,717,803	447,440	1.72x	15.1%
2005	Aldus/New York Fire Fund, L.P.	8/19/2005	54,862,500	51,889,655	22,007,132	37,859,326	1.15x	4.7%
2005	Blackstone Mezzanine Partners II, L.P.	10/10/2005	3,000,000	2,663,474	2,190,416	1,368,713	1.34x	8.1%
2005	Bridgepoint Europe III	12/6/2005	5,458,033	4,993,430	1,982,848	3,356,221	1.07x	1.3%
2005	Carlyle Partners IV, L.P.	4/29/2005	5,000,000	4,701,894	5,208,861	3,716,838	1.90x	12.7%
2005	FirstMark Capital I, L.P. (fka FirstMark IV)	11/21/2005	1,500,000	1,491,817	1,229,321	3,454,912	3.14x	42.6%
2005	GI Partners Fund II L.P.	9/26/2005	2,500,000	2,517,219	1,339,946	2,462,096	1.51x	8.1%
2005	JP Morgan Fleming (Tranche A)	12/21/2005	3,000,000	2,466,668	816,594	2,130,784	1.19x	5.2%
2005	New Mountain Partners II, L.P.	1/12/2005	2,580,650	2,016,694	2,733,628	1,089,424	1.90x	12.8%
2005	Palladium Equity Partners III, L.P.	11/12/2004	10,000,000	8,401,141	4,958,480	9,928,420	1.77x	17.3%
2005	Prism Venture Partners V-A, L.P.	7/14/2005	7,500,000	7,500,000	1,758,970	3,285,442	0.67x	(10.9%)
2005	Psilos Group Partners III, L.P.	10/24/2005	2,500,000	2,312,406	1,224,401	1,806,533	1.31x	7.3%
2005	Snow Phipps Group, L.P.	9/7/2005	5,000,000	4,442,829	2,651,735	3,451,767	1.37x	10.2%
2005	USPF II Institutional Fund, L.P.	11/23/2005	5,000,000	5,000,000	1,866,206	4,243,277	1.22x	4.5%
2005	VSS Communications Partners IV, L.P.	3/14/2005	2,500,000	2,549,869	586,021	1,421,637	0.79x	(5.0%)
2006	Aisling Capital II, LP	1/12/2006	1,000,000	969,240	286,259	670,391	0.99x	(0.3%)
2006	Apollo Investment Fund VI, L.P.	5/10/2006	20,000,000	17,890,515	6,928,968	21,445,819	1.59x	9.6%
2006	Ares Corporate Opportunities Fund II, L.P.	5/23/2006	5,000,000	4,380,454	5,499,252	2,292,096	1.78x	14.0%
2006	Avista Capital Partners, L.P.	4/27/2006	5,000,000	5,002,984	3,098,287	3,999,569	1.42x	7.9%
2006	Blackstone Capital Partners V, L.P.	4/13/2006	9,625,000	9,147,551	1,855,912	9,318,560	1.22x	4.3%
2006	Catterton Partners VI, L.P.	12/14/2006	5,000,000	4,812,064	1,218,079	6,327,802	1.57x	11.4%
2006	CCMP Capital Investors II, L.P.	8/17/2006	5,000,000	4,731,062	1,763,093	5,218,372	1.48x	13.8%
2006	Coller International Partners V, L.P.	12/21/2006	5,000,000	4,197,693	2,064,275	3,121,529	1.24x	7.2%
2006	Euro Choice III L.P.	11/21/2006	5,343,818	4,806,995	822,943	3,913,760	0.99x	(0.5%)
2006	Fenway Partners Capital Fund III, L.P.	3/29/2006	5,000,000	5,019,225	2,122,992	2,241,379	0.87x	(3.7%)
2006	First Reserve Fund XI, L.P.	12/14/2006	5,000,000	4,977,634	1,538,505	4,289,437	1.17x	4.3%
2006	InterMedia Partners VII, L.P.	1/20/2006	2,500,000	2,410,851	33,194	3,235,556	1.36x	5.9%
2006	MidOcean Partners III, L.P.	12/21/2006	10,000,000	8,159,770	631,671	8,701,087	1.14x	3.7%
2006	Permira IV, L.P.	12/14/2006	5,491,980	5,083,110	1,855,819	4,487,720	1.25x	5.7%
2006	Perseus Partners VII, L.P.	8/31/2006	5,000,000	4,750,023	16,450	1,977,002	0.42x	(21.6%)
2006	RRE Ventures IV, L.P.	12/19/2006	2,500,000	2,753,142	343,051	2,847,074	1.16x	4.7%
2006	Terra Firma Capital Partners III, L.P.	3/8/2006	5,210,265	4,889,146	111,215	2,617,924	0.56x	(15.5%)
2006	The Fourth Cinven Fund	1/22/2007	2,808,320	2,472,553	717,806	2,571,365	1.33x	7.0%
2007	Carlyle Partners V, L.P.	7/6/2007	10,000,000	8,224,808	2,809,470	8,385,904	1.36x	11.4%
2007	Constellation Venture Capital III, L.P.	5/22/2007	5,000,000	4,777,517	-	4,478,456	0.94x	(2.3%)
2007	FTVentures III, LP	3/1/2007	2,500,000	1,774,827	954,095	2,964,858	2.21x	20.0%
2007	GSO Capital Opportunities Fund LP	7/16/2007	7,500,000	7,409,974	6,707,333	5,081,814	1.59x	19.5%
2007	Highland Consumer Fund I LP	3/16/2007	2,000,000	1,723,212	-	1,171,204	0.68x	(11.0%)
2007	Montreux Equity Partners IV, L.P.	3/27/2007	5,000,000	4,797,500	1,648,176	4,288,741	1.24x	7.9%
2007	New Mountain Partners III, L.P.	8/9/2007	10,000,000	8,981,853	1,770,534	9,090,764	1.21x	8.6%
2007	Olympus Capital Asia III, L.P.	1/31/2007	5,000,000	3,883,259	847,340	2,828,385	0.95x	(2.6%)
2007	PCG Clean Energy & Technology Fund (East), LLC	7/6/2007	10,000,000	8,089,195	457,324	5,384,622	0.72x	(11.1%)
2007	Pegasus Partners IV, L.P.	1/29/2007	7,500,000	7,519,924	3,164,597	6,862,607	1.33x	8.5%
2007	Pine Brook Capital Partners, L.P.	1/11/2008	7,500,000	5,517,834	2,086,988	5,836,052	1.44x	16.6%
2007	SCP Vitalife Partners II Fund	4/13/2007	5,000,000	3,999,924	395	3,401,077	0.85x	(5.7%)
2007	Trilantic Capital Partners IV L.P.	10/22/2007	7,236,332	6,183,398	4,726,428	5,313,873	1.62x	18.4%
2007	United States Power Fund III, L.P.	6/28/2007	5,000,000	3,896,540	380,001	3,835,699	1.08x	2.0%
2007	Vista Equity Partners Fund III, L.P.	10/3/2007	7,500,000	6,787,166	9,754,966	7,470,386	2.54x	30.8%
2008	Aisling Capital III, LP	11/20/2008	3,500,000	1,802,921	58,934	1,523,969	0.88x	(8.2%)
2008	Apollo Investment Fund VII, L.P.	1/28/2008	25,000,000	18,936,947	11,261,784	21,742,894	1.74x	24.6%
2008	Ares Corporate Opportunities Fund III, L.P.	7/30/2008	10,000,000	7,866,727	5,055,742	8,014,365	1.66x	24.2%
2008	Avista Capital Partners II, L.P.	11/5/2008	10,000,000	6,618,596	1,703,435	9,035,029	1.62x	15.8%
2008	Bridgepoint Europe IV	11/14/2008	6,694,316	5,005,530	-	5,614,427	1.12x	6.1%
2008	Crestview Partners II, L.P.	10/1/2008	7,500,000	5,248,376	603,558	6,612,987	1.38x	15.3%
2008	CS NYCFDPF Emerging Manager Co-Investment Fund, L.P.	8/22/2008	2,020,202	1,185,965	592,332	983,992	1.33x	10.1%
2008	CS NYCFDPF Emerging Manager Fund, L.P.	8/22/2008	8,979,798	4,299,400	341,923	3,938,424	1.00x	(0.2%)
2008	CVC European Equity Partners V, L.P.	7/21/2008	13,509,967	9,429,523	3,153,181	8,300,625	1.21x	8.1%
2008	Erasmus New York City Growth Fund IA	10/17/2008	10,000,000	1,208,990	417,624	387,445	0.67x	(9.2%)
2008	Euro Choice IV L.P.	10/22/2008	6,568,811	3,366,958	18,965	3,179,206	0.95x	(3.0%)
2008	First Reserve Fund XII, L.P.	8/25/2008	5,000,000	3,998,003	277,094	4,166,131	1.11x	4.0%
2008	GI Partners Fund III L.P.	7/29/2008	7,500,000	7,080,049	2,157,686	7,455,412	1.36x	15.4%
2008	Landmark Equity Partners XIV, L.P.	9/19/2008	13,630,000	8,700,804	2,832,578	8,010,657	1.25x	17.9%
2008	Lee Equity Partners Fund, L.P.	4/23/2008	7,500,000	5,556,166	508,630	5,431,924	1.07x	3.0%

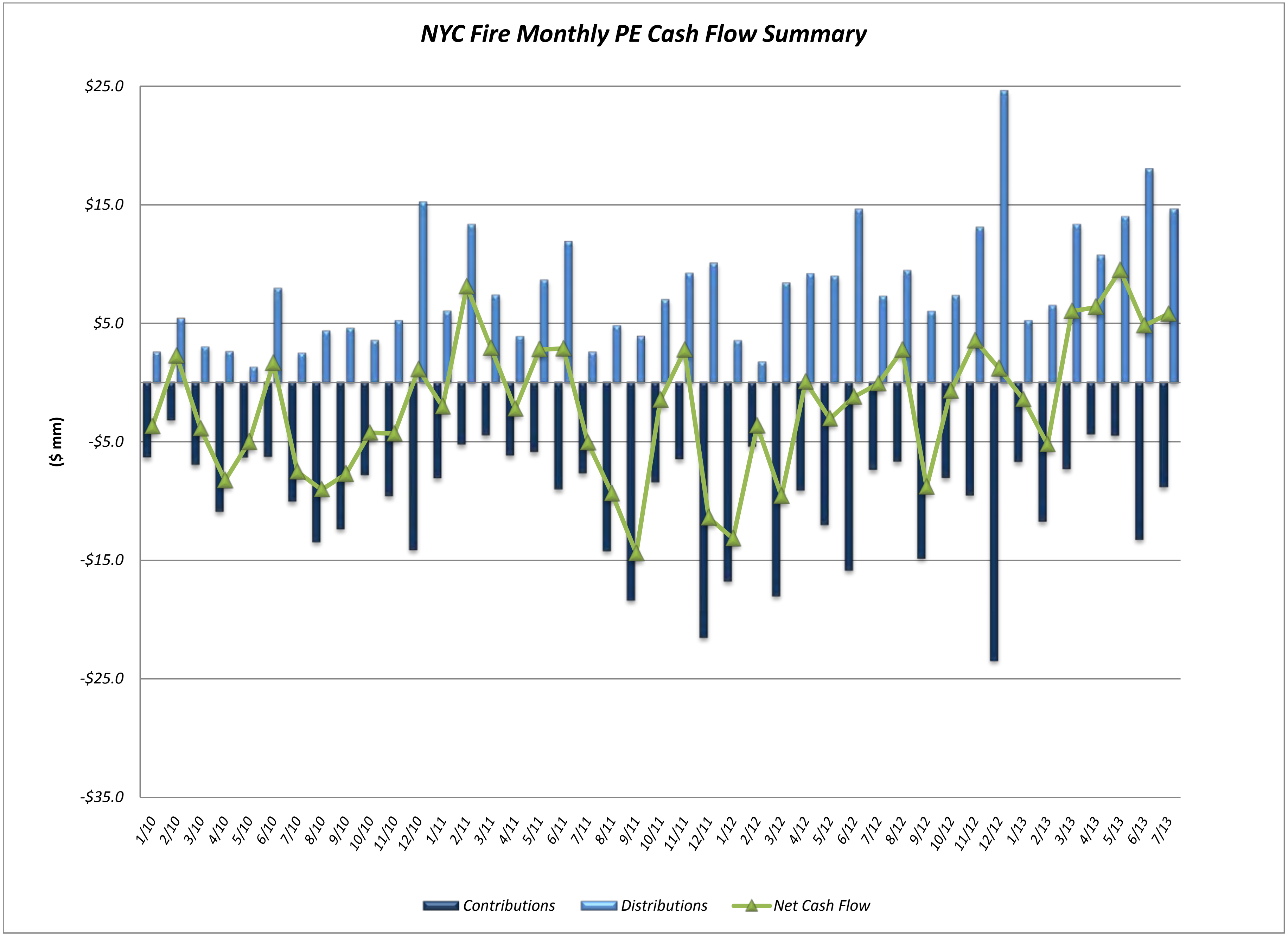
New York City Fire Department Pension Fund, Subchapter 2
Private Equity Portfolio
As of March 31, 2013 (in USD)

Vintage Year	Investment	First Drawdown	Committed Capital	Net Contributed Capital	Net Distributed Capital	Market Value	Multiple	IRR
2008	Levine Leichtman Capital Partners IV, L.P.	4/8/2008	5,000,000	3,733,919	781,142	5,629,021	1.72x	27.4%
2008	New York/Fairview Emerging Managers Fund, L.P.-Tranche 2	5/28/2008	5,000,000	2,702,000	427,507	2,735,200	1.17x	8.7%
2008	NGN BioMed Opportunity II, L.P.	2/11/2008	5,000,000	3,962,955	5,922	2,962,219	0.75x	(10.5%)
2008	Onex Partners III LP	12/10/2008	5,000,000	3,859,684	488,765	3,632,657	1.07x	4.3%
2008	Paladin III (NY City), L.P.	1/8/2008	7,500,000	5,008,220	844,705	4,839,373	1.13x	4.2%
2008	Riverstone/Carlyle Global Energy & Power Fund IV, L.P.	3/3/2008	7,500,000	6,270,796	3,207,775	5,794,955	1.44x	15.3%
2008	Yucaipa American Alliance Fund II, LP	3/28/2008	15,000,000	13,787,314	3,498,961	19,373,226	1.66x	18.6%
2008	Yucaipa Corporate Initiatives Fund II, LP	6/23/2008	4,676,976	4,470,885	517,586	2,662,416	0.71x	(16.5%)
2009	FS Equity Partners VI, L.P.	7/27/2009	12,500,000	8,266,279	754,654	9,035,776	1.18x	9.4%
2009	Lexington Capital Partners VII, L.P.	12/3/2009	10,000,000	6,018,057	1,579,481	6,292,920	1.31x	19.2%
2009	Lincolnshire Equity Fund IV, L.P.	8/5/2009	2,500,000	1,302,390	19,214	1,090,935	0.85x	(11.2%)
2009	NorthBound Emerging Manager Custom Fund LP	1/29/2009	5,000,000	3,093,968	818,356	2,909,023	1.20x	10.5%
2009	Scale Venture Partners III, LP	5/1/2009	5,000,000	4,358,924	1,220,725	6,230,412	1.71x	31.3%
2009	Welsh, Carson, Anderson & Stowe XI, L.P.	2/10/2009	7,500,000	4,969,473	323,313	5,854,431	1.24x	11.4%
2010	Comvest Investment Partners IV, L.P.	10/21/2010	20,000,000	7,950,504	25,577	12,976,876	1.64x	49.5%
2010	Snow Phipps II, L.P.	1/8/2010	7,500,000	3,270,692	141,976	3,368,774	1.07x	5.4%
2010	Trident V, L.P.	4/29/2010	15,000,000	6,845,733	-	6,843,888	1.00x	(0.0%)
2011	American Securities Partners VI, L.P.	11/18/2011	20,000,000	6,298,802	-	5,916,719	0.94x	NM
2011	Ampersand 2011	3/11/2011	5,000,000	3,200,000	-	3,639,661	1.14x	NM
2011	AXA Secondary Fund V B L.P.	6/16/2011	40,000,000	18,039,824	1,459,023	22,351,003	1.32x	NM
2011	BC European Capital IX	9/19/2011	23,001,614	6,998,831	184,690	7,981,986	1.17x	NM
2011	BDCM Opportunity Fund III, L.P.	4/8/2011	10,000,000	2,925,857	296,614	3,030,750	1.14x	NM
2011	Blackstone Capital Partners VI, L.P.	1/24/2011	10,000,000	2,468,767	11,740	2,654,852	1.08x	NM
2011	EQT VI, L.P.	8/1/2011	17,942,145	5,291,147	-	4,545,467	0.86x	NM
2011	Pegasus Partners V, L.P.	8/16/2011	6,236,975	3,165,713	-	3,058,654	0.97x	NM
2011	Vista Equity Partners Fund IV, L.P.	11/30/2011	30,000,000	10,571,816	-	10,890,951	1.03x	NM
2011	Wellspring Capital Partners V, L.P.	7/1/2011	7,500,000	1,983,253	-	1,756,554	0.89x	NM
2012	Ares Corporate Opportunities Fund IV, L.P.	11/5/2012	20,000,000	756,407	-	616,696	0.82x	NM
2012	Green Equity Investors VI, L.P.	11/30/2012	25,000,000	2,407,942	63,532	2,246,603	0.96x	NM
2012	NYCFDPF - 2012 Emerging Manager Program	2/7/2013	25,000,000	983,670	38,819	882,775	0.94x	NM
2012	Palladium Equity Partners IV, L.P.	10/10/2012	10,000,000	1,503,994	-	1,329,235	0.88x	NM
2012	Platinum Equity Capital Partners III, L.P.	1/14/2013	25,000,000	7,046,550	1,217,597	5,592,570	0.97x	NM
2012	Summit Partners Growth Equity Fund VIII-A, L.P.	6/14/2012	30,000,000	2,100,000	-	1,900,806	0.91x	NM
2012	Trilantic Capital Partners V L.P.	9/20/2012	10,000,000	142,975	-	(29,699)	(0.21x)	N/A
2012	Warburg Pincus Private Equity XI, L.P.	5/24/2012	35,000,000	7,581,277	-	8,001,395	1.06x	NM
2013	Carlyle Partners VI, L.P.	7/3/2013	20,000,000	-	-	-	0.00x	N/A
2013	Carlyle Partners VI, L.P. (Side Car)	N/A	2,200,000	-	-	-	0.00x	N/A
2013	Landmark - NYC Fund I, L.P.	N/A	9,000,000	-	-	-	0.00x	N/A
2013	Landmark Equity Partners XV, L.P.	N/A	26,000,000	-	-	-	0.00x	N/A
Total Portfolio[1]			**$ 1,289,045,624**	**$ 807,114,870**	**$ 493,166,494**	**$ 591,830,224**	**1.34x**	**10.2%**

Vintage Year	Investment	First Drawdown	Committed Capital	Net Contributed Capital	Net Distributed Capital	Market Value	Multiple	IRR
Commitments Closed Subsequent to as of Date								
2013	Apollo Investment Fund VIII, L.P.	N/A	$ 40,000,000	$ -	$ -	$ -	0.00x	N/A
2013	CVC Capital Partners VI, L.P.	N/A	40,000,000	-	-	-	0.00x	N/A
2013	Olympus Growth Fund VI, L.P.	N/A	15,000,000	-	-	-	0.00x	N/A
Total Commitments Closed Subsequent to as of Date			**$ 95,000,000**	**$ -**	**$ -**	**$ -**	**N/A**	**N/A**

[1]Please note that the Total Portfolio includes liquidated investments and is presented Pro-Forma for the proceeds received and expected to be received from the sale of nine partnership investments in secondary transactions that closed during the first half of 2012.

Note: IRRs presented are interim estimates and may not be indicative of the ultimate performance of fund investments due to a number of factors, such as the lack of industry valuation standards and the differences in the investment pace and strategy of various funds. Until a fund is liquidated, typically over 10 to 12 years, the IRR is only an interim estimated return. The IRR calculated in early years of a fund is not meaningful given the J-curve effect. The actual IRR performance of any fund is not known until all capital contributed and earnings have been distributed to the investor. The IRRs contained in this report are calculated by StepStone Group LP ("StepStone"), a consultant to the New York City Fire Department Pension Fund, Subchapter 2, based on information provided by the general partners (e.g. cash flows and valuations). The IRR calculations and other information contained in this report have not been reviewed or confirmed by the general partners. The result of the IRR calculation may differ from that generated by the general partner or other limited partners. Differences in IRR calculations can be affected by cash-flow timing, the accounting treatment of carried interest, fund management fees, advisory fees, organizational fees, other fund expenses, sale of distributed stock, and valuations.


NYC Fire Monthly PE Cash Flow Summary
($ mm)
$25.0
$15.0
$5.0
-$5.0
-$15.0
-$25.0
-$35.0
1/10 2/10 3/10 4/10 5/10 6/10 7/10 8/10 9/10 10/10 11/10 12/10 1/11 2/11 3/11 4/11 5/11 6/11 7/11 8/11 9/11 10/11 11/11 12/11 1/12 2/12 3/12 4/12 5/12 6/12 7/12 8/12 9/12 10/12 11/12 12/12 1/13 2/13 3/13 4/13 5/13 6/13 7/13
Contributions
Distributions
Net Cash Flow

The Townsend Group®

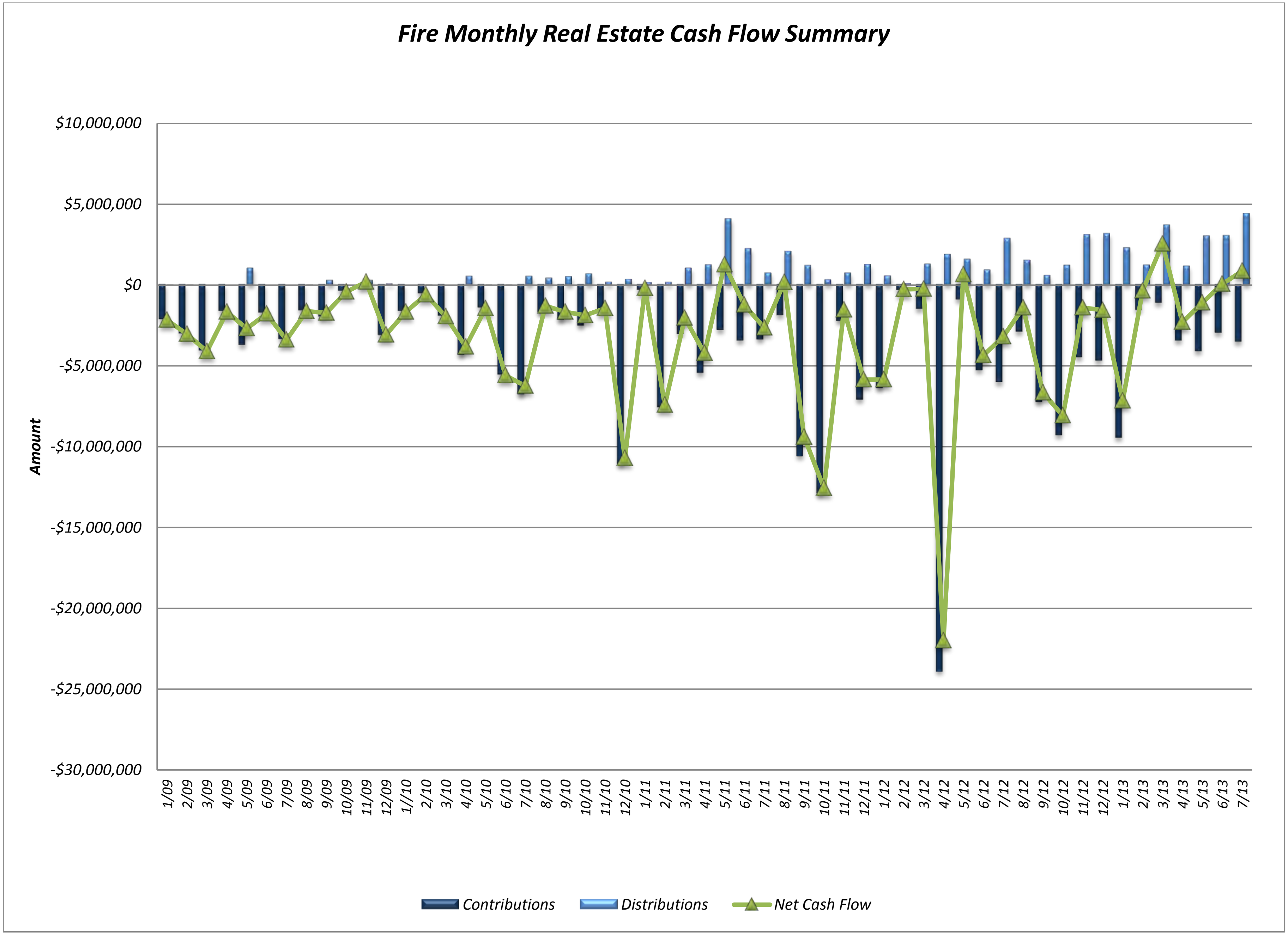
New York City Fire Department Pension Fund

Vintage Year	Fund Name	First Draw Down	Capital Committed	Contributions	Distributions	Market Value	Equity Multiple	Net IRR
2006	UBS Trumbull Property Fund ("UBS-TPF")	9/28/2006	$27,000,000	$29,838,277	($2,220,767)	$31,211,700	1.1	4.6%
2006	RREEF America REIT II	10/1/2006	$7,000,000	$9,241,449	($2,943,932)	$6,906,809	1.1	1.3%
2006	PRISA SA	9/29/2006	$7,000,000	$7,344,803	($805,377)	$6,843,725	1.0	0.7%
2006	Prologis Targeted U.S. Logistics Fund	10/1/2006	$5,000,000	$5,847,278	($888,077)	$3,887,380	0.8	-3.7%
2007	JP Morgan Strategic Property Fund	12/5/2006	$22,000,000	$22,759,433	$0	$28,184,388	1.2	6.3%
2007	PRISA II	6/30/2007	$20,228,233	$20,900,783	($1,660,969)	$18,948,434	1.0	-0.3%
2007	Heitman HART	3/29/2007	$9,000,000	$10,669,543	($1,669,543)	$11,131,952	1.2	4.8%
2007	JP Morgan Special Situation Property Fund	1/2/2007	$5,000,000	$5,441,410	($780,538)	$4,201,938	0.9	-1.6%
2007	Colony Realty Partners II	12/20/2006	$5,000,000	$5,355,052	($166,526)	$2,095,900	0.4	-14.8%
2007	RREEF America REIT III - 1410	10/1/2007	$5,000,000	$5,000,000	($142,179)	$2,031,635	0.4	-14.2%
2010	LaSalle Property Fund	7/1/2010	$30,000,000	$20,669,758	($1,313,669)	$23,258,413	1.2	12.1%
	Core / Core Plus Portfolio		**$142,228,233**	**$143,067,785**	**($12,591,577)**	**$138,702,274**	**1.1**	**1.5%**
2003	Canyon Johnson Urban Fund	12/6/2002	$10,000,000	$9,060,242	($10,582,954)	$0	1.2	10.2%
2004	The City Investment Fund I	3/16/2004	$35,000,000	$34,515,181	($20,626,019)	$16,447,049	1.1	2.0%
2004	Blackstone Fund IV	5/10/2004	$5,000,000	$6,406,782	($5,595,766)	$2,724,284	1.3	10.9%
2005	Canyon Johnson Urban Fund II	5/11/2005	$10,000,000	$8,988,710	($6,000)	$4,857,532	0.5	-10.9%
2007	Blackstone Real Estate Partners VI	9/27/2007	$10,000,000	$10,618,982	($2,413,269)	$12,299,398	1.4	10.0%
2007	Colony Investors VIII	9/18/2007	$20,000,000	$21,249,679	($1,926,829)	$7,114,450	0.4	-19.5%
2007	Carlyle Realty Partners V	8/27/2007	$5,000,000	$5,968,325	($3,972,393)	$3,326,097	1.2	6.7%
2007	Metropolitan Workforce Housing Fund	7/13/2007	$3,500,000	$3,503,257	($178,461)	$3,312,399	1.0	-0.2%
2008	Stockbridge Real Estate Fund III	9/9/2008	$13,500,000	$13,142,674	$0	$13,104,480	1.0	-0.1%
2008	AREA European Real Estate Fund III, LP	5/6/2008	$15,000,000	$14,157,500	($3,252,500)	$10,731,411	1.0	-0.5%
2008	AG Realty Fund VII	5/20/2008	$15,000,000	$13,612,500	($7,687,500)	$9,624,242	1.3	10.3%
2008	ARA Asia Dragon Fund	7/9/2008	$10,000,000	$9,284,000	($3,704,144)	$9,318,431	1.4	12.5%
2008	American Value Partners Fund I	10/18/2007	$5,000,000	$3,634,947	($642,734)	$2,393,637	0.8	-5.9%
2008	Silverpeak Legacy Partners III (Lehman)	5/28/2008	$5,000,000	$2,216,844	($68,839)	$871,210	0.4	-18.3%
2009	Carbon Capital III	7/2/2009	$10,000,000	$10,939,291	($8,113,194)	$4,815,429	1.2	8.4%
2009	Walton Street Real Estate Fund VI	4/27/2009	$5,000,000	$4,232,393	($904,182)	$4,135,712	1.2	8.3%
2009	Thor Urban Property Fund II	10/30/2008	$5,000,000	$6,246,750	($2,220,902)	$3,982,512	1.0	-0.6%
2010	Westbrook Real Estate Fund VIII	12/28/2009	$5,000,000	$5,797,623	($1,932,618)	$4,641,879	1.1	13.1%
2010	Blackstone Real Estate Partners Europe III (USD Vehicle)	10/24/2008	$5,000,000	$3,407,974	($90,865)	$3,906,640	1.2	13.7%
2010	Canyon Johnson Urban Fund III	3/29/2010	$5,000,000	$4,251,241	($755,883)	$3,856,684	1.1	6.1%
2011	Carlyle Realty Partners VI	9/14/2011	$20,000,000	$6,468,234	($451,718)	$7,367,326	1.2	22.2%
2011	H/2 Special Opportunities Fund II	1/31/2011	$10,000,000	$3,048,131	$0	$4,293,555	1.4	30.3%
2012	Divco West Fund III	1/6/2012	$30,000,000	$24,261,333	($2,161,788)	$27,303,389	1.2	33.5%
2012	Blackstone Real Estate Partners VII	3/31/2012	$30,000,000	$14,003,013	($1,749,823)	$15,294,936	1.2	37.3%
2012	Taconic New York City Investment Fund LP	7/5/2012	$20,000,000	$6,045,455	$0	$5,890,390	1.0	-4.8%
2012	Brookfield Strategic Real Estate Partners	9/20/2012	$15,000,000	$1,821,449	$0	$1,977,041	1.1	17.0%
	Non Core and Emerging Manager Portfolio		**$322,000,000**	**$246,882,510**	**($79,038,379)**	**$183,590,113**	**1.1**	**2.6%**
	New York City Fire Department Pension Fund		**$464,228,233**	**$389,950,294**	**($91,629,956)**	**$322,292,386**	**1.1**	**2.1%**

Funds Closed Subsequent to Quarter

Vintage	Fund Name	First Draw Down	Capital Committed	Contributions				
2012	Emmes Asset Management		$5,000,000	-	-	-	-	-
2013	NYC Related Superstorm Sandy Rebuilding Fund		$9,000,000	-	-	-	-	-
2013	KTR Industrial Fund III		$15,000,000	-	-	-	-	-
2013	NYC Hudson Superstorm Sandy Rebuilding Fund		$6,000,000	-	-	-	-	-
Grand Total			**$35,000,000**					

Source: PCG historical cash flow data. TTG cash flow data from Fund Managers, effective 2005. Note: The equity multiples and IRRs contained in this report are interim calculations based upon information provided by the investment managers of the New York City Retirement Systems, including cash flows and quarterly unaudited, or audited, valuations. The IRR calculated in early years of a fund life is not meaningful given the J-curve effect and can be significantly impacted by the timing of cash flows, investment strategy, investment pacing, and fund life. The calculations are not necessarily indicative of total fund performance, which can only be determined after the fund is liquidated and all capital contributed and earnings have been distributed to the investor. All data supplied is as of March 31, 2013. Note: The General Partner of the JPMorgan Urban Renaissance Fund terminated the Fund on February 23, 2010 and all capital contributed, including management fees, was returned to investors.



Fire Monthly Real Estate Cash Flow Summary
Amount
$10,000,000
$5,000,000
$0
-$5,000,000
-$10,000,000
-$15,000,000
-$20,000,000
-$25,000,000
-$30,000,000
1/09 2/09 3/09 4/09 5/09 6/09 7/09 8/09 9/09 10/09 11/09 12/09 1/10 2/10 3/10 4/10 5/10 6/10 7/10 8/10 9/10 10/10 11/10 12/10 1/11 2/11 3/11 4/11 5/11 6/11 7/11 8/11 9/11 10/11 11/11 12/11 1/12 2/12 3/12 4/12 5/12 6/12 7/12 8/12 9/12 10/12 11/12 12/12 1/13 2/13 3/13 4/13 5/13 6/13 7/13
Contributions
Distributions
Net Cash Flow

III. IPS Conforming Update:

INVESTMENT POLICY STATEMENT

NEW YORK FIRE DEPARTMENT PENSION FUND

Adopted

July 25, 2007

Amended

Through June 30, 2013

TABLE OF CONTENTS – FIRE IPS

SECTION I. PURPOSE OF THE INVESTMENT POLICY STATEMENT

The Board of Trustees (Board) of the New York Fire Department Pension Fund (NYFDPF) herein establishes a written, comprehensive and integrated Investment Policy Statement (IPS) in furtherance of the management and investment of its assets.

The Investment Policy Statement sets forth the investment objectives and philosophy of the NYFDPF investment program, as well as its major components, procedures and policies relating to risk tolerances, liquidity needs, asset allocations and rebalancing ranges. The Statement sets forth procedures to oversee and evaluate the overall performance of the Fund. The Statement further provides a procedural framework for the Board of Trustees, with the advice and counsel of the Comptroller's Bureau of Asset Management ("BAM"), to select, retain, monitor and evaluate the performance of Investment Managers, Consultants and others.

Investment Policy Statements for Alternative Investments including Private Equity, Real Assets, Hedge Funds, Opportunistic Fixed Income, and Economically Targeted Investments which have been separately approved, are made a part of this overall policy by reference (see Appendices).

SECTION II. INVESTMENT POLICY ROLES

A. Board of Trustees

The Board, as a fiduciary, is responsible for the management of the Fund. Activities of the Board include the following:

- Establish and adopt written investment policies, including delegations of authority, desired risk levels, investment time horizons, and proxy voting policies. The written investment policies will guide the management of the Fund consistent with the Fund's investment goals and objectives.

- Adopt an appropriate asset allocation strategy that diversifies assets in a manner consistent with the Board's risk/return objectives.

- Consider and approve appropriate investment strategies.

- Determine the Investment Manager structure for implementation of investment strategies, including such factors as manager style and active vs. indexed management approaches.

- Select Consultants and Investment Managers to implement the investment strategies.

- Approve the commencement of securities litigation, its strategy, and settlement.

- Monitor the performance of Plan assets as well as the investment activities of all Investment Managers and Investment Consultants as they affect Plan assets.

- Approve reasonable and necessary investment expenses to acquire, manage and protect Plan assets.

B. Comptroller

Under the New York City Administrative Code, the Comptroller serves as a trustee of the Board and as custodian for NYFDPF assets. As custodian, the Office of the Comptroller, by and through the Bureau of Asset Management (BAM), performs activities including:

- Selection of one or more custody banks, including a Master Custodian for the safekeeping of NYFDPF assets and monitoring of the performance of the custodians.

- Reconciliation of the monthly accounting statements rendered by the Master Custodian with (a) daily information on trades and positions of publicly traded securities provided by Investment Advisors; and (b) periodic information provided by Managers and Consultants regarding illiquid securities. The reconciled statements are provided to the NYFDPF Chief Accountant and form the basis for the investment performance sections of the NYFDPF financial statements.

- Review, audit and processing of payments to Investment Advisors, Investment Counsel, and Consultants.

By delegation, which is reviewed annually by the Board, the Comptroller also serves as Investment Advisor to the Fund.

In its role as Investment Advisor, the Office of the Comptroller provides investment advice, implements Board decisions, and reports on investment performance. In carrying out these functions, BAM:

- Advises the Board on all investment issues, including:

    - Investment policy and strategy
    - Asset allocation
    - Manager structure
    - Manager selection
    - Financial and economic developments that may affect the Plan.

- Evaluates and recommends to the Board potential investment partners, Managers and Consultants for NYFDPF assets pursuant to established procedures and Board policies.

- Provides the Board and/or its Proxy Committee analyses of proxy issues and vote recommendations, votes proxies of domestic equity securities, and recommends and implements NYFDPF annual ownership initiatives.

- Informs the Board of significant developments regarding NYFDPF assets.

- Implements Board investment decisions.

- Rebalances the portfolio within ranges established by the Board.

- Implements portfolio transitions to effectuate Board decisions.

- Negotiates, enters into, renews, administers and terminates agreements with Investment Managers, Consultants and investment partners on behalf of the Board.

- Directs Investment Managers to sell assets to meet NYFDPF liquidity needs, and transfers cash to NYFDPF accounts.

- Monitors the performance of Investment Managers who have been selected by the Board, and reports regularly to the Board on potential issues requiring Board attention.

- Provides regular reports to the Board on the performance of Plan assets.

In executing each of these responsibilities, BAM works closely with Consultants selected by the Board.

C. Director of the NYFDPF and Director of Operations

Director of the NYFDPF and the Director of Operations are designated by the Fire Commissioner pursuant to Administrative Code § 13-316 (c), which authorizes the Commissioner to assign personnel to assist the Board of Trustees in administrating the Fund. The Director of the NYFDPF insures the accurate and timely payment of all benefits and the proper accounting of all financial transactions. The Director of Operations organizes Board meetings and reports to the Board on operational issues, benefit payments, and service levels. Together, the Director of the NYFDPF and the Director of Operations create and safeguard the System’s records, and satisfy the System’s external reporting requirements. They also translate the statutory structure of the Plan into efficient operating procedures and incorporate new state and federal legislation into the procedures.

D. Actuary

In its determination of an Investment Policy, the Board of Trustees incorporates information and advice from the Actuary.

In particular, the Actuary provides such insight and guidance as requested with respect to future cash flows, liabilities, risks and the impact of Investment Policy on the funding of the NYFDPF.

The Actuary advises the Board regarding funding issues, including the level of the Actuarial Interest Rate ("AIR") assumption that the Actuary would support for a given Investment Policy. The Actuary for the NYFDPF periodically recommends to the Board an AIR assumption, which is currently set at 7.0%[1] per annum, net of expenses. The AIR assumption is ultimately codified in the New York City Administrative Code.

SECTION III. ELIGIBLE INVESTMENTS

The investment of the Fund's assets is governed by federal, state and New York City law. The Board may invest in securities and other eligible investments primarily described in Section 235 of the New York State Banking Law and Article 4-A of the New York State Retirement Social Security Law (RSSL), Sections 176 – 179a, subject to applicable restrictions.

Within the parameters of the law, the Board establishes asset allocations and awards investment management contracts subject to the following overall policies:

- Plan assets generally may be invested in mortgages, bonds, notes and other fixed income securities of U.S. and certain other issuers.
- Up to 70% of Plan assets may be invested in public equities, including common stock, preferred stock, and investment company shares. Within the overall 70% limit:
  - Up to 70% of Plan assets may be invested in equity securities of U.S.-based publicly traded companies that are traded on a U.S. exchange.
  - Up to 10% of Plan assets may be invested in equity securities of non-U.S.-based publicly traded companies that are traded on a U.S. or foreign exchange and meet certain other requirements.
  - Additionally, up to 10%[2] of Plan assets may be invested in U.S. equity real estate. These investments are included in the overall 70% limit on public equities, even if the underlying securities are not publicly traded.
- In addition, under RSSL Section 177's Basket Clause, the Fund may invest up to 25% of its assets in investments that do not qualify or are not otherwise expressly authorized under RSSL Section 177 or other provisions of law, subject to certain limitations. Examples of such investments include:

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[1] Per the Actuary's Resolution of February 2012 and subsequent legislative change consistent with Chapter 3 of the Laws of 2013.

[2] Per Legislative change to the NYS RSSL in February 2011

- Equity real estate in excess of 10% of the market value of Plan assets.
- Private equity investments.
- Other investments that do not qualify or are not expressly authorized under RSSL Section 177 or other provisions of law.

SECTION IV. INVESTMENT OBJECTIVE

The overall investment objective of the NYFDPF is to achieve a competitive market rate of return compatible with its risk tolerance and with prudent investment practices, and which, together with employee and employer contributions, will allow it to meet current and future benefit obligations and plan expenses.

NYFDPF maintains a long-term perspective in formulating and implementing its Investment Policy, and in evaluating its investment performance because of the long-term nature of its liabilities.

In implementing its investment objective, the Board considers capital market assumptions on projected returns and risk of a variety of asset classes, as well as the current AIR assumption.

The AIR assumption is a key actuarial assumption affecting future NYFDPF funding rates and pension liabilities. Based on the actuarial assumptions and methods recommended by the Actuary and adopted by the Board, a 7.0%[3] per annum return on assets, together with employee and annual employer contributions, is expected to fully fund the Plan over time in order to allow it to meet current and future benefit obligations. Investment performance that exceeds or underperforms the AIR assumption may materially affect future funding rates. The Board seeks to have long-term investment performance that will equal or exceed its AIR assumption.

SECTION V. INVESTMENT PHILOSOPHY AND STRATEGY

The IPS establishes the investment philosophy and strategy of the Board, as well as implementation procedures. The Board may review and revise the IPS from time to time as market conditions or other factors make such revisions advisable.

The Trustees expect asset allocation to be the primary determinant of the Fund’s ability to achieve its investment objective. For this reason, equities comprise the largest portion of the System’s assets. The Board also strives to diversify the portfolio. Diversification is achieved by investing in asset classes such as fixed income, real assets, and private equity – asset classes in which price movements are less correlated with the price movements of U.S. equities. Moreover, the Board seeks to diversify its portfolio by capitalization, geography, economic

[3] Per the Actuary’s Resolution of February 2012 and subsequent legislative change consistent with Chapter 3 of the Laws of 2013.

sector, and other relevant factors.

Expected returns for asset allocation purposes are calculated based on long term capital market expectations. Return expectations are consistent with Modern Portfolio Theory in that, for example, equities are expected to generate a higher return than fixed income instruments over the long run, commensurate with their higher expected risk.

The Fund maintains a long-term investment focus implemented through a policy of rebalancing assets to policy weights on a regular basis. Although the Board reviews performance of the Fund, and of individual Managers, on a quarterly basis, and compares them to established benchmarks, the Board establishes long-term strategy through asset allocation studies conducted at least every five years (or more frequently if the Board deems appropriate). These studies assess long-term expected capital market returns, and include reviews of the Manager structure used to implement the asset allocation policy. The Board may also conduct an asset/liability study when, in its discretion, it believes such a study could assist in the asset allocation process.

SECTION VI. ASSET ALLOCATION AND REBALANCING

When the Board desires to conduct an asset allocation review, BAM works with NYFDPF general Consultant (the "Consultant") to present the Board with alternative structures reflecting different risk and return scenarios and asset class diversification strategies. In recommending capital market assumptions and considering asset classes, BAM and the Consultant coordinate their efforts with those of the general Consultants to the other New York City Retirement Systems. The Board establishes an asset allocation based on the analyses and recommendations of BAM and the Consultant (in particular, on a mean-variance optimization model) and on the input provided by the Actuary. Any resulting changes in asset allocation are incorporated into the Investment Policy Statement.

At the direction of the Board, BAM implements the asset allocation policy. To implement changes to the Fund's asset allocation, BAM issues requests for proposals ("RFPs") or, in the case of illiquid investments, coordinates, with specialist Consultants, a competitive process for the selection of investments (in either case, the "Investment Selection Process"). At the end of the Investment Selection Process, the Board selects Advisors, Managers or other vendors, where appropriate, to invest and manage funds. BAM arranges funding to the Manager(s) selected by the Board consistent with these decisions.

NYFDPF adopted its current target Long Term Strategic Allocation (asset allocation) in June 2011. The table below shows the most recent adopted allocation.

Subsequent to the Asset Allocation adopted in June 2011, the Board approved new rebalancing ranges (for the traditional asset classes), new pacing ranges (for the alternatives asset classes), and interim asset class holding places (parking places) for unfunded commitments. The ranges below were adopted by the Board in December 2011, and were subsequently amended in March 2013.

Unfunded allocations to Hedge Funds, Opportunistic Fixed Income, Private Equity and Real Assets are temporarily allocated as per the Footnotes Table below the asset allocation Table.

	Long-Term Strategic Allocation	Rebalancing Range
Equity Securities		
Domestic Equity	29%	+/-6
Non-U.S. Equity	10	+/-3
Emerging Markets Equity	6.5	+/-2
Hedge Funds	5	+/-3
REITs	3	+/-2
Private Equity	7	+/-2
Real Assets	5	+/-2
Total Equity	**65.50%**	**+/-6%**
Fixed Income Securities		
Core +5 Fixed-Income	19.5	+/-4.5
Enhanced Yield**	4	+/-2
Opportunistic Fixed	5	+/-3
TIPS	5	+/-2
Convertible Bonds	1	+/-1
Total Fixed-Income	**34.50%**	**+/-5%**

**Effective June 2012, the Board adopted a specific allocation of up to 1/3 of the Enhanced Yield allocation to Leveraged Loans (aka Bank Loans).

<u>"Parking places" for unfunded allocations are as follows:</u>

Private Equity	75% Domestic Equity	25% International Equities
Hedge Funds	50% Domestic Equity	50% Core+ 5
Opportunistic Fixed Income	50% Core +5	50% Enhanced Yield
Real Assets	50% Core +5	50% Domestic Equities

Capital market expectations associated with this asset allocation embody a forecast that this asset allocation will achieve an average annualized return of 7.1%[4] gross of expenses over a market cycle. Because markets are volatile, actual investment returns, even in a broadly diversified

[4] This was adopted by the Board as part of the Asset Allocation decision in June 2011.

portfolio, will likely fall in a range around the expected return in any given year. While the Board intends asset allocation to reduce the volatility of the total portfolio, volatility cannot be eliminated. Based on the assumptions used in establishing this asset allocation, in any given year, the Board expects the 12-month return to have a standard deviation of approximately 11.8%.[5]

Assets are rebalanced to ensure that the System's actual investment mix remains consistent with its asset allocation policy. Volatility in the capital markets and/or over- or under-performance of a particular asset class drive the need to rebalance. The Board reviews its asset mix on a quarterly basis. This range is designed to constrain the extent to which changes in capital markets result in long-term divergences between asset allocation policy and actual investment mix. Significant or extended divergences from policy must have the approval of the Board.

BAM implements the Board's rebalancing policy. BAM monitors the actual investment mix and compares it with the asset allocation policy on a monthly basis. The primary tool for controlling asset class exposure is the payment of pension benefits and expenses from Fund assets. As funds are needed for these payments, BAM seeks to liquidate assets in overweight classes. Assets are liquidated with a goal of maintaining the Board's allocation decisions to asset classes and to portfolio structure targets within asset classes.

In implementing the rebalancing policy, maximizing the alignment of actual and policy asset allocation is not the sole consideration. BAM is authorized to take into account factors which a prudent investor might reasonably consider in purchasing or selling securities such as the size of the asset class, liquidity constraints of each asset class, and relative transaction costs and fees.

Other rebalancing interventions may occur when benefit and expense payments are insufficient to keep asset class exposures within the target or in response to a change in asset allocation policy.

In the event that payments of benefits and expenses are insufficient to keep the System's actual investment mix within the established ranges for the policy's asset classes, or where rebalancing is necessitated by a change in asset allocation policy, BAM implements a plan for liquidating assets in the over-weighted asset class(es) and transferring assets to the under-weighted class(es). In constructing the plan, BAM considers the size of the asset class, the liquidity constraints of each asset class and the transaction costs and fees connected with any such liquidation and transfer.

Coincident with the asset allocation study, the Board reviews with its Consultant the [6]parking places for unfunded commitments in illiquid asset classes and the rebalancing/pacing ranges for each asset class and makes revisions to those ranges that seem appropriate given changes in capital market conditions.

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[5] The average annualized return and accompanying standard deviation were adopted by the Board as part of the Asset Allocation decision in June 2011.

[6] Parking places, rebalancing ranges, and pacing ranges were adopted in December 2011.

SECTION VII. GUIDELINES

BAM adopts detailed investment guidelines for Investment Managers to ensure implementation of Board mandates. Managers are responsible for certifying their compliance with guidelines on a quarterly basis. BAM also monitors guideline compliance through the Master Custodian's system.

SECTION VIII. LIQUIDITY

The Fund's asset allocation policy does not include an allocation to cash. Managers are generally expected to be fully invested but may maintain limited cash balances to manage duration of bond portfolios, or as a result of implementing purchases or sales of assets. Cash balances for liquidity, are expected to remain below 5%[7]; except in unusual circumstances. Cash in excess of 5% will require prior notification to, and approval by the Board.

SECTION IX. ROLES AND RESPONSIBILITIES OF SERVICE PROVIDERS

The Board retains service providers to assist in the management of the Fund. Such providers include, but are not limited to, Investment Advisors, general and specialist Consultants, and attorneys. The providers perform in a fiduciary capacity and must exercise the requisite duties of care and loyalty to NYFDPF. The Office of the Comptroller retains the Master Custodian for the Fund.

A. General Consultant

The Board employs a general Consultant, which performs as a fiduciary to the Board. The responsibilities of the Consultant include:

- Assisting the Board to create and maintain the Investment Policy Statement
- Advising the Board on the investment of NYFDPF assets.
- Advising the Board regarding strategies for the allocation of assets across capital markets that will generate a long-term return consistent with the Board's investment objectives and risk tolerance.
- Developing cost-effective structures for the implementation of the Board's asset allocation that will maximize excess returns by Managers while minimizing the

[7] The new liquidity tolerance level was adopted by the Board as a part of the Asset Allocation rebalancing decision in December 2011

volatility of the returns.

- Assisting BAM in identifying potential Investment Managers, in conducting research in screening Managers and in negotiating Investment Manager contracts.

- Monitoring the Investment Managers employed by NYFDPF and providing reports and analyses to the Board and BAM relating to material events such as, but not limited to, relative performance, material changes to senior personnel, investment process and organization.

- Preparing presentations or position papers on topical issues and specific projects.

- Attending meetings as required.

B. Investment Managers

Fund assets generally are managed externally by Investment Managers retained by the Office of the Comptroller, acting on behalf of and with authorization from the Board. Exceptions include:

- Certain short-term cash reserves managed by the Master Custodian or by BAM;

- Certain economically targeted investments, managed by BAM;

- Certain assets lent or invested in through Securities Lending program(s);

- Limited partnership investments that are managed by general partners under limited partnership agreements pursuant to the Board's Alternative Investments Policies.

Investment Managers are identified through an RFP process, or such other process as may be determined appropriate and in conformance with applicable regulations and best practices, and are required to enter into an investment advisory contract. Responsibilities include:

- Arranging, ordering and monitoring the purchase and sale of securities for the System's portfolio. The Investment Manager at all times must exercise the highest standard of care to which a professional, ERISA fiduciary or Investment Advisor is subject.

- Adhering to portfolio investment guidelines, including maintaining risk management and oversight policies designed to ensure compliance.

- Advising BAM on possible amendments to portfolio guidelines, as appropriate, given the dynamic nature of the capital markets and that are in the best interest of the System.

- Advising BAM on capital actions relating to securities in or proposed for the portfolio.

- Submitting monthly and quarterly reports summarizing portfolio activity.

- Providing accurate and timely reporting of positions and trades to BAM and to the Master Custodian.

- Reporting significant changes in ownership or control of the firm or changes in organizational structure or professional staffing.

- Attending account review meetings as necessary, but on at least an annual basis.

C. Master Custodian

By statute, the Comptroller is the custodian of NYFDPF assets, as well as the assets of other New York City Retirement Systems. Assets include such property as cash (in any currency), securities, any other assets or the product thereof, and earnings and profits thereon.

As Custodian, the Comptroller retains by Agreement a Master Custodian to safeguard the property of the funds that the Custodian or its agents, representatives or sub-custodians may receive from time to time for deposit, and for other purposes. (In the case of certain assets such as international equities in commingled accounts, other custodians may be retained to serve as custodians of particular accounts.)

The Master Custodian and its agents and sub-custodians are fiduciaries to the Comptroller, NYFDPF, and other Systems and Funds.

The Master Custodian provides many services. It holds the Fund Accounts, effects purchases and sales of the securities, operates a securities lending program for the benefit of the Fund (see Section XIV), collects income that becomes due and payable on property held in the accounts, makes payment from the accounts at the Comptroller's direction, and maintains books and records to clearly identify cash, securities and other property. Except for accounts in which another custodian assumes some of these responsibilities, the Master Custodian is responsible for the safekeeping of all assets, transaction processing, reporting, performance measurement and compliance

The Master Custodian is also responsible with respect to the various NYFDPF portfolios for:
- the preparation, audit and distribution of investment account reports,
- plan accounting,
- performance calculation and reporting of the portfolios, using industry-accepted standards,
- specialized reporting,
- risk reporting,
- providing the Comptroller with the underlying portfolio data and reports needed to monitor compliance with legal restrictions, investment guidelines and other policies set

by NYFDPF,
- providing the Comptroller the underlying data to support NYFDPF proxy voting, and
- providing notification of class actions, files class action settlement proofs of claims on NYFDPF's behalf and collects and posts settlements to various accounts.

D. Private Equity Consultant

NYFDPF retains one or more specialist private equity Consultants (the "PE Consultant(s)") to assist in the implementation of its strategic allocation to the private equity asset class. The Consultant(s) are fiduciaries and advise BAM and the Board on all aspects of its private equity investment program. The responsibilities of the PE Consultant(s) include:

- Providing strategic advice:
  - Periodic assessments of industry best practices with regard to policies and procedures.
  - Analysis of NYFDPF existing private equity portfolio.
  - Recommendations with respect to proposed sub-asset allocations (e.g., allocations to corporate finance/buyout funds, venture capital, etc.).
  - Annual and longer-term pacing analyses, translating the NYFDPF allocations to private equity, sub-asset allocations and existing portfolio into proposed investment plans.
  - Periodic reports on the state of the private equity marketplace.
  - Such other strategic advice and services as NYFDPF or BAM may reasonably require.
- New investment identification and evaluation, including:
  - Periodic reports on current and anticipated investment opportunities.
  - Specific summary and detailed due diligence reports on prospective individual private equity, limited partnerships and other investment opportunities and evaluating the investment merits of such opportunities in the context of the NYFDPF portfolio, policies and plans.
  - Detailed non-legal assistance in the negotiation and documentation of authorized commitments.
- Portfolio monitoring
  - Periodic and real-time reports on developments at and performance of individual

partnerships in the NYFDPF portfolio.

- Where necessary, advising on and assisting in actions to protect the interests of NYFDPF as an investor and to ensure compliance by general partners with the terms of their partnership agreements.

- Reviewing and recommending courses of action on partnership amendments.

- Meeting regularly with the Comptroller's staff and making regular presentations to the Board concerning each of these areas of work, as well as individual investment opportunities, and such other topics as the Board or BAM may request.

E. Real Asset Consultants

Fire retains consultants (the "Real Asset Consultants") to assist in the implementation of its strategic allocation to Real Assets. Fire may retain different consultants for each component asset class. The strategic allocation to the asset class is recommended to the Board by its General Consultant. The Real Asset Consultants are fiduciaries and advise Staff and Fire on all aspects of its Real Assets Program. The responsibilities of the Real Asset Consultants include, but are not limited to:

- Providing Strategic Advice:

    - Providing advice to the Board and Staff with respect to the development and operation of the Program, including advice on industry developments and portfolio construction.

    - Assisting the Board and Staff in developing the Real Assets Program IPS, as well as policy statements for component asset classes, and assist in conducting periodic reviews of the IPS and the Program.

    - Together with Staff, provide an annual and a longer term plan for the Program;

    - Periodic assessments of industry best practices with regard to policies and procedures;

    - Analysis of Fire's existing Real Assets Program;

    - Periodic reports on the state of the Real Asset marketplace;

    - Attending meetings of the Board and providing educational seminars for the Trustees;

- New investment identification and evaluation, including:

  - Assisting Staff in identifying, evaluating and recommending investment opportunities and terminations consistent with the IPS and believed to be appropriate for the Program, including conducting due diligence with respect to new investments, as requested;

  - The manager's ability to comply with the Board's investment policies and restrictions;

- Periodic reports on current and anticipated investment opportunities.

- Assisting Staff with the implementation, negotiation and execution of new commitments and/or investments;

- Portfolio monitoring:

  - Assisting Staff with the ongoing review of committed investments, including reports to the Board on significant manager developments, proposed amendments to fund documentation and investment performance;

  - Update Board quarterly on any portfolio company opt-outs pertaining to the Board's investment policy;

  - Periodic and real-time reports on developments at and performance of individual investments in the Fire portfolio.

F. Hedge Fund Consultant[8]

To effectively implement its hedge fund program, the Board has retained a specialist Consultant for hedge funds. The Hedge Fund Consultant is a fiduciary to the Board and BAM. The Consultant advises the Board and BAM on all aspects of its hedge fund investment program. Responsibilities of the Hedge Fund Consultant include:

- Providing advice to the Board and Staff with respect to the development and operation of the Program, including advice on industry developments and portfolio construction, with the goal of an overall Program risk/return profile deemed appropriate by the Board, Staff and the Consultant and monitoring capital markets for investment strategies and investment opportunities;

- Assisting the Board and Staff in developing the IPS and in periodic reviews of the IPS and the Program;

- Together with BAM, provide an annual Tactical Plan for the Program

[8] The Board voted to adopt an allocation to Hedge Funds in the asset allocation decision in June 2011, and voted to hire a Consultant for the Program in October 2010.

- Assisting Staff in identifying, evaluating and recommending investment opportunities and terminations consistent with the IPS and believed to be appropriate for the Program, including conducting due diligence with respect to new investments, as requested;

- Assisting Staff with the implementation, negotiation and execution of new investments;

- Assisting Staff with the ongoing review of committed investments, including reports to the Board on significant manager developments, proposed amendments to fund documentation and investment performance, and periodic and timely review of the risk of the Systems' investment portfolios (although it is recognized that the ability to provide any such review is limited with respect to hedge funds due to the nature of the underlying hedge fund investments);

- Fulfilling such other purposes as the Board, and BAM staff may approve and consultant may agree to.

SECTION X. INVESTMENT MANAGERS

A. Manager Selection - Public Markets

The Board normally selects Investment Managers to manage NYFDPF assets through a competitive RFP process described below. The Board seeks Managers that will provide superior investment management performance. In selecting Managers, the Board evaluates investment management and decision making capabilities, organizational characteristics, including ownership, management and regulatory issues, the performance of potential Managers in specific investment mandates, and fees.

1. Process

- BAM, working with the Consultant, develops and the Board approves a Scope of Services document that defines the investment services sought, the minimum requirements for proposers, and evaluation criteria.

- BAM issues the approved RFP to firms in BAM's data base and to firms suggested by the Systems' consultant(s) and to respondents to advertisements placed in widely distributed industry periodicals.

- BAM, with the Consultant's input, scores the proposals to identify a "short list" of respondents to be interviewed based on technical proposals received in response to the RFP. BAM notifies the Trustees of the interview schedule.

- At one or more meetings open to all Trustees, BAM and the Consultant conduct interviews.

- BAM, utilizing any additional information obtained at the interviews and any input from the Consultant, ranks and recommends finalists to be interviewed by the Board for potential selection.

- The Board invites the firms which they have selected as finalists to make presentations. The Board conducts interviews of each of the selected finalists.

- The Board selects Managers and with the assistance of BAM and the Consultant, allocates assets to each firm. In making its final selection, the Board may consider such factors as:

  - The quality and depth of the Manager's investment team.

  - The Manager's clear articulation of its investment strategy.

  - The Manager's successful execution of its strategy over time, as evidenced by, for example:

    - Analysis of the Manager's historical quarterly performance calculated on a time-weighted basis, based on a Global Investment Performance Standards (GIPS) compliant composite of all fully discretionary accounts of similar investment style.

    - Performance evaluation reports prepared by BAM with the assistance of the Consultant that illustrate the risk/return profile of the Manager relative to other Managers.

    - Significant or adverse regulatory issues.

  - The Manager's compliance and information systems.

- BAM negotiates contracts with selected firms.

- BAM funds the Managers' portfolios in accordance with the Board's mandate.

2. General Requirements

Managers selected to manage publicly traded assets for NYFDPF must be registered investment advisers under the Registered Investment Advisers Act of 1940 or a bank or trust company as defined in the Act. Managers shall not be the subject of regulatory or enforcement actions, pending or threatened litigation, or legal judgments that in the Board's judgment would impair the Managers' ability to provide expert investment management services to NYFDPF.

3. Contract Renewal Policy

Contracts with Investment Managers, Consultants, and other service providers are generally awarded for an initial term of three years, and may be extended at the option of the Board twice for a maximum of three years per extension.

Contracts will provide that the Board may terminate a service provider on 30 days' notice.

B. Manager Selection - Private Markets

NYFDPF invests in private equity using a top-down process, seeking to identify investment opportunities which represent superior opportunities relative to the marketplace as a whole and relative to other investment opportunities characterized by similar strategy. In addition, such opportunities must demonstrate a strong likelihood of producing top-quartile performance, including either:

(a) History of top-quartile performance in a clearly articulated and consistent strategy, or

(b) In the absence of a history of top-quartile performance in the specific investment strategy, other superior relevant experience including a combination of:

i. Time together as a team,
ii. Investment track record assembled elsewhere,
iii. Participation in a top-quartile effort, and
iv. Experience working successfully in the articulated strategy.

Pursuant to its various Investment Policy Statements for the alternative asset classes, NYFDPF each year adopts an Annual Plan, establishing sub-asset allocations as the System may deem appropriate, establishing a pace and volume of targeted investment, and identifying specific targets for investment, including both "re-ups" – renewals of existing relationships – and new investment relationships. The Board may also elect to allocate funds to Managers to invest at their discretion under discrete mandates.

Prospective investment opportunities shall be evaluated by the Consultant(s) and BAM in the context of the Investment Policy Statement, that asset class' Investment Policy and the Annual Plan. BAM shall establish and implement due diligence procedures, and shall present recommendations by the Consultant(s) and/or the Comptroller to the Board.

C. Manager Selection – Economically Targeted Investments

NYFDPF invests in Economically Targeted Investments (ETIs). ETIs are investments in a variety of asset classes which generate rates of return commensurate with the overall risk, liquidity, security and structure of comparable non-targeted investments while providing collateral economic benefits (benefits that enhance the quality of life and promote economic development and activity) to the targeted areas. The Board, in its ETI Policy, has established requirements regarding the qualifications of prospective ETI Managers and evaluation criteria, by which prospective investments will be considered.

Each year NYCPPF adopts an Annual Plan regarding ETIs. Prospective investment opportunities are evaluated by BAM (and Consultants as appropriate) in the context of the 1) ETI Policy 2) Investment Policy Statement for the relevant asset class, and 3) the Annual Plan. In identifying ETIs, BAM applies appropriate solicitation processes and due diligence procedures, and presents its recommendations to the Board. The Board considers and authorizes ETI investments.

D. Emerging Managers

The Fund seeks to employ Emerging Managers. Emerging Managers are asset Managers the Board believes will add value to the Fund through implementation of investment strategies consistent with the Board's asset allocation and other policies, but which, because of size, length of track record, or other similar factors, have not been awarded contracts through the Board's Manager selection process. Smaller Emerging Managers are typically retained pursuant to a Manager of Managers arrangement, while larger Emerging Managers may be retained directly. The Board implements its Emerging Manager program through a competitive RFP process.

The Emerging Manager Program includes both Fixed Income and Equity Managers. The Equity portion of the Emerging Managers Program is allocated entirely towards small-cap Managers[9].

E. Brokerage

The Board delegates discretion over placement and execution of securities transactions to its Investment Managers. It is the intention of the Board that all securities transactions be effected to the best advantage of the System regarding price and execution. The Board recognizes that "soft dollar" commissions are allowed under Section 28(e) of the Securities and Exchange Act of 1934 (commonly referred to as the "safe harbor" provisions). The Board requires its Investment Managers to report information on soft dollar transactions involving securities of the System. These reports shall be provided periodically upon request to BAM in accordance with the Ethics and Compliance Policy of the System (see Appendix 2).

The Board supports diversity among brokers providing securities transaction services to its Investment Managers. Managers are encouraged, to the greatest extent possible consistent with best execution, to use minority- and women-owned brokerage firms. Investment Managers report the use of minority- and women-owned brokerage firms to BAM.

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[9] The Board voted to expand the Emerging Managers Program to Fixed Income and to tilt the portfolio to a small-cap program in February 2012.

SECTION XI. PERFORMANCE MONITORING AND EVALUATION

A. Benchmarks

The Board monitors Fund performance against a variety of applicable benchmarks.

1. Policy Benchmark

To monitor the Fund, the Board adopts a Policy Benchmark which reflects the performance of the markets to which the Board has allocated assets. Because of the allocations to new asset classes in general, the Policy Benchmark has been and will continue to be adjusted as the allocations to new or existing asset classes are funded. The Policy Benchmark serves as a minimum performance objective for the Fund, and allows the Trustees to evaluate the implementation of its asset allocation strategy. The Policy Benchmark will be included in all quarterly evaluation reports of NYFDPF. As of June 30, 2013, the composition (i.e. the asset classes and the accompanying benchmark) of the Policy Benchmark was:

- US Equity: Russell 3000 Index
- EAFE: Morgan Stanley Capital International EAFE Index (Net)
- EAFE Small Cap: Small Cap S&P EPAC
- Emerging Markets Equities: MSCI Emerging Markets Free Index
- Core+ 5: Citigroup Core +5 Fixed Income Index
- Enhanced Yield: Citigroup BB & B Fixed Income Index
- Leveraged Loans: Credit Suisse Leveraged Loans Index
- TIPS: Barclays Capital US Inflation Linked Index
- Convertible Bonds: Bank of America Merrill Lynch All US Convertibles ex-Mandatory Index
- Opportunistic Fixed Income: 10% Absolute Annual Return*
- Private Equity: Russell 3000 Index + 300 bps
- Hedge Funds: 1yr Treasury Bill yield + 4%
- Real Estate: NFI - ODCE Index (Net) +100bps
- REITS: Dow Jones U.S. Select Real Estate Securities Index
- Infrastructure: Consumer Price Index (“CPI”) plus 4% (net)

*The Opportunistic Fixed Income Portfolio is secondarily benchmarked to the JP Morgan Global High Yield Plus 3%, for the purpose of capturing the Program’s volatility.

2. Asset Class Benchmarks

The Policy Benchmark is composed of benchmarks which have been established for each individual asset class. The Board will review performance of each asset class relative to its selected benchmark on a quarterly basis.

3. Investment Manager Benchmarks

Each Investment Manager is evaluated relative to an Investment Manager Benchmark composed of a market index plus an active management premium reflecting the Manager's particular style or tactical role in NYFDPF investment program. Each Investment Manager Benchmark will be clearly specified, measurable, and, for liquid securities, investable. Benchmarks may be customized for a particular style or styles. The appropriate Investment Manager Benchmark and expected active management premium shall be determined in advance of funding by mutual agreement between the Investment Manager, BAM and the Consultant.

4. Peer Group Analysis

The Board reviews the performance of the Fund relative to a peer group of other major public pension funds on a quarterly basis. However, due to differences in asset allocation, time horizon, and risk tolerance between public pension funds, comparisons of Fund performance to the AIR assumption and Policy Benchmark are the primary evaluation methods used by the Board.

B. Investment Information

The Board monitors the performance of the Fund and of individual Managers through ongoing monthly and quarterly reviews of performance, market developments, and Manager reviews. The Board uses two primary reports to monitor investment information, the quarterly performance report and the monthly flash report. In addition, the Board may monitor individual Managers through the Watch List. BAM and the Consultant also report to the Board periodically on issues identified by BAM, the Consultant, or the Board as requiring additional review.

On a quarterly basis, the Board reviews a performance report that includes a commentary prepared by the Consultant summarizing portfolio developments and performance. The quarterly performance report also provides detailed quantitative information regarding the risk and performance of Plan assets. Performance is evaluated relative to appropriate market benchmarks, peer comparison universes, and a variety of relevant time periods.

In addition, the Board reviews a flash performance report at each investment meeting. The flash performance report includes asset class and policy benchmark returns for the prior fiscal year and estimated fiscal year-to-date returns.

Managers provide daily and monthly reports regarding portfolio holdings and transactions to BAM. Managers also complete a detailed quarterly questionnaire regarding portfolio holdings and organizational developments. Responses to the questionnaire are reviewed by the Consultant and BAM. Material developments affecting the Fund are reported to the Board.

C. Manager Watch List

The Board monitors the performance of its Investment Managers on an ongoing basis, through its quarterly reporting process. In general, Manager performance is evaluated over a full investment cycle.

The Board may terminate a Manager at any time. The Board or BAM may place a Manager on the watch list. When a Manager is placed on the watch list, the Board and BAM will specify the reasons for its decision. After BAM places a Manager on the watch list, BAM will notify the Board. BAM and the Board's General Consultant will report regularly to the Board on the Manager's progress toward resolving the issue(s) resulting in placement on the watch list. After the Manager is placed on the watch list, the Board will, typically within one year, either conclude that the issue(s) have been resolved, or terminate the Manager.

BAM and the Board may take both qualitative and quantitative factors into account in considering whether to place a Manager on the watch list or whether to terminate a Manager. Examples of qualitative factors include concerns regarding personnel, organizational changes, and ethical, legal or regulatory issues. Examples of quantitative factors are lagging performance or indicators that the investment mandate is not being implemented.

1. Watch List Guidelines - Qualitative Factors

The table below sets forth some of the *qualitative* factors that the Board may consider in determining whether to place a Manager on the watch list or to terminate a Manager.

FACTOR	EVALUATION TECHNIQUE	ACTION STEPS
Changes in ownership	Require immediate notification of any pending changes in ownership.	Assess risk that change may negatively affect investment performance.
Turnover of key personnel	Require immediate notification of any changes in personnel involved in the management of the System's assets, or the senior officers of the Manager.	Assess risk that change may negatively affect investment performance.
Litigation	Require immediate notification if the Manager, a parent, or affiliate is involved in any material litigation, regulatory or enforcement action.	Evaluate nature, seriousness and likely impact of charges on the investment process and take appropriate action.
Conflicts of interest	Require Manager to provide immediate written disclosure.	Review to determine if conflict was material and should have been known by Manager and reported to the Board.
Failure to disclose material information which could affect	Require Manager to provide immediate written disclosure.	Review information to determine materiality and reasons for failure to disclose.

Manager evaluation		

2. Watch List Guidelines - Quantitative Factors

Managers are expected to exceed their Investment Manager Benchmark (which is composed of a market index plus an active management premium) net of fees over rolling three to five-year periods. Investment performance is measured on a quarterly basis in order to gauge shorter term progress toward long term goals.. Failure to outperform or, in the case of index Managers, to match the market index over time will typically result in placement on the watch list or in the Manager's termination. Failure to outperform the Investment Manager Benchmark (net of fees) may result in placement on the watch list after consideration of tracking error, information ratio, and other quantitative and qualitative factors.

Managers are expected to maintain their stated investment style and philosophy. Quantitative measures of investment style and philosophy include style mapping, style attribution analysis, and tracking error relative to a benchmark. The Consultant monitors these factors on a quarterly basis and advises BAM of potential deviations. Indications that a Manager is not maintaining its investment style and philosophy will typically result in the Board placing the Manager on the watch list. BAM and the Consultant will then present to the Board an evaluation of the Manager's consistency with the Board's asset allocation policy and the Manager's stated investment approach.

SECTION XII. RISK MANAGEMENT

The Trustees recognize the inevitability of the assumption of risk in the management of the Fund's portfolio. The issue of risk is considered during many phases of the investment decision and implementation process. Risk will be analyzed during the asset allocation strategy and decision making phase using such analytic tools as optimization, risk budgeting, value at risk and volatility and tracking error analysis. The portfolio is diversified across both the public and private capital markets in order to achieve the optimal balance of risk and return among asset classes. Managers are required to have internal controls and risk management systems appropriate to their investment disciplines. Managers selected by the Board shall provide information adequate in quantity, quality and timeliness to permit BAM, the Custodian and the Consultant to monitor risk and compliance.

SECTION XIII. PORTFOLIO TRANSITIONS

Transition management is an integral part of portfolio management. When the Board terminates a Manager and re-allocates assets to another Manager, or funds a new mandate, the portfolio must be transitioned. In accordance with public procurement regulations, BAM selects and works with transition Managers to implement each transition.

Transitions are to be completed in a cost-efficient manner given the characteristics of the portfolios and market conditions. Cost-efficiency for equity portfolio transitions is measured by an analysis of total implementation shortfall. BAM presents a post-trade analysis of the transition to the Board upon completion.

SECTION XIV. SECURITIES LENDING

The Board has authorized the Comptroller to enter into agreements establishing participation in securities lending programs. Securities lending enables the Fund to use its asset base to augment investment income. It involves the temporary exchange of securities owned by the Fund for other securities or cash of a greater value, with an obligation of the borrower to pay a fee to the Fund, and to return a like quantity of the borrowed securities at a future date. The fee paid by the borrower is agreed in advance, while the Fund has contractual rights similar to those it would have as the beneficial owner of the securities except that the Fund does not retain voting rights on loaned equity securities.

The objective of securities lending is to earn income through a conservatively operated and well controlled program. There is no absolute return expectation; rather, income is expected to be commensurate with the market demand for the securities made available by the Fund and the return earned on the investment of cash collateral. 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. Those objectives are pursued within the parameters governing the program as outlined in the securities lending agreements with agent banks. Each agent bank is required to act as a fiduciary with respect to NYFDPF and 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.

SECTION XV. SECURITIES LITIGATION PROTOCOL

NYFDPF objectives in choosing to take an active role in securities litigation include the following:

- Preservation of Plan assets and collection of all amounts due to NYFDPF;
- Maximizing the net recovery to the class; and
- Effecting corporate governance reforms, when appropriate.

NYFDPF will use the process outlined in the Securities Litigation Protocol, (set forth in Appendix 1, Section 11), in evaluating and acting on any situation in which securities litigation may be appropriate.

SECTION XVI. INVESTMENT EXPENSES

It is the policy of the Board that expenses such as consultants' and investment advisors' fees, attorneys' fees and costs, funding for Personal and Other Than Personal Services resources for BAM and other costs that may necessarily be incurred in acquiring, managing and protecting the Fund's investments may be paid from any income, interest or dividends derived from the Fund's deposits or investments. The Board adopts a budget for the incurrence of consultants' and investment advisors' fees, attorneys' fees and other costs. BAM reviews the expenses and costs and arranges for their payment by the custodian bank. Pursuant to a budget, the Board also funds the expenditures of additional resources of Personal Services and Other Than Personal Services for BAM, which will report at least annually to the Board regarding the additional resources.

SECTION XVII. PROXY VOTING/SHAREHOLDER INITIATIVES

The duty of pension fund fiduciaries to exercise the voting rights attached to the shares of stock owned by their funds has long been established. In the early 1980s, top officials of the Labor Department's Pension and Welfare Benefits Administration (PWBA) (renamed Employee Benefits Security Administration (EBSA), which enforces fiduciary standards for plan sponsors and Managers, repeatedly stated that the right to vote shares owned by a pension plan is, in itself, an asset of the plan, and, therefore, the fiduciary's responsibility to manage the assets includes voting proxies on issues that may affect the value of the shares.

While official pronouncements and guidance on proxy voting rights primarily have been directed to the private sector institutions which have established Plans governed by Employee Retirement Income Security Act of 1974 (ERISA), or to the mutual funds industry, many public pension funds, religious and tax-exempt institutions have followed this guidance. Many private and public pension funds have established proxy committees and guidelines for voting their proxies, and exercise their voting rights in accordance with these policies and guidelines.

This general acceptance of the proxy vote as a plan asset is the primary basis on which NYFDPF established a Proxy Committee. The Committee promulgates proxy voting policies and procedures, and oversees NYFDPF sponsorship of shareholder proposals to improve corporate governance and corporate social responsibility of companies in which NYFDPF invests. NYFDPF adopted a "Statement of Procedures and Policies for Voting Proxies" in 1987 which was last amended in 2012[10]. The Proxy Committee seeks to ensure that companies follow sustainable business practices which advance their long-term economic value.

The Board has constituted a Proxy Committee comprised of the following Trustees:

1. Commissioner, NYFD,
2. Treasurer, Uniformed Fire Fighters' Association of Greater NY,

[10] New Proxy Voting Guidelines and additional methods for communicating with the Committee were adopted in April 2012.

3. Chief's Representative, Uniformed Fire Officers Association,

or their delegates.

The operations of this Committee are described in Appendix 1, Section 12, and in the above-mentioned Statement of Procedures and Policies.

SECTION XVIII. ETHICS AND COMPLIANCE POLICY

In furthering the Board's fiduciary duty to manage and invest the assets of the Fund, the Board of Trustees has adopted an Ethics and Compliance Policy (the Ethics Policy) establishing a comprehensive set of written requirements for the investment consultants (Consultants) and investment managers (Managers) who do or seek to do business with the Fund.

In accordance with the Ethics Policy (appended hereto as Appendix 2), the Consultants and Managers shall submit an Annual Compliance Statement to BAM. Such statement shall include a Certification representing that the Ethics Policy was received and read, and that the Manager or Consultant is in full compliance therewith. It shall also provide appropriate disclosures of real or potential conflicts, and/or of non-compliance with the law or with policies of the Fund or of the City of New York as they may apply to the Consultant or Manager.

To the extent BAM receives or obtains information indicating that the Consultant or Manager is substantially out of compliance with the Ethics Policy and/or substantially in violation of applicable law, BAM will report such information to the Board for whatever action the Board deems appropriate.

SECTION XIX. REVIEW AND MODIFICATION OF THE IPS

The NYFDPF Board of Trustees reserves the right to amend the Investment Policy Statement at any time it deems such amendment to be necessary or to comply with changes in Federal, State or City Laws or regulations as these changes may affect the investment of Fund assets. In any event, a review of this Investment Policy Statement shall be undertaken no less frequently than every three years.

The date and a summary description of amendments or modifications to the IPS are recorded below:

Date	Summary of Amendment or Modification
January 2008	The Board adopted a 1% allocation to Convertible Bonds from Core+ 5 Fixed Income.
May 2008	Board also adopted an allocation to Opportunistic Fixed Income: 5% of the Fixed Income portfolio
November 2008	The Board adopted the Economically Targeted Investments IPS to implement the allocation to that investment class.
April	The Board approved the restructuring of the Core+ 5 Program.

2009	
October 2010	The Board adopted the ODCE Real Estate Index instead of the NPI as the Real Estate Program's Benchmark going forward. The Board also voted to hire a Hedge Fund Consultant at this meeting.
May & November 2010; February 2012	The Board approved Amendments to the US Equity sub-allocations and structure – including decisions on size and style mix and to terminate the Activist program. The Board also voted to expand the Emerging Managers Program to Fixed Income and to tilt the portfolio to a small-cap program.
February 2011	NYS Retirement Security Law was amended to increase the amount of assets that can be invested in real property; changing the basket clause.
March 2011	The Board also adopted the Hedge Fund IPS to prepare for an allocation to that asset class.
June 2011	The Board adopted the Opportunistic FI IPS to implement the allocation to that asset class.
June 2011	Adopted Asset Allocation to reflect new AA approved by the Board in June 2011 including the addition of certain other asset classes, and to update the Board's policy expectations in general and within asset classes.
September 2011	The Board approved an expansion to the REITs Program to expand the Managers mandates to include more flexibility to purchase Global REITs securities.
December 2011 & March 2013	Expanded Asset Allocation to update newly adopted rebalancing and pacing ranges for all asset classes, to update the cash balance limit for liquidity, and to update the "parking places" for unfunded alternative asset classes.
February 2012	The Actuary secured a legislative change to reduce the Actuarial Investment Rate from 8% to 7% (net of fees), subsequent to a resolution presented to the Board consistent with Chapter 3 of the Laws of 2013.
April 2012	New Proxy Voting Guidelines and additional methods for communicating with the Proxy Committee were adopted by the Committee.
June 2012	Adopted a sub-allocation to Leveraged Loans, as part of the previously adopted allocation to Enhanced Yield.
September 2012	Added a new allocation to Small Cap EAFE to be 10% of the total EAFE Policy allocation, and adopted a new active/passive split for the EAFE asset class.
October 2012	Adopted the updated Private Equity IPS which also changed the Benchmark premium over the Russell 3000 Index.
December 2012	Adopted the Real Assets IPS to include Real Estate and any other Real Asset investments, thus approving an allocation to Infrastructure. An active premium of 100 bps was also added to the RE Benchmark with the new Real Assets IPS. Implementation to be determined for the new asset class.
April 2013	The Board adopted a resolution to omit the requirement that evaluation counsel cannot serve as litigation counsel in the same matter, thus amending the Securities Litigation Protocol.
May 2013	The Board approved the expansion of the ETI Public/Private Apartment Rehabilitation Program to include additional NYS Counties.

APPENDIX I - ASSET CLASS AND SPECIFIC POLICIES

1. U.S. Equities
2. International Equities – Developed Markets
3. International Equities – Emerging Markets
4. U.S Real Estate Equity Securities
5. Fixed Income – NYC Core +5 Program
6. Fixed Income – Enhanced Yield
7. Fixed Income – Leveraged Loans (Sub-sector of Enhanced Yield)
8. Fixed Income – TIPS
9. Fixed Income – Convertible Bonds
10. Alternative Investments – Policy Listing and Approved Dates
11. Securities Litigation Protocol
12. Proxy Voting Policies and Procedures

1. U.S. Equities

Definition and Purpose

U.S. Equity is defined as common and preferred stock of U.S. and foreign corporations, denominated in U.S. dollars and traded on a U.S. exchange. With a strategic policy weight of 29%, U.S. Equity is the largest asset allocation of the Fund. At the total fund level it is the primary driver of risk and return for the Fund.

Philosophy and Strategy

The U.S. Equity portfolio is structured to capture exposure to the broad U.S. Equity market as represented by the Russell 3000 Index. The U.S. Equity portfolio is diversified across industries, economic sectors and other appropriate investment characteristics.

The Board primarily employs passive management (index funds) in market sectors that it views as efficient. Index funds provide broadly diversified market exposure with controlled market risk and minimal cost.

However, the Board employs active Managers for a significant portion of its investments in each of the capitalization ranges. In these less efficient sectors of the U.S. Equity Markets, the Board believes that selected Managers possess skill identifying companies that may be undervalued or have substantial growth potential that will enable them to capture excess returns relative to the sector benchmark, adjusted for risk and fees. The Board has allocated 26.4% of its portfolio to active managers (see the Table below for a breakdown of the U.S. Equity portfolio to active large, small and mid-cap Managers). The Board employs large, small and mid-cap Managers who, in combination, are style-neutral.

Style Allocation:

The U.S. Equity portfolio, in aggregate, is managed in a style- and size-neutral basis.

Use of External Managers

The U.S. Equity Portfolio is implemented through the use of external Managers. Multiple Managers may be used for similar or identical mandates in order to reduce Manager-specific risk. Managers shall be banks, insurance companies, or investment management companies, or investment advisers as defined by the Registered Investment Advisers Act of 1940. Managers are selected in compliance with a competitive RFP process designed to identify Managers with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate that outlines the Manager's individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives. Active Manager performance objectives are expressed as a positive outperformance of their Benchmark.

Managers are to be evaluated through a formal annual account review process conducted by the Bureau of Asset Management staff. Managers exhibiting under-performance, personnel turnover and/or other issues may be monitored more closely through the "Watch List" process.

Proxy Voting

The Board retains Proxy Voting rights, which are exercised by BAM in accordance with the NYFDPF Proxy Voting policy.

Asset Class Objectives:

Trustees review Manager and portfolio performance quarterly. The total U.S. Equity portfolio is expected to marginally outperform the Russell 3000 Index Fund over a full market cycle. Individual Manager performance will be evaluated quarterly and annually in the short-term and over a full market cycle (typically 3-5 years) using benchmarks appropriate to capitalization and style characteristics.

Market Sector Allocations[11]

Fire	
U.S. Equity	**Policy Target**
Large Cap Active	15.00%
Large Cap Passive	85.00%
Large Cap Total	***50.00%***
Mid Cap Active	30.00%
Mid Cap Passive	70.00%
Mid Cap Total	***37.00%***
Small Cap Active	60.00%
Small Cap Passive	40.00%
Small Cap Total	***13.00%***
Subtotal Active	26.40%
Subtotal Passive	73.60%
Total	**100.0%**

[11] The Board has adopted several sub-allocation changes to the US Equity Program over the years, including May 2010, November 2010 and February 2012.

Liquidity:

Managers are expected to be fully invested. Index funds are managed with cash levels below 1%. Active Managers are limited to a maximum of 5% cash for trading purposes. As necessary, BAM may direct Managers to sell securities to fund benefit payments and other eligible System expenses, or as otherwise appropriate for rebalancing purposes.

2. International Equities – EAFE Markets

Definition and Purpose

EAFE Equity is defined as common and preferred stock of foreign corporations domiciled in developed markets, denominated in foreign currency and traded on foreign exchanges.

Philosophy and Strategy

The EAFE Equity portfolio is structured to capture exposure to the broad non-U.S. Equity market as represented by the MSCI EAFE (Europe, Australasia & Far East) Index. The EAFE Equity portfolio is to be diversified across countries, industries, economic sectors and other appropriate investment characteristics.

Historically, over long periods of time EAFE Equity Managers have outperformed the EAFE index adjusted for risk and fees. Therefore, the Board has allocated the portfolio to be split 90.4% active and 9.6% passive[12] Managers.

Also, In September 2012, the Board voted to add a Small Cap EAFE allocation to its portfolio, to represent 10% of the Non-US Equity allocation.

EAFE Index funds provide broadly diversified market exposure with controlled market risk and minimal cost. The Index fund provides a core EAFE Equity exposure.

Style Allocation:

The EAFE Equity portfolio style allocation changes depending upon market trends and individual manager performance. The EAFE Equity portfolio, in the aggregate, is managed on a style-neutral basis.

Use of External Managers

The EAFE Equity Portfolio is implemented through the use of external Managers. Managers shall be banks, insurance companies, investment management companies, or investment advisers

[12] In September 2012, the Board voted to re-structure the Non-US Equity portfolio, including a specific allocation to Small Cap EAFE.

as defined by the Registered Investment Advisers Act of 1940. Managers are selected in compliance with a competitive RFP process designed to identify Managers with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate. The guidelines outline the Managers' individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives.

Managers are to be evaluated through a formal annual account review process conducted by the Bureau of Asset Management staff. Managers exhibiting under-performance, personnel turnover and/or other issues may be monitored more closely through the "Watch List" process.

Proxy Voting

Proxies are voted by the Managers.

Asset Class Objectives:

The total EAFE Equity portfolio represents 10% of the Fund's asset allocation and is expected to outperform the MSCI EAFE index by 200 basis points per year gross of fees over a full market cycle. Individual Manager performance will be evaluated quarterly and annually in the short-term and over a full market cycle (typically 3-5 years) using the index and a comparison universe of the top half of TUCS non-US equity managers. Trustees review portfolio performance quarterly.

Market Sector Allocations[13]

	Target Sub-allocations	Expected Active Return (gross)
Passive		
EAFE Index	9.6%	0
Total Passive	**9.6%**	**0**
Active		
Growth	20.6%	
Core	44.7%	
Value	25.1%	
Total Active	**90.4%**	**250 bp**
Total EAFE Equity	**100%**	**200 bp**

[13] In September 2012, the Board voted to re-structure the Non-US Equity portfolio, including a specific allocation to Small Cap EAFE.

Liquidity:

The EAFE Equity portfolio is not a source of liquidity for the Fund, although benefits may be paid out of the portfolio as required. Managers are expected to be fully invested. Index funds are managed with cash levels below 1%. Active Managers are limited to a maximum of 7% cash for trading purposes. As necessary, BAM may direct Managers to sell securities to fund benefit payments and certain other eligible system expenses, or as otherwise appropriate for rebalancing purposes.

Currency Hedging:

Managers are permitted to hedge a portion of their currency exposure. Hedging may only be used for defensive purposes and not as a form of leverage.

Emerging Equity Markets:

Managers are permitted limited exposure to emerging equity markets. Holdings in emerging markets countries must not exceed 15% of the portfolio.

3. International Equities - Emerging Markets

Definition and Purpose

Emerging Markets Equity is defined as common and preferred stock of foreign corporations domiciled in countries included in the MSCI Emerging Markets Index, denominated in foreign currency and traded on foreign exchanges. It may also include emerging market American Depository Receipts (ADRs) or Global Depository Receipts (GDRs) denominated in U.S. dollars.

Philosophy and Strategy

The Emerging Markets Equity portfolio is structured to capture broad exposure to the high growth economies of developing countries. There are higher risk-adjusted expected returns from this investment.[14]

Historically over long periods of time Emerging Markets Equity Managers have outperformed the MSCI Emerging Equity Market Index adjusted for risk and fees. Therefore the Board has allocated the entire emerging markets portfolio to active Managers.

The Board currently maintains a large allocation to passive management until such time as highly rated closed managers reopen, to allow for a higher allocation to active managers at that

[14] EM Equities and US Equities are now much more highly correlated in recent years.

time.[15]

Style Allocation:

The Emerging Markets Equity portfolio, in the aggregate, is managed in a style-neutral basis but may change based upon market trends and individual manager performance.

Use of External Managers

The Emerging Markets Equity Portfolio is implemented through the use of external Managers. Managers shall be banks, insurance companies, investment management companies, or investment advisers as defined by the Registered Investment Advisers Act of 1940. Managers are selected in compliance with a competitive RFP process designed to identify Managers with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate that outline the Managers' individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives.

Managers are to be evaluated through a formal annual account review process conducted by the Bureau of Asset Management staff. Managers exhibiting under-performance, personnel turnover and/or other issues may be monitored more closely through the "Watch List" process.

Proxy Voting

Proxies are voted by the Managers.

Asset Class Objectives:

The Board reviews portfolio performance quarterly. The total Emerging Markets Equity portfolio is expected to outperform the MSCI Emerging Markets Free Index by 200 basis points per year gross of fees over a full market cycle. Individual Manager performance will be evaluated quarterly and annually in the short-term and over a full market cycle (typically 3-5 years).

Liquidity:

The Emerging Markets Equity portfolio is not a source of liquidity for the Fund, although benefits may be paid out of the portfolio as required. Managers are limited to a maximum of 7% cash for trading purposes. As necessary, BAM may direct Managers to sell securities to fund benefit payments and certain eligible system expenses, or as otherwise appropriate for rebalancing purposes.

Currency Hedging:

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[15] Per Board Memorandum adopted in December 2011.

Managers are permitted to hedge a portion of their currency exposure. Hedging may only be used for defensive purposes and not as a form of leverage.

4. U.S. Real Estate Equity Securities

Definition and Purpose

The U.S. Real Estate Equity Securities (REES) program is dedicated to equity and convertible securities of U.S. real estate companies, defined as real estate investment trusts (REITs) and/or real estate operating companies (REOCs) organized under the laws of any state of the United States or province of Canada.

The strategic policy weight for the REES program is 3%.

Philosophy and Strategy

The REES program is structured to capture exposure to the REIT and REOC markets as represented by the Dow Jones U.S Select Real Estate Securities Index. The REES program is diversified across property types and sectors, geographical regions, and other appropriate investment characteristics. Additionally, equity securities of developed markets real estate companies may be purchased in the REES Program.[16]

Historically over long periods of time, managers of real estate securities have outperformed the Dow Jones U.S Select Real Estate Securities Index adjusted for risk and fees. Therefore, the Board has allocated the entire REES portfolio to active Managers.

Use of External Managers

The REES program is implemented through the use of external Managers. Managers shall be banks, insurance companies, or investment management companies, or investment advisers as defined by the Registered Investment Advisers Act of 1940. Managers are selected in compliance with a competitive RFP process designed to identify Managers with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by BAM pursuant to the Board's mandate. The guidelines outline the Manager's individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives. Managers are monitored through the Watch List process.

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[16] In September 2011, the Board approved changes to the REES Program to expand the Managers' mandates to include more flexibility to purchase Global REIT securities.

Proxy Voting

The Board retains proxy voting rights for the domestic securities in the REES Program, which are exercised by the Office of the Comptroller in accordance with the Board's Proxy Voting Policy. Managers retain proxy voting rights for international securities held in the REES Program, similar to the process for the EAFE and Emerging Markets equities programs.

Asset Class Objectives

Trustees review manager and portfolio performance quarterly. The total REES program is expected to outperform the Dow Jones U.S Select Real Estate Securities Index by 200 basis points per year gross of fees over a full market cycle. Individual manager performance will be evaluated quarterly, annually, and over a full market cycle (typically 3-5 years).

Liquidity

The REES program is generally not a source of liquidity for the Fund, although, benefits may be paid out of the portfolio as required. Managers are expected to be fully invested, and are limited to a maximum of 5% cash for trading purposes. As necessary, BAM may direct Managers to sell securities to fund benefit payments and certain other eligible system expenses, or as otherwise appropriate for rebalancing purposes.

5. Fixed Income: NYC Core +5 Program[17]

Definition and Purpose

Fixed income securities are bonds and other debt securities such as mortgage-backed securities, most paying interest on a current basis. The NYFDPF Fixed Income allocation consists of the Core + 5 Portfolio, the Enhanced Yield Portfolio– including an allocation to leveraged loans, the Convertibles Portfolio, the Opportunistic Fixed Income Portfolio, the TIPS Portfolio, and the Fixed Income portion of the ETI Program. The Core +5 Program is the dominant NYFDPF Fixed Income Program, the second largest investment program after U.S. Equity. It is a driver of return and diversification at the total fund level. While the explicit objective is total return, given the fundamental nature of fixed income – relatively predictable income and principal payouts – it also extends the duration of the total fund to better match liabilities, and may be used to provide cash for benefit payments if the portfolio is otherwise within rebalancing ranges.

Most of the securities of the Fixed Income Programs are registered in the U.S. 144A securities, Global bonds, and Eurodollar bonds may be permitted investments.

[17] The Board approved the restructuring of the Core +5 Fixed Income Program in February 2009, reducing the sub-indices from four sectors, among other changes.

Philosophy and Strategy

The Core +5 Program is benchmarked to a customized version of the Citigroup (formerly Salomon Smith Barney) U.S. Broad Investment Grade Index (the "BIG Index"), known as the ***NYC Core +5 Index***. The NYC Core +5 index comprises sub-indices for three sectors: (1) U.S. Treasury and Agency issues excluding one to five-year maturities; (2) mortgage backed securities; and (3) Investment Grade Credit. The total allocation to each sector mirrors that sector's proportion of the custom NYC Core +5 Index, which is revised by Citigroup monthly to reflect market changes.

Concurrent with the implementation of the results of an RFP, the Investment Grade Credit Sector was created by combining the previously existing Corporate and Yankee sectors.

The Core + 5 Program is implemented through a sector specialist program, in which Managers are selected for mandates benchmarked to one of the sub-indices. Managers may employ index-like, enhanced index, or active approaches within their sector. Major characteristics of the three sectors are:

- **U.S. Government**: Consists primarily of U.S. Treasury and Agency debt. Does not include mortgage-backed securities. Managers are permitted to invest in Supranationals to a very small degree. Securities of any maturity may be used, provided that the weighted average duration of the portfolio is within a range of -1.0 year and +0.5 year of the Citigroup Core +5 Treasury/Government Sponsored Index, which includes only those securities with a maturity in excess of five years.

- **Mortgage-Backed Securities (MBS)**: Consists primarily of Agency mortgage pass-throughs and Agency and non-agency securities collateralized by mortgage pass-throughs. Managers are permitted to invest in certain non-benchmark sectors and security types. Securities of any maturity may be used, provided that the weighted average duration of the portfolio is within +/- 0.75 year of Citigroup's standard Mortgage Index, which includes GNMA, FNMA and FHLMC mortgage pass-throughs.

- **Investment Grade Credit:** U.S.-dollar denominated debt securities of domestic corporations and foreign and Supranational entities rated BBB- or higher. Managers are permitted to invest in certain non-benchmark securities to a limited degree, including 10% in high yield securities. Securities of any maturity may be used, provided that the weighted average duration of the portfolio is within +/- 0.5 years of the customized Citigroup Investment Grade Credit Index (which combines the former Domestic Corporate Index and Yankee Index), and includes industrial, utility, financial, asset-backed and credit-enhanced securities.

The Program is implemented through the use of external Managers. Managers are selected in compliance with a competitive RFP process designed to identify firms with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate that outlines the Managers' individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives. Subject to constraints contained in guidelines issued by the Comptroller pursuant to Board mandates, value may be added through:

- Duration management, within stated constraints
- Sub-sector weights (within specified ranges of the benchmark weights)
- Security selection, including certain securities/issuers not specifically included in the benchmark

Managers are monitored through the Watch List process.

Asset Class Objectives:

- Trustees review Manager and portfolio performance quarterly. The total Core +5 Program is expected to outperform the custom index over a full market cycle, as indicated below. Individual Manager performance expectations vary, as each employs a distinct approach that may be categorized as index-like, enhanced index or active.

Each Manager will be evaluated quarterly, annually and over a full market cycle (typically 3-5 years).

Market Sector Allocations

Core + 5 Program	**Percent of Program* (as of 6/30/13)**
Government +5	18.63%
Mortgage-backed	40.00%
Investment Grade Credit	41.33%
Total Core +5	**100%**

(*Market sector allocations are adjusted monthly by the benchmark provider, Citigroup, to reflect market weight. The Fund policy is to be neutral to the benchmark/market.)

Liquidity and Cash Management:

As a fixed income alternative, cash equivalents (or "*short-term fixed income*") are integral to managing risk in fixed income portfolios through portfolio duration. Fixed Income Managers, unlike the Equity Managers, are given wider latitude to use cash equivalents. Government Sector Managers have no explicit limits on cash; however the relatively long duration requirements for this sector indirectly limit the Managers' use of cash equivalents. Corporate and Yankee Sector Managers are allowed to invest up to 10% in cash. MBS Sector Managers are also allowed to invest up to 10% in cash; however, they may hold significantly more cash to back a widely used MBS instrument ("TBA"). These large cash balances, nonetheless, are not considered an immediate source of liquidity. As necessary, BAM may direct Managers to sell securities to fund benefit payments and certain other eligible System expenses, or as otherwise appropriate for rebalancing purposes.

6. Fixed Income: Enhanced Yield Program (Includes Leveraged Loans Sub-Sector) [18]

Definition and Purpose

Fixed income is defined as bonds and other debt securities, most paying interest on a current basis. While most securities are registered in the U.S., the NYC Fixed Income Programs allow for use of 144 A securities, Global bonds, and Eurodollar bonds. In the Enhanced Yield Program (traditionally referred to as "high yield," or "non-investment grade"), most securities are denominated in $U.S, while a small allocation is permitted for $Canada-denominated issues. Additionally, deferred-interest securities that do not pay interest on a current basis (such as zero-coupon bonds) are permitted. The high yield sector has equity-like features, including convertible securities, preferred stocks, and warrants. Common stock may appear in traditional high yield portfolios as a result of debt restructuring. The characteristics of the high yield sector may be viewed as a cross between traditional bonds and stocks. The objective of the Enhanced Yield Program is total return and has a current policy weight of 4%.

Within the overall Enhanced Yield program, the Leveraged Loans program (also known as "Bank Loans") has been established as a sub-sector and is designed to invest up to one-third of total Enhanced Yield as described in the Asset Allocation section.

Philosophy and Strategy

The Enhanced Yield Program employs a variety of external Managers with active management approaches. The Program benchmark and the benchmark for most of NYFDPF Managers is the Citigroup (formerly Salomon Smith Barney) BB & B Index. It is a subset of the widely-used Citigroup High Yield Index and excludes securities with ratings of only CCC or lower. The index includes only securities of U.S. and Canadian corporations. As appropriate, an individual Manager's benchmark may be different from the Program benchmark, depending on the Manager's investment approach.

Managers are selected in compliance with a competitive RFP process designed to identify firms with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate that outlines the Managers' individual investment philosophies

[18] In June 2012, the Board voted to adopt a sub-allocation to Leveraged Loans and adopted appropriate IPS language for the new Program.

and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives.

Subject to guideline limitations (which may vary modestly by Manager due to stylistic differences), value may be added through:

- Industry / sector allocation
- Quality sector allocation
- Security selection, including certain securities/issuers not specifically included in the benchmark, such as convertibles and investment-grade
- However; direct purchase of defaulted securities and securities of bankrupt companies is explicitly prohibited.
- Cash equivalents may be used on a limited basis
- Duration decisions are not expected to be a notable contributor to performance

Managers are to be evaluated through a formal annual account review process conducted by the Bureau of Asset Management staff. Managers exhibiting under-performance, personnel turnover and/or other issues may be monitored more closely through the "Watch List" process.

<u>Asset Class Objectives:</u>

Trustees review portfolio performance quarterly. The total Program is expected to outperform the Citigroup BB& B Index over a full market cycle. Individual Manager performance expectations vary, as each employs a distinct approach. The expected active return is at least 125 basis points (bp). Each Manager will be evaluated quarterly, annually and over a full market cycle (typically 3-5 years).

<u>Liquidity and Cash Management:</u>

The Enhanced Yield Program is not a source of liquidity for the Fund, although, benefits may be paid out of the portfolio as required. Typically, cash equivalents are integral to managing the interest rate risk in fixed income portfolios. However, for high yield, interest rate risk is less of a consideration than for investment-grade bond portfolios like those in NYFDPF main Core + 5 Program. Nevertheless, as the high yield asset class is heavily dependent on new security issuance and may be characterized by extended periods of relative illiquidity (as compared to the U.S. equity market), the Enhanced Yield Managers have been given more latitude to hold cash – the maximum is generally 8%. As necessary, BAM may direct Managers to sell securities to fund benefit payments and certain other eligible System expenses, or as otherwise appropriate for rebalancing purposes.

7. Fixed Income: Leveraged Loans[19]

Definition and Purpose

Fixed income is defined as bonds and other debt securities, most paying interest on a current basis. While most securities are registered in the U.S., the NYC Fixed Income Programs allow for use of 144 A securities, Global bonds, Eurodollar bonds and Leveraged Loans. In the Leveraged Loans Program (also referred to as "Bank Loans"), most securities are denominated in $US. Common stock may appear in traditional Leveraged Loans portfolios as a result of debt restructuring. The characteristics of the Leveraged Loans sector may be viewed as a cross between Core +5 and High Yield and securities are typically non-investment grade and senior debt obligations in an entity's capital structure. Typically, Leveraged Loans are floating rate debt obligations. The objective of the Leveraged Loans Program is total return.

Philosophy and Strategy

The Leveraged Loans Program employs a variety of external Managers with active management approaches. The Program benchmark is the Credit Suisse Leveraged Loans Index, which includes mostly BB, B, CCC and non-rated securities. The index includes only securities denominated in US dollars. As appropriate, an individual Manager's benchmark may be different from the Program benchmark, depending on the Manager's investment approach which could include securities denominated in currencies other than the US dollar.

Managers are selected in compliance with a competitive RFP or search process designed to identify firms with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate that outlines the Managers' individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives.

Subject to guideline limitations (which may vary modestly by Manager due to stylistic differences), value may be added through:

- Industry / sector allocation
- Quality sector allocation
- Security selection, including certain securities/issuers not specifically included in the benchmark
- Direct purchase of defaulted securities and securities of bankrupt companies is generally prohibited
- Cash equivalents may be used
- Duration decisions are not expected to be a notable contributor to performance

[19] In July 2012, the Board voted to adopt a sub-allocation to Leveraged Loans and adopted appropriate IPS language for the new Program.

Managers are monitored through the Watch List process.

Asset Class Objectives

At a minimum, Trustees review portfolio performance quarterly. The total Program is expected to outperform the Credit Suisse Leveraged Loan Index over a full market cycle by a minimum 100 basis points (gross). Individual Manager performance expectations vary, as each employs a distinct approach. Each Manager will be evaluated quarterly, annually and over a full market cycle (typically 3-5 years).

Liquidity and Cash Management

The Leveraged Loans Program is generally not a source of liquidity for the Fund, although, benefits may be paid out of the portfolio as required. Typically, cash equivalents are integral to managing the interest rate risk in fixed income portfolios. However, for Leveraged Loans, interest rate risk is less of a consideration than for investment-grade bond portfolios like those in NYCRS' main Core + 5 Program due to the floating rate nature of most of the securities. Nevertheless, as the Leveraged Loans asset class is heavily dependent on new security issuance and may be characterized by extended periods of relative illiquidity (as compared to the U.S. equity market), the Leveraged Loans Managers have been given more latitude to hold cash. As necessary, BAM may direct Managers to sell securities to fund benefit payments and certain other eligible System expenses, or as otherwise appropriate for rebalancing purposes.

8. Fixed Income: U.S. TIPS Program

Definition and Purpose

Fixed income is defined as bonds and other debt securities, most paying interest on a current basis. In the U.S. TIPS Program, U.S. Treasury Inflation-Protected Securities will be the predominant holding, and most other securities will also be denominated in $U.S. Limited use of inflation linked bonds (ILBs) of foreign developed-market sovereigns will be permitted. The U.S. TIPS Program's primary purpose is to hedge inflation (as measured by the CPI - U) and, secondarily, to provide diversification.

Philosophy and Strategy

The U.S. TIPS Program will be managed using a combination of index and active management approaches. The policy mix is 25% passive/75% active. The Program and individual Managers' benchmark is the Barclays Capital[20] U.S. Inflation-Linked Index, which is comprised of all outstanding TIPS of the U.S. Treasury.

The Program will be implemented through the use of external Managers. Managers are selected in compliance with a competitive RFP process designed to identify firms with demonstrated

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[20] Barclays Capital has taken over the Lehman Indices, after Lehman Brothers went out of business.

ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate that outlines the Managers' individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives. The portfolio of the passive (or index) Manager will mirror the benchmark index with minimal tracking error; value may be added through trading strategies. Subject to constraints contained in guidelines issued by the Comptroller, which may change over time, the active Managers may add value through:

- Duration and yield curve management
- Individual U.S. TIPS weightings that vary from the benchmark
- Use of nominal U.S. Treasury and inflation-indexed U.S. Agency securities
- Use of inflation linked bonds (ILBs) of foreign developed-market sovereigns, however the position must be hedged back to $U.S. Foreign inflation linked corporate and agency bonds are not permitted.
- Cash equivalents may be used on a limited basis

Managers will be monitored through the Watch List process.

Asset Class Objectives

Trustees review portfolio performance quarterly. The total U.S. TIPS Program is expected to exceed the inflation rate and to outperform the Barclays Capital U.S. Inflation-Linked Index over a full market cycle, as indicated below. Individual Manager performance expectations vary, as each employs a distinct approach that may be categorized as index or active. Each Manager will be evaluated quarterly, annually and over a full market cycle (typically 3-5 years).

Market Sector Allocations

U.S. TIPS Program	**Percent of Program**	**Expected Active Return (gross)**
Active Managers	75%	75 bp
Passive (Indexed) Managers	25%	
Total U.S. TIPS Program	**100%**	**55 bp**

Liquidity and Cash Management:

The U.S. TIPS Program is not a source of liquidity for the Fund, although, benefits may be paid out of the portfolio as required. As a fixed income alternative, cash equivalents are integral to managing risk in fixed income portfolios through portfolio duration. Active Fixed Income

Managers, unlike Equity Managers, are given wider latitude to use cash equivalents. The U.S. TIPS Index Manager will generally be permitted to hold up to 2% cash and the active Managers, up to 20%.

9. Fixed Income: Convertible Bonds[21]

Definition and Purpose

A convertible bond has the characteristics of two types of securities: a bond and an equity option. Convertible bonds are issued by publicly held companies and come in a variety of forms. At the simplest level, they combine a corporate bond paying a fixed interest rate with an equity warrant (a long term equity call option) on the issuer's common stock. The bonds are senior to equity in a company's capital structure. The allocation of the Fund to this sub-asset class is 1% of the value of the total Fund.

Convertible bonds have higher expected returns and higher risk than conventional corporate bonds. The link to equity volatility through the equity option adds an extra return driver that is not available from a portfolio of stocks and bonds alone. The convertible bond market can be relatively inefficient and therefore provides opportunities for total return oriented investors such as the Fund. The primary purpose of the program is to provide a higher total return than the corporate bond market with less volatility than the equity market, in addition to providing diversification.

Philosophy and Strategy

The Convertible Bond Program employs a variety of external Managers with active management approaches. The Program benchmark is the Bank of America Merrill Lynch All U.S. Convertibles ex-Mandatory Index. As appropriate, an individual Manager's benchmark may be different from the Program benchmark, depending on the Manager's investment approach.

Subject to guideline limitations (which may vary modestly by Manager due to stylistic differences), value may be added through:

- Industry / sector allocation
- Quality sector allocation
- Security selection, including certain securities/issuers not specifically included in the benchmark

Cash equivalents may be used on a limited basis. Duration decisions are not expected to be a notable contributor to performance.

[21] The Board adopted a 1% allocation to Convertible Bonds in January 2008.

<u>Asset Class Objectives:</u>

Trustees review portfolio performance at least quarterly. The total Program is expected to outperform the Bank of America Merrill Lynch All U.S. Convertibles ex-Mandatory Index over a full market cycle. Individual Manager performance expectations vary, as each employs a distinct approach. Each Manager will be evaluated quarterly, annually and over a full Manager Market Cycle.

<u>Liquidity and Cash Management:</u>

The Convertible Bond Program is not typically a source of liquidity for the Fund, although, benefits may be paid out of the portfolio as required. Typically, cash equivalents are integral to managing the interest rate risk in fixed income portfolios. However, for convertibles, interest rate risk is less of a consideration than for investment-grade bond portfolios like those in the Fund's main Core + 5 Program. Nevertheless, as the asset class is heavily dependent on new security issuance and may be characterized by extended periods of relative illiquidity (as compared to the U.S. equity market), the Convertible Bond Managers have been given more latitude to hold cash – the maximum is generally 5%.

10. Alternative Investment Policies - Policy Listing and Approved Dates

PRIVATE EQUITY INVESTMENTS POLICY; ADOPTED OCTOBER 17, 2012. SEE APPENDIX #3 FOR THE POLICY

REAL ASSETS EQUITY INVESTMENTS POLICY; ADOPTED DECEMBER 7, 2012. SEE APPENDIX #4 FOR THE POLICY

ECONOMICALLY TARGETED INVESTMENTS POLICY; ADOPTED NOVEMBER 11, 2008. SEE APPENDIX #5 FOR THE POLICY

HEDGE FUNDS INVESTMENTS POLICY; ADOPTED MARCH 30, 2011. SEE APPENDIX #6 FOR THE POLICY

OPPORTUNISTIC FIXED INCOME INVESTMENTS POLICY; ADOPTED JUNE 22, 2011. SEE APPENDIX #7 FOR THE POLICY

11. Securities Litigation Protocol

I. Overview

The recent revelations of corporate fraud and other misdeeds that have resulted in significant losses to shareholders, and the ensuing litigation, have underscored the need for an internal set of policies and procedures to guide the New York City Pension and Related Funds ('the Funds'), including the New York Fire Department Pension Fund ('NYFDPF'), in identifying, evaluating and ultimately managing securities litigation. The Funds are increasingly being presented with potential cases by the class action bar and a set of established procedures will help facilitate the Funds' decision-making process and ensure that the Funds are pursuing active involvement in cases when it is in their best interests to do so. Across the country, pension funds have started clearly identifying their objectives in pursuing actions and are becoming more proactive in identifying these claims themselves and reducing their reliance on the class action bar. They are also looking at other ways to participate actively in securities class actions. In addition, many pension funds are employing a two-tiered approach to their use of counsel; *i.e.,* they are expanding their counsel pool and are engaging counsel to help in the evaluation of claims. Thereafter, they engage separate counsel to represent them in the litigation, if they decide to proceed. This process provides additional resources and expertise in the evaluation process while ensuring that the resulting recommendations are as unbiased as possible.

II. Objectives

NYFDPF's objectives in choosing an active role in securities litigation include the following:

a. Preservation of plan assets and collection of all amounts due to NYFDPF;

b. Maximizing the net recovery to the class; and

c. Effecting corporate governance reforms, when appropriate.

Out of the enormous volume of securities cases being filed, the Funds will consider those where the amount of loss sustained by the Funds and attributable to some type of wrongdoing is of a magnitude to justify the time, expense and effort involved in being lead plaintiff in a class action or in filing an independent action either in state or federal court or in pursuing some other litigation alternative. The Law Department as the Funds' legal representative and the Comptroller's Office as its investment advisor will work together in the best interests of the Funds to recommend those cases best suited for the Funds' active participation.

III. Identification of Potential Cases

The first step in this process is to identify those cases or claims that would warrant the Funds' active involvement in securities litigation. Early identification of potential cases will allow the Law Department and the Comptroller's Office more time to analyze the case and recommend strategies, and allow the Funds more time to respond to any such joint recommendations. To meet this goal, the Funds will engage outside data consultants. Consultants can better monitor new case filings, follow the financial news as well as the activities of government agencies such as the SEC. Consultants will also interface directly with the custodial banks for the five Funds as well as the custodian for the TRS Variable Annuity Funds in order to compute loss estimates. The consultant should be able to provide the Law Department and the Comptroller's Office with loss estimates for each Fund as well as the TRS Variable Funds within days of a federal securities class action being filed, early enough in the 60-day statutory time period for filing a lead plaintiff motion to allow for careful analysis of potential cases by the Law Department and the Comptroller's Office and a thoughtful consideration of any joint recommendations from the Law Department and the Comptroller's Office by NYFDPF and the other Funds.

IV. Review and Analysis of Potential Cases

A two-tiered approach, involving Evaluation Counsel and Litigation Counsel, will be used to expedite the review and analysis of potential cases. After a reasonable time period, this approach will be evaluated and, if necessary, modified.

A. Evaluation Team

The Funds' current pool of five securities litigation law firms will be expanded pursuant to a competitive solicitation for outside counsel. The enlarged pool will permit two or more pool members to serve as an evaluation team on a rotating basis ('Evaluation Team'). Evaluation Team members are not precluded from serving[22] as Litigation Counsel on any matter they have evaluated.

Utilizing a consultant's services as described in Section III of this Protocol, the Comptroller's Office will forward to the Law Department information on any case filed that satisfies the minimum loss requirement, a monetary threshold to be established by consent by the Funds. The Evaluation Team, in conjunction with the Law Department and the Comptroller's Office, will review cases given to them by the Law Department and evaluate potential securities litigation claims, advising the Law Department on ways to best protect the interests of the Funds. The Evaluation Team will also perform additional due diligence on claims (*i.e.*, contact counsel for both sides; review complaints, SEC filings and company disclosures; examine contents of relevant internal files, interview investment staff, and contact other investors as appropriate).

Each Evaluation Team law firm for a particular case will provide the Law Department with a written evaluation of that case including an opinion as to what, if any, action would be in the best interests of the Funds and why. The memorandum will evaluate options available to protect the Funds' interests. Options may include doing nothing, filing for lead plaintiff status or actively participating in ways other than becoming lead plaintiff.

These other types of active participation include attempting to get a claimant with larger losses to become lead plaintiff; monitoring the case from the sidelines; writing a letter to the court and/or lead counsel to bring up issues being ignored; filing a motion to support or oppose a particular lead plaintiff or lead counsel candidate; filing a notice of appearance and more actively monitoring the case; attempting to negotiate an agreement with prospective lead counsel that will require them to keep the Funds informed of case developments, provide the Funds with access to discovery upon request and allow the Funds to participate in settlement negotiations or be consulted on a settlement; waiting until settlement and reviewing the settlement carefully with the option to object to a poor settlement or excessive fees; opting out of the class to file a separate action; or bringing a derivative action. The memorandum should also discuss the most

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[22] In April 2013, the Board adopted a resolution to omit the requirement that evaluation counsel is not eligible to serve as litigation counsel in the same matter.

advantageous means of bringing a suit; *i.e.,* individual federal action or federal class action; state law individual action; or derivative action.

B. Joint Recommendation to the Funds from the Law Department and the Comptroller's Office.

The Law Department will consult with each Evaluation Team member and will fully analyze all relevant legal issues. The Law Department, in conjunction with the Comptroller's Office, might consider, among other things, the following in issuing a recommendation to the Trustees:

a. What was the alleged wrongdoing? What are the legal claims?

b. What is the degree to which the Funds are offended by the wrongdoing?

c. What is the amount of NYFDPF's loss and the Funds' losses collectively?

d. What are the defenses? What are the merits of the case? Are the Funds likely to prevail?

e. Are the losses collectible? What is the defendant's financial condition? Are insurance carriers involved? How many defendants will there be?

f. Will there be other consequences if the Funds win or lose? For instance, will success bankrupt the company or adversely affect other investments that the Funds have in the same company?

g. Are there others who are more appropriate to serve as lead plaintiff? (In which case, the Funds may defer to them or seek to join them as co-lead plaintiff.)

h. What economic and administrative costs will be involved? (Typically, all out-of-pocket costs should be advanced by Litigation Counsel who accepts the case on a contingency basis. However, some law firms prefer that out-of-pocket costs are advanced by the client.)

i. Does NYFDPF have a separate claim which is not covered by the class complaint or are there unusual facts that suggest a benefit to independent non-class litigation?

j. Would failure in the litigation adversely affect NYFDPF? For example, might the litigation result in the disclosure, subject to a protective order, of material non-public information about the company that could interfere with NYFDPF's future anticipated trading strategy? Are there other possible adverse consequences?

k. Do the Funds have time to interact with legal counsel and make decisions as required?

l. Should NYFDPF and the other Funds consider seeking to serve as co-lead plaintiff with other parties?

m. Is the suit a nuisance suit? Should NYFDPF consider supporting the company in a motion to dismiss?

n. Are there any potential conflicts with other members of the class?

o. Is there a need for corporate governance changes? Are there individual actors that need to be pursued to deter future wrongdoing?

The Law Department, in conjunction with the Comptroller**,** will then make a written recommendation to NYFDPF and the other Funds to pursue a particular case in which active participation would be in the Funds' best interest. If time permits, such a recommendation would be presented in person by representatives of both the Law Department and the Comptroller's Office who would be available to answer questions the Trustees may have. Because of the statutory deadlines involved in this type of litigation, a representative from each Fund and the TRS Variable Annuity Funds will be appointed to attend one meeting where the joint recommendation can be presented. This approach will only be used when time limitations require it.

C. Litigation Counsel

Litigation Counsel will be selected after the Funds have made a decision to pursue an active role in litigation. The panel of law firms available to be assigned cases will be expanded through a competitive process. Each firm selected must have a recognized expertise in the area of securities litigation. Special attention will be paid to experience in class actions, especially under the PSLRA, experience as counsel to other institutional investors (preferably other public pension funds), a demonstrated understanding of the special responsibilities of a public fund trustee and how public employees' retirement systems function as well as experience with corporate governance reforms.

Litigation Counsel will be selected by the Law Department based on, among other things, suitability for a particular matter (including, for example, their expertise in the jurisdiction in which a case is being brought and expertise in the particular type of suit. For each case approved by the Funds, the Law Department will invite pool members, [23]including those who served as members of the Evaluation Team for that case, to submit written proposals for handling the litigation. The proposal will focus on the litigation factors discussed in Section IV, B of this

[23] In April 2013, the Board adopted a resolution to omit the requirement that evaluation counsel is not eligible to serve as litigation counsel in the same matter.

Protocol and propose the most appropriate strategy for the conduct of the litigation. The proposal will also include a fee schedule. Selection of counsel for any given case will be based on an evaluation of the litigation strategy proposed, the suggested fee and the expertise and resources of the firm. Thus increasing the size of the panel will also increase competition regarding the fee to be charged against any recovery by the Funds, and, in PSLRA cases, the recovery of other class members.

V. Interaction with the Funds

The Law Department will also issue a monthly report to the Funds, which will include significant potential cases being evaluated as well as the status of pending securities litigation. The Funds will make the final determinations on whether to proceed or not with a particular securities law case. In the event that there is disagreement amongst the Funds with regard to a particular course of action, the Funds may wish to consider acting independently. The advisability of such independent action would have to be examined on a case by case basis.

NYFDPF counsel ("Fund Counsel") shall serve as liaison between the Trustees and the Law Department in order to keep the Trustees advised on securities litigation issues, provide written opinions to the Trustees and convene voice votes and/or special meetings. Fund Counsel shall be included in meetings with and on the distribution list for the Evaluation and Litigation Counsel and shall review any joint recommendations from the Law Department and the Comptroller's Office after such recommendation is made to the Trustees to pursue a particular case as described in Section IV, B of this protocol. The Fund Counsel shall also review the Law Department's monthly litigation report to the Trustees once it is issued.

12. Proxy Voting Policies and Procedures[24]

In fulfilling the Proxy Voting Policy of the Board, the following procedures shall be used.

Each year, the Proxy Committee, on behalf of the Board, reviews the Comptroller's recommendations for shareholder proposals and target companies, and decides which proposals and companies will comprise NYFDPF annual shareholder proposal program. The committee considers the Comptroller's recommendations for voting proxy issues that are not covered by NYFDPF proxy voting policies and procedures and, on behalf of the Board, promulgates voting policies and procedures on such issues.

The Chair, or the Office of the Comptroller with notification of the Chair, shall call all committee meetings. If time does not allow a meeting to be called, the Chair or the Office of the Comptroller shall set up a conference call among the committee members and the Comptroller's staff. If a conference call is not feasible, the Chair or the Comptroller's Office shall conduct a telephone or an e-mail poll of committee members. If a Trustee is not available his/her vote shall be recorded as an abstention.

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[24] New Proxy Voting Guidelines and additional methods for communicating with the Committee were adopted in April 2012.

In voting proxies, the Comptroller shall follow the following guidelines:

Vote Action – For Proposal

The Comptroller shall vote FOR a proposal if such proposal is consistent fully with the provision(s) stipulated in the resolutions/policies promulgated by the NYFDPF Proxy Committee.

Vote Action – Against Proposal

The Comptroller shall vote AGAINST a proposal if such proposal is inconsistent with, or contrary to, the philosophy, intent and spirit of resolutions/policies promulgated by the NYFDPF Proxy Committee.

Vote Action - Abstain

Absent enabling NYFDPF resolutions/policies and past history, or the availability of adequate information, the Comptroller shall ABSTAIN. If time does not permit the Comptroller's Office to present to the Proxy Committee, for its review and voting decision, a proposal with voting-policy recommendation and adequate background information, the Comptroller shall ABSTAIN.

Review of New Issues

Each spring, the Comptroller's Office and the Proxy Committee shall meet to review new proxy issues. The Proxy Committee may review and revise existing policies and procedures.

Proposal not Covered by Existing Board Resolution – Time Permitting

If time permits, the Comptroller shall present to the Proxy Committee, for review, deliberation and vote decision, proposals pertaining to issues which are not covered by past practice or existing policies. To facilitate this process, the Comptroller's Office shall provide the Board the full text of such proposals, supporting and opposing statements, and other available background information that would represent fairly the views of proponents and opponents of issues.

Proposal not Covered by Existing Board Resolution – Time Limited

In the event that the distribution of proxy statements is delayed through corporate, postal, or other setback, particularly as it relates to issues not covered by past practice or existing policy, the Comptroller's Office or the Chair shall conduct a telephone conference call of the members of the Proxy Committee and the Comptroller's Staff and obtain the votes of the members on the proposal). If a conference call is not feasible, the Chair or the Comptroller's Office shall conduct a telephone or an e-mail poll of committee members.

The Comptroller's Office shall be guided by the consent of a simple majority. In the event of a deadlock, the Comptroller's Office shall ABSTAIN.

Mergers and Acquisitions[25]

The Comptroller's Office casts votes on mergers and acquisitions consistent with the Proxy Voting Guidelines adopted by the Trustees.

Reports to the Trustees

The Comptroller's Office shall submit annual summary[26] reports to the Proxy Committee on the results of the NYFDPF shareholder proposal programs, and on votes cast by the Comptroller's Office against management director nominees.

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[25] New Proxy Voting Guidelines governing votes on mergers and acquisitions were adopted in April 2012.

[26] Summary reports were accepted by the Committee since the Fall 2011 reporting.

INVESTMENT POLICY STATEMENT

NEW YORK
FIRE DEPARTMENT PENSION FUND

Adopted

July 25, 2007
Amended
Through June 30, 2013

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SECTION I. PURPOSE OF THE INVESTMENT POLICY STATEMENT

The Board of Trustees (Board) of the New York Fire Department Pension Fund (NYFDPF) herein establishes a written, comprehensive and integrated Investment Policy Statement (IPS) in furtherance of the management and investment of its assets.

The Investment Policy Statement sets forth the investment objectives and philosophy of the NYFDPF investment program, as well as its major components, procedures and policies relating to risk tolerances, liquidity needs, asset allocations and rebalancing ranges. The Statement sets forth procedures to oversee and evaluate the overall performance of the Fund. The Statement further provides a procedural framework for the Board of Trustees, with the advice and counsel of the Comptroller's Bureau of Asset Management ("BAM"), to select, retain, monitor and evaluate the performance of Investment Managers, Consultants and others.

Investment Policy Statements for Alternative Investments including ~~(~~Private Equity~~)~~, Real Assets, Hedge Funds, Opportunistic Fixed Income,~~Estate,~~ and Economically Targeted Investments which have been separately approved, are made a part of this overall policy by reference (see Appendices).

SECTION II. INVESTMENT POLICY ROLES

A. Board of Trustees

The Board, as a fiduciary, is responsible for the management of the Fund. Activities of the Board include the following:

- Establish and adopt written investment policies, including delegations of authority, desired risk levels, investment time horizons, and proxy voting policies. The written investment policies will guide the management of the Fund consistent with the Fund's investment goals and objectives.
- Adopt an appropriate asset allocation strategy that diversifies assets in a manner consistent with the Board's risk/return objectives.
- Consider and approve appropriate investment strategies.
- Determine the Investment Manager structure for implementation of investment strategies, including such factors as manager style and active vs. indexed management approaches.
- Select Consultants and Investment Managers to implement the investment strategies.

- Approve the commencement of securities litigation, its strategy, and settlement.

- Monitor the performance of Plan assets as well as the investment activities of all Investment Managers and Investment Consultants as they affect Plan assets.

- Approve reasonable and necessary investment expenses to acquire, manage and protect Plan assets.

B. Comptroller

Under the New York City Administrative Code, the Comptroller serves as a trustee of the Board and as custodian for NYFDPF assets. As custodian, the Office of the Comptroller, by and through the Bureau of Asset Management (BAM), performs activities including:

- Selection of one or more custody banks, including a Master Custodian for the safekeeping of NYFDPF assets and monitoring of the performance of the custodians.

- Reconciliation of the monthly accounting statements rendered by the Master Custodian with (a) daily information on trades and positions of publicly traded securities provided by Investment Advisors; and (b) periodic information provided by Managers and Consultants regarding illiquid securities. The reconciled statements are provided to the NYFDPF Chief Accountant and form the basis for the investment performance sections of the NYFDPF financial statements.

- Review, audit and processing of payments to Investment Advisors, Investment Counsel, and Consultants.

By delegation, which is reviewed annually by the Board, the Comptroller also serves as Investment Advisor to the Fund.

In its role as Investment Advisor, the Office of the Comptroller provides investment advice, implements Board decisions, and reports on investment performance. In carrying out these functions, BAM:

- Advises the Board on all investment issues, including:
    - Investment policy and strategy
    - Asset allocation
    - Manager structure
    - Manager selection
    - Financial and economic developments that may affect the Plan.

- Evaluates and recommends to the Board potential investment partners, Managers and

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Consultants for NYFDPF assets pursuant to established procedures and Board policies.

- Provides the Board and/or its Proxy Committee analyses of proxy issues and vote recommendations, votes proxies of domestic equity securities, and recommends and implements NYFDPF annual ownership initiatives.
- Informs the Board of significant developments regarding NYFDPF assets.
- Implements Board investment decisions.
- Rebalances the portfolio within ranges established by the Board.
- Implements portfolio transitions to effectuate Board decisions.
- Negotiates, enters into, renews, administers and terminates agreements with Investment Managers, Consultants and investment partners on behalf of the Board.
- Directs Investment Managers to sell assets to meet NYFDPF liquidity needs, and transfers cash to NYFDPF accounts.
- Monitors the performance of Investment Managers who have been selected by the Board, and reports regularly to the Board on potential issues requiring Board attention.
- Provides regular reports to the Board on the performance of Plan assets.

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In executing each of these responsibilities, BAM works closely with Consultants selected by the Board.

C. Director of the NYFDPF and Director of Operations

Director of the NYFDPF and the Director of Operations are designated by the Fire Commissioner pursuant to Administrative Code § 13-316 (c), which authorizes the Commissioner to assign personnel to assist the Board of Trustees in administrating the Fund. The Director of the NYFDPF insures the accurate and timely payment of all benefits and the proper accounting of all financial transactions. The Director of Operations organizes Board meetings and reports to the Board on operational issues, benefit payments, and service levels. Together, the Director of the NYFDPF and the Director of Operations create and safeguard the System's records, and satisfy the System's external reporting requirements. They also translate the statutory structure of the Plan into efficient operating procedures and incorporate new state and federal legislation into the procedures.

D. Actuary

In its determination of an Investment Policy, the Board of Trustees incorporates information and advice from the Actuary.

In particular, the Actuary provides such insight and guidance as requested with respect to future cash flows, liabilities, risks and the impact of Investment Policy on the funding of the NYFDPF.

The Actuary advises the Board regarding funding issues, including the level of the Actuarial Interest Rate ("AIR") assumption that the Actuary would support for a given Investment Policy. The Actuary for the NYFDPF periodically recommends to the Board an AIR assumption, which is currently set at 7~~8~~.0%[1] per annum, ~~gross~~ net of expenses. The AIR assumption is ultimately codified in the New York City Administrative Code.

SECTION III. ELIGIBLE INVESTMENTS

The investment of the Fund's assets is governed by federal, state and New York City law. The Board may invest in securities and other eligible investments primarily described in Section 235 of the New York State Banking Law and Article 4-A of the New York State Retirement Social Security Law (RSSL), Sections 176 – 179a, subject to applicable restrictions.

Within the parameters of the law, the Board establishes asset allocations and awards investment management contracts subject to the following overall policies:

- Plan assets generally may be invested in mortgages, bonds, notes and other fixed income securities of U.S. and certain other issuers.

- Up to 70% of Plan assets may be invested in public equities, including common stock, preferred stock, and investment company shares. Within the overall 70% limit:

    - Up to 70% of Plan assets may be invested in equity securities of U.S.-based publicly traded companies that are traded on a U.S. exchange.

    - Up to 10% of Plan assets may be invested in equity securities of non-U.S.-based publicly traded companies that are traded on a U.S. or foreign exchange and meet certain other requirements.

    - Additionally, up to 10~~5~~%[2] of Plan assets may be invested in U.S. equity real

[1] Per the Actuary's Resolution of February 2012 and subsequent legislative change consistent with Chapter 3 of the Laws of 2013.

[2] Per Legislative change to the NYS RSSL in February 2011

estate. These investments are included in the overall 70% limit on public equities, even if the underlying securities are not publicly traded.

- In addition, under RSSL Section 177's Basket Clause, the Fund may invest up to 25% of its assets in investments that do not qualify or are not otherwise expressly authorized under RSSL Section 177 or other provisions of law, subject to certain limitations. Examples of such investments include:
  - Equity real estate in excess of 10~~5~~% of the market value of Plan assets.
  - Private equity investments.
  - Other investments that do not qualify or are not expressly authorized under RSSL Section 177 or other provisions of law.

SECTION IV. INVESTMENT OBJECTIVE

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The overall investment objective of the NYFDPF is to achieve a competitive market rate of return compatible with its risk tolerance and with prudent investment practices, and which, together with employee and employer contributions, will allow it to meet current and future benefit obligations and plan expenses.

NYFDPF maintains a long-term perspective in formulating and implementing its Investment Policy, and in evaluating its investment performance because of the long-term nature of its liabilities.

In implementing its investment objective, the Board considers capital market assumptions on projected returns and risk of a variety of asset classes, as well as the current AIR assumption.

The AIR assumption is a key actuarial assumption affecting future NYFDPF funding rates and pension liabilities. Based on the actuarial assumptions and methods recommended by the Actuary and adopted by the Board, a~~n~~ 7~~8~~.0%[3] per annum return on assets, together with employee and annual employer contributions, is expected to fully fund the Plan over time in order to allow it to meet current and future benefit obligations. Investment performance that exceeds or underperforms the AIR assumption may materially affect future funding rates. The Board seeks to have long-term investment performance that will equal or exceed its AIR assumption.

[3] Per the Actuary's Resolution of February 2012 and subsequent legislative change consistent with Chapter 3 of the Laws of 2013.

SECTION V. INVESTMENT PHILOSOPHY AND STRATEGY

The IPS establishes the investment philosophy and strategy of the Board, as well as implementation procedures. The Board may review and revise the IPS from time to time as market conditions or other factors make such revisions advisable.

The Trustees expect asset allocation to be the primary determinant of the Fund's ability to achieve its investment objective. For this reason, equities comprise the largest portion of the System's assets. The Board also strives to diversify the portfolio. Diversification is achieved by investing in asset classes such as fixed income, real assets~~estate~~, and private equity – asset classes in which price movements are less correlated with the price movements of U.S. equities. Moreover, the Board seeks to diversify its portfolio by capitalization, geography, economic sector, and other relevant factors.

Expected returns for asset allocation purposes are calculated based on long term capital market expectations. Return expectations are consistent with Modern Portfolio Theory in that, for example, equities are expected to generate a higher return than fixed income instruments over the long run, commensurate with their higher expected risk.

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The Fund maintains a long-term investment focus implemented through a policy of rebalancing assets to policy weights on a regular basis. Although the Board reviews performance of the Fund, and of individual Managers, on a quarterly basis, and compares them to established benchmarks, the Board establishes long-term strategy through asset allocation studies conducted at least every five years (or more frequently if the Board deems appropriate). These studies assess long-term expected capital market returns, and include reviews of the Manager structure used to implement the asset allocation policy. The Board may also conduct an asset/liability study when, in its discretion, it believes such a study could assist in the asset allocation process.

SECTION VI. ASSET ALLOCATION AND REBALANCING

When the Board desires to conduct an asset allocation review, BAM works with ~~the~~ NYFDPF general Consultant (the "Consultant") to present the Board with alternative structures reflecting different risk and return scenarios and asset class diversification strategies. In recommending capital market assumptions and considering asset classes, BAM and the Consultant coordinate their efforts with those of the general Consultants to the other New York City Retirement Systems. The Board establishes an asset allocation based on the analyses and recommendations of BAM and the Consultant (in particular, on a mean-variance optimization model) and on the input provided by the Actuary. Any resulting changes in asset allocation are incorporated into the Investment Policy Statement.

At the direction of the Board, BAM implements the asset allocation policy. To implement changes to the Fund's asset allocation, BAM issues requests for proposals ("RFPs") or, in the case of illiquid investments, coordinates, with specialist Consultants, a competitive process for the selection of investments (in either case, the "Investment Selection Process"). At the end of the Investment Selection Process, the Board selects Advisors, Managers or other vendors, where appropriate, to invest and manage funds. BAM arranges funding to the Manager(s) selected by the Board consistent with these decisions.

NYFDPF adopted its current target Long Term Strategic Allocation (asset allocation) in June 2011. The table below shows the most recent adopted allocation.

Subsequent to the Asset Allocation adopted in June 2011, the Board approved new rebalancing ranges (for the traditional asset classes), new pacing ranges (for the alternatives asset classes), and interim asset class holding places (parking places) for unfunded commitments. The ranges below were adopted by the Board in December 2011, and were subsequently amended in March 2013.

Unfunded allocations to Hedge Funds, Opportunistic Fixed Income, Private Equity and Real Assets are temporarily allocated as per the Footnotes Table below the asset allocation Table. ~~NYFDPF adopted its current Long Term Strategic Allocation (asset allocation) in September, 2003 and most recently amended it in May, 2007. The table below shows the most recently amended allocation as well as the interim allocation as of March 31, 2007 pending full funding of new asset classes. During the funding period for the Private Equity and Real Estate allocation, the unfunded portions of those asset classes will be invested in Domestic Equity.~~

	Long-Term Strategic Allocation	Rebalancing Range
Equity Securities		
Domestic Equity	29%	+/-6
Non-U.S. Equity	10	+/-3
Emerging Markets Equity	6.5	+/-2
Hedge Funds	5	+/-3
REITs	3	+/-2
Private Equity	7	+/-2
Real Assets	5	+/-2
Total Equity	**65.50%**	**+/-6%**
Fixed Income Securities		
Core +5 Fixed-Income	19.5	+/-4.5
Enhanced Yield**	4	+/-2
Opportunistic Fixed	5	+/-3
TIPS	5	+/-2
Convertible Bonds	1	+/-1
	34.50%	**+/-5%**

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Total Fixed-Income

**Effective June 2012, the Board adopted a specific allocation of up to 1/3 of the Enhanced Yield allocation to Leveraged Loans (aka Bank Loans).

"Parking places" for unfunded allocations are as follows:

Private Equity	75% Domestic Equity	25% International Equities
Hedge Funds	50% Domestic Equity	50% Core+ 5
Opportunistic Fixed Income	50% Core +5	50% Enhanced Yield
Real Assets	50% Core +5	50% Domestic Equities

	~~**Long Term Strategic Allocation**~~	~~**Interim Allocation**~~	~~**Rebalancing Range**~~
~~**Equity Securities**~~			
~~Domestic Equity~~	~~40%~~	~~46%~~	~~+/-4%~~
~~REITs~~	~~3~~	~~4~~	
~~Non-U.S. Equity – Dev. Mkts.~~	~~13~~	~~14~~	~~+/-2%~~
~~Emerging Markets Equity~~	~~4~~	~~5~~	~~+/-1%~~
~~Private Equity~~	~~5~~	~~2~~	
~~Equity Real Estate~~	~~5~~	~~1~~	
~~**Total Equity**~~	~~**70%**~~	~~**72%**~~	~~**±5%**~~
~~**Fixed Income Securities**~~			
~~Core +5 Fixed-Income~~	~~19~~	~~19~~	~~+/-4%~~
~~ETIs~~	~~2~~	~~1~~	
~~Enhanced Yield~~	~~6~~	~~5~~	~~+/-1%~~
~~TIPS~~	~~3~~	~~3~~	~~+/-1/2%~~
~~**Total Fixed-Income**~~	~~**30%**~~	~~**28%**~~	~~**±5%**~~

Capital market expectations associated with this asset allocation embody a forecast that this asset allocation will achieve an average annualized return of 7.1%[4] ~~of 8.23%~~ gross of expenses over a market cycle. Because markets are volatile, actual investment returns, even in a broadly diversified portfolio, will likely fall in a range around the expected return in any given year. While the Board intends asset allocation to reduce the volatility of the total portfolio, volatility cannot be eliminated. Based on the assumptions used in establishing this asset allocation, in any given year, the Board expects the 12-month return to have a standard deviation of approximately 11.8%.[5]

[4] This was adopted by the Board as part of the Asset Allocation decision in June 2011.

[5] The average annualized return and accompanying standard deviation were adopted by the Board as part of the Asset Allocation decision in June 2011.

Assets are rebalanced to ensure that the System's actual investment mix remains consistent with its asset allocation policy. Volatility in the capital markets and/or over- or under-performance of a particular asset class drive the need to rebalance. The Board reviews its asset mix on a quarterly basis. This range is designed to constrain the extent to which changes in capital markets result in long-term divergences between asset allocation policy and actual investment mix. Significant or extended divergences from policy must have the approval of the Board.

BAM implements the Board's rebalancing policy. BAM monitors the actual investment mix and compares it with the asset allocation policy on a monthly basis. The primary tool for controlling asset class exposure is the payment of pension benefits and expenses from Fund assets. As funds are needed for these payments, BAM seeks to liquidate assets in overweight classes. Assets are liquidated with a goal of maintaining the Board's allocation decisions to asset classes and to portfolio structure targets within asset classes.

In implementing the rebalancing policy, maximizing the alignment of actual and policy asset allocation is not the sole consideration. BAM is authorized to take into account factors which a prudent investor might reasonably consider in purchasing or selling securities such as the size of the asset class, liquidity constraints of each asset class, and relative transaction costs and fees.

Other rebalancing interventions may occur when benefit and expense payments are insufficient to keep asset class exposures within the target or in response to a change in asset allocation policy.

In the event that payments of benefits and expenses are insufficient to keep the System's actual investment mix within the established ranges for the policy's asset classes, or where rebalancing is necessitated by a change in asset allocation policy, BAM implements a plan for liquidating assets in the over-weighted asset class(es) and transferring assets to the under-weighted class(es). In constructing the plan, BAM considers the size of the asset class, the liquidity constraints of each asset class and the transaction costs and fees connected with any such liquidation and transfer.

Coincident with the asset allocation study, the Board reviews with its Consultant the [6]parking places for unfunded commitments in illiquid asset classes and the rebalancing/pacing ranges for each asset class ~~and class component~~ and makes ~~any~~ revisions to those ranges that seem appropriate given changes in capital market conditions.

SECTION VII. GUIDELINES

BAM adopts detailed investment guidelines for Investment Managers to ensure implementation of Board mandates. Managers are responsible for certifying their compliance with guidelines on a quarterly basis. BAM also monitors guideline compliance through the Master Custodian's system.

[6] Parking places, rebalancing ranges, and pacing ranges were adopted in December 2011.

SECTION VIII. LIQUIDITY

The Fund's asset allocation policy does not include an allocation to cash. Managers are generally expected to be fully invested but may maintain limited cash balances to manage duration of bond portfolios, or as a result of implementing purchases or sales of assets. Cash balances ~~levels of the fund~~ for liquidity, are expected to remain below ~~1~~5%[7]; except in unusual circumstances. ~~although c~~Cash ~~may~~ in excessed of 5~~1~~% will require prior notification to, and approval by the Board.~~for brief periods to meet benefit payments and rebalancing requirements.~~

SECTION IX. ROLES AND RESPONSIBILITIES OF SERVICE PROVIDERS

The Board retains service providers to assist in the management of the Fund. Such providers include, but are not limited to, Investment Advisors, general and specialist Consultants, and attorneys. The providers perform in a fiduciary capacity and must exercise the requisite duties of care and loyalty to NYFDPF. The Office of the Comptroller retains the Master Custodian for the Fund.

A. General Consultant

The Board employs a general Consultant, which performs as a fiduciary to the Board. The responsibilities of the Consultant include:

- Assisting the Board to create and maintain the Investment Policy Statement
- Advising the Board on the investment of NYFDPF assets.
- Advising the Board regarding strategies for the allocation of assets across capital markets that will generate a long-term return consistent with the Board's investment objectives and risk tolerance.
- Developing cost-effective structures for the implementation of the Board's asset allocation that will maximize excess returns by Managers while minimizing the volatility of the returns.
- Assisting BAM in identifying potential Investment Managers, in conducting research in screening Managers and in negotiating Investment Manager contracts.

[7] The new liquidity tolerance level was adopted by the Board as a part of the Asset Allocation rebalancing decision in December 2011

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- Monitoring the Investment Managers employed by NYFDPF and providing reports and analyses to the Board and BAM relating to material events such as, but not limited to, relative performance, material changes to senior personnel, investment process and organization.

- Preparing presentations or position papers on topical issues and specific projects.

- Attending meetings as required.

B. Investment Managers

Fund assets generally are managed externally by Investment Managers retained by the Office of the Comptroller, acting on behalf of and with authorization from the Board. Exceptions include:

- Certain short-term cash reserves managed by the Master Custodian or by BAM;

- Certain economically targeted investments, managed by BAM;

- Certain assets lent or invested in through Securities Lending program(s);

- Limited partnership investments~~,~~ that are managed by general partners under limited partnership agreements pursuant to the Board's Alternative ~~and Real Estate~~ Investments Policiesy.

Investment Managers are identified through an RFP process, or such other process as may be determined appropriate and in conformance with applicable regulations and best practices, and are required to enter into an investment advisory contract. Responsibilities include:

- Arranging, ordering and monitoring the purchase and sale of securities for the System's portfolio. The Investment Manager at all times must exercise the highest standard of care to which a professional, ERISA fiduciary or Investment Advisor is subject.

- Adhering to portfolio investment guidelines, including maintaining risk management and oversight policies designed to ensure compliance.

- Advising BAM on possible amendments to portfolio guidelines, as appropriate, given the dynamic nature of the capital markets and that are in the best interest of the System.

- Advising BAM on capital actions relating to securities in or proposed for the portfolio.

- Submitting monthly and quarterly reports summarizing portfolio activity.

- Providing accurate and timely reporting of positions and trades to BAM and to the Master Custodian.

- Reporting significant changes in ownership or control of the firm or changes in organizational structure or professional staffing.

- Attending account review meetings as necessary, but on at least an annual basis.

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C. Master Custodian

By statute, the Comptroller is the custodian of NYFDPF assets, as well as the assets of other New York City Retirement Systems. Assets include such property as cash (in any currency), securities, any other assets or the product thereof, and earnings and profits thereon.

As Custodian, the Comptroller retains by Agreement a Master Custodian to safeguard the property of the funds that the Custodian or its agents, representatives or sub-custodians may receive from time to time for deposit, and for other purposes. (In the case of certain assets such as international equities in commingled accounts, other custodians may be retained to serve as custodians of particular accounts.)

The Master Custodian and its agents and sub-custodians are fiduciaries to the Comptroller, NYFDPF, and other Systems and Funds.

The Master Custodian provides many services. It holds the Fund Accounts, effects purchases and sales of the securities, operates a securities lending program for the benefit of the Fund (see Section XIV), collects income that becomes due and payable on property held in the accounts, makes payment from the accounts at the Comptroller's direction, and maintains books and records to clearly identify cash, securities and other property. Except for accounts in which another custodian assumes some of these responsibilities, the Master Custodian is responsible for the safekeeping of all assets, transaction processing, reporting, performance measurement and compliance

The Master Custodian is also responsible with respect to the various NYFDPF portfolios for:

- the preparation, audit and distribution of investment account reports,
- plan accounting,
- performance calculation and reporting of the portfolios, using industry-accepted standards,
- specialized reporting,
- risk reporting,
- providing the Comptroller with the underlying portfolio data and reports needed to monitor compliance with legal restrictions, investment guidelines and other policies set by NYFDPF,
- providing the Comptroller the underlying data to support NYFDPF proxy voting, and
- providing notification of class actions, files class action settlement proofs of claims on

NYFDPF's behalf and collects and posts settlements to various accounts.

D. Private Equity Consultant

NYFDPF retains one or more specialist private equity Consultants (the "PE Consultant(s)") to assist in the implementation of its strategic allocation to the private equity asset class. The Consultant(s) are fiduciaries and advise BAM and the Board on all aspects of its private equity investment program. The responsibilities of the PE Consultant(s) include:

- Providing strategic advice:
  - Periodic assessments of industry best practices with regard to policies and procedures.
  - Analysis of NYFDPF existing private equity portfolio.
  - Recommendations with respect to proposed sub-asset allocations (e.g., allocations to corporate finance/buyout funds, venture capital, etc.).
  - Annual and longer-term pacing analyses, translating the NYFDPF allocations to private equity, sub-asset allocations and existing portfolio into proposed investment plans.
  - Periodic reports on the state of the private equity marketplace.
  - Such other strategic advice and services as NYFDPF or BAM may reasonably require.
- New investment identification and evaluation, including:
  - Periodic reports on current and anticipated investment opportunities.
  - Specific summary and detailed due diligence reports on prospective individual private equity, limited partnerships and other investment opportunities and evaluating the investment merits of such opportunities in the context of the NYFDPF portfolio, policies and plans.
  - Detailed non-legal assistance in the negotiation and documentation of authorized commitments.
- Portfolio monitoring
  - Periodic and real-time reports on developments at and performance of individual partnerships in the NYFDPF portfolio.
  - Where necessary, advising on and assisting in actions to protect the interests of

NYFDPF as an investor and to ensure compliance by general partners with the terms of their partnership agreements.

- Reviewing and recommending courses of action on partnership amendments.

- Meeting regularly with the Comptroller's staff and making regular presentations to the Board concerning each of these areas of work, as well as individual investment opportunities, and such other topics as the Board or BAM may request.

E. Real ~~Estate~~ Asset Consultants

Fire retains consultants (the "Real Asset Consultants") to assist in the implementation of its strategic allocation to Real Assets. Fire may retain different consultants for each component asset class. The strategic allocation to the asset class is recommended to the Board by its General Consultant. The Real Asset Consultants are fiduciaries and advise Staff and Fire on all aspects of its Real Assets Program. The responsibilities of the Real Asset Consultants include, but are not limited to:
~~To effectively implement its real estate program, the Board has retained a specialist Consultant for real estate. The Real Estate Consultant is a fiduciary to the Board and BAM. The Consultant advises the Board and BAM on all aspects of its real estate investment program. Responsibilities of the Real Estate Consultant include:~~

- Providing Strategic Advice:
- ~~Recommending the initial program design.~~

  - Providing advice to the Board and Staff with respect to the development and operation of the Program, including advice on industry developments and portfolio construction.

  - Assisting the Board and Staff in developing the Real Assets Program IPS, as well as policy statements for component asset classes, and assist in conducting periodic reviews of the IPS and the Program.

  - Together with Staff, provide an annual and a longer term plan for the Program;

  - Periodic assessments of industry best practices with regard to policies and procedures;

  - Analysis of Fire's existing Real Assets Program;

  - Periodic reports on the state of the Real Asset marketplace;

  - Attending meetings of the Board and providing educational seminars for the Trustees;

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- New investment identification and evaluation, including:

~~Assisting in the development, implementation, and periodic review of real estate investment policy statements/guidelines.~~

~~Assisting in the development of a performance monitoring program.~~

~~Assisting in the development/implementation of RFPs, the search for, and evaluation and selection of Investment Advisors and Managers, and the negotiation of contract terms.~~

~~Prescreening prospective real estate investment opportunities to determine whether the opportunity meets the investment and portfolio objectives of the Fund.~~

  - Assisting Staff in identifying, evaluating and recommending investment opportunities and terminations consistent with the IPS and believed to be appropriate for the Program, including conducting due diligence with respect to new investments, as requested;

  - The manager's ability to comply with the Board's investment policies and restrictions;~~Conducting due diligence reviews of prospective real estate Investment Advisors, opportunities, Managers, co-investors, partners, programs, funds and prepared a written report documenting the results of each due diligence review, including a recommendation as to whether the Fund should invest in the reviewed investment.~~

- Periodic reports on current and anticipated investment opportunities.

- Assisting Staff with the implementation, negotiation and execution of new commitments and/or investments;

- Portfolio monitoring:

  - Assisting Staff with the ongoing review of committed investments, including reports to the Board on significant manager developments, proposed amendments to fund documentation and investment performance;

  - Update Board quarterly on any portfolio company opt-outs pertaining to the Board's investment policy;

  - Periodic and real-time reports on developments at and performance of individual investments in the Fire portfolio.

- ~~Monitoring investment performance and compliance.~~

- ~~Providing quarterly and annual performance monitoring reports.~~

- ~~Attending Investment Manager meetings.~~

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- ~~Conducting ongoing and systematic performance analysis in order to identify and report instances of anticipated underperformance or non compliance with the Fund's real estate investment policies, guidelines, and strategies.~~

- ~~Providing research and reports on emerging issues, market trends, new investment structures and techniques.~~

- ~~Attending meetings of the Board, providing educational seminars for the Trustees, and making recommendations and presentations to the Board, as required.~~

- ~~Meeting regularly with the Comptroller's staff and making regular presentations to the Board concerning each of these areas of work, as well as individual investment opportunities, and such other topics as the Board or BAM may request.~~

F. Hedge Fund Consultant[8]

To effectively implement its hedge fund program, the Board has retained a specialist Consultant for hedge funds. The Hedge Fund Consultant is a fiduciary to the Board and BAM. The Consultant advises the Board and BAM on all aspects of its hedge fund investment program. Responsibilities of the Hedge Fund Consultant include:

- Providing advice to the Board and Staff with respect to the development and operation of the Program, including advice on industry developments and portfolio construction, with the goal of an overall Program risk/return profile deemed appropriate by the Board, Staff and the Consultant and monitoring capital markets for investment strategies and investment opportunities;

- Assisting the Board and Staff in developing the IPS and in periodic reviews of the IPS and the Program;

- Together with BAM, provide an annual Tactical Plan for the Program

- Assisting Staff in identifying, evaluating and recommending investment opportunities and terminations consistent with the IPS and believed to be appropriate for the Program, including conducting due diligence with respect to new investments, as requested;

- Assisting Staff with the implementation, negotiation and execution of new

[8] The Board voted to adopt an allocation to Hedge Funds in the asset allocation decision in June 2011, and voted to hire a Consultant for the Program in October 2010.

investments;

- Assisting Staff with the ongoing review of committed investments, including reports to the Board on significant manager developments, proposed amendments to fund documentation and investment performance, and periodic and timely review of the risk of the Systems' investment portfolios (although it is recognized that the ability to provide any such review is limited with respect to hedge funds due to the nature of the underlying hedge fund investments);

- Fulfilling such other purposes as the Board, and BAM staff may approve and consultant may agree to.

SECTION X. INVESTMENT MANAGERS

A. Manager Selection - Public Markets

The Board normally selects Investment Managers to manage NYFDPF assets through a competitive RFP process described below. The Board seeks Managers that will provide superior investment management performance. In selecting Managers, the Board evaluates investment management and decision making capabilities, organizational characteristics, including ownership, management and regulatory issues, the performance of potential Managers in specific investment mandates, and fees.

1. Process

- BAM, working with the Consultant, develops and the Board approves a Scope of Services document that defines the investment services sought, the minimum requirements for proposers, and evaluation criteria.

- BAM issues the approved RFP to firms in BAM's data base and to firms suggested by the Systems' consultant(s) and to respondents to advertisements placed in widely distributed industry periodicals.

- BAM, with the Consultant's input, scores the proposals to identify a "short list" of respondents to be interviewed based on technical proposals received in response to the RFP. BAM notifies the Trustees of the interview schedule.

- At one or more meetings open to all Trustees, BAM and the Consultant conduct interviews.

- BAM, utilizing any additional information obtained at the interviews and any input from the Consultant, ranks and recommends finalists to be interviewed by the Board for potential selection.

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- The Board invites the firms which they have selected as finalists to make presentations. The Board conducts interviews of each of the selected finalists.

- The Board selects Managers and with the assistance of BAM and the Consultant, allocates assets to each firm. In making its final selection, the Board may consider such factors as:

    - The quality and depth of the Manager's investment team.

    - The Manager's clear articulation of its investment strategy.

    - The Manager's successful execution of its strategy over time, as evidenced by, for example:

        - Analysis of the Manager's historical quarterly performance calculated on a time-weighted basis, based on a Global Investment Performance Standards (GIPS) compliant composite of all fully discretionary accounts of similar investment style.

        - Performance evaluation reports prepared by BAM with the assistance of the Consultant that illustrate the risk/return profile of the Manager relative to other Managers.

        - Significant or adverse regulatory issues.

    - The Manager's compliance and information systems.

- BAM negotiates contracts with selected firms.

- BAM funds the Managers' portfolios in accordance with the Board's mandate.

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2. General Requirements

Managers selected to manage publicly traded assets for NYFDPF must be registered investment advisers under the Registered Investment Advisers Act of 1940 or a bank or trust company as defined in the Act. Managers shall not be the subject of regulatory or enforcement actions, pending or threatened litigation, or legal judgments that in the Board's judgment would impair the Managers' ability to provide expert investment management services to NYFDPF.

3. Contract Renewal Policy

Contracts with Investment Managers, Consultants, and other service providers are generally awarded for an initial term of three years, and may be extended at the option of the Board twice for a maximum of three years per extension.

Contracts will provide that the Board may terminate a service provider on 30 days' notice.

B. Manager Selection - Private Markets

NYFDPF invests in private equity using a top-down process, seeking to identify investment opportunities which represent superior opportunities relative to the marketplace as a whole and relative to other investment opportunities characterized by similar strategy. In addition, such opportunities must demonstrate a strong likelihood of producing top-quartile performance, including either:

(a) History of top-quartile performance in a clearly articulated and consistent strategy, or

(b) In the absence of a history of top-quartile performance in the specific investment strategy, other superior relevant experience including a combination of:

i. Time together as a team,
ii. Investment track record assembled elsewhere,
iii. Participation in a top-quartile effort, and
iv. Experience working successfully in the articulated strategy.

Pursuant to its ~~Alternative~~ various Investment Policy Statements for the alternative asset classes, NYFDPF each year adopts an Annual Plan, establishing sub-asset allocations as the System may deem appropriate, establishing a pace and volume of targeted investment, and identifying specific targets for investment, including both "re-ups" – renewals of existing relationships – and new investment relationships. The Board may also elect to allocate funds to Managers to invest at their discretion under discrete mandates.

Prospective investment opportunities shall be evaluated by the Consultant(s) and BAM in the context of the Investment Policy Statement, that asset class'~~e~~ ~~Alternative~~ Investment Policy and the Annual Plan. ~~–~~BAM shall establish and implement due diligence procedures, and shall present recommendations by the Consultant(s) and/or the Comptroller to the Board.

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C. Manager Selection – Economically Targeted Investments

NYFDPF invests in Economically Targeted Investments (ETIs). ETIs are investments in a variety of asset classes which generate rates of return commensurate with the overall risk, liquidity, security and structure of comparable non-targeted investments while providing collateral economic benefits (benefits that enhance the quality of life and promote economic development and activity) to the targeted areas. The Board, in its ETI Policy, has established requirements regarding the qualifications of prospective ETI Managers and evaluation criteria, by which prospective investments will be considered.

Each year NYCPPF adopts an Annual Plan regarding ETIs. Prospective investment opportunities are evaluated by BAM (and Consultants as appropriate) in the context of the 1) ETI Policy 2) Investment Policy Statement for the relevant asset class, and 3) the Annual Plan. In identifying ETIs, BAM applies appropriate solicitation processes and due diligence procedures, and presents its recommendations to the Board. The Board considers and authorizes ETI investments.

D. Emerging Managers

The Fund seeks to employ Emerging Managers. Emerging Managers are asset Managers the Board believes will add value to the Fund through implementation of investment strategies consistent with the Board's asset allocation and other policies, but which, because of size, length of track record, or other similar factors, have not been awarded contracts through the Board's Manager selection process. Smaller Emerging Managers are typically retained pursuant to a Manager of Managers arrangement, while larger Emerging Managers may be retained directly. The Board implements its Emerging Manager program through a competitive RFP process.

The Emerging Manager Program includes both Fixed Income and Equity Managers. The Equity portion of the Emerging Managers Program is allocated entirely towards small-cap Managers[9].

E. Brokerage

The Board delegates discretion over placement and execution of securities transactions to its Investment Managers. It is the intention of the Board that all securities transactions be effected to the best advantage of the System regarding price and execution. The Board recognizes that "soft dollar" commissions are allowed under Section 28(e) of the Securities and Exchange Act of 1934 (commonly referred to as the "safe harbor" provisions). The Board requires its Investment Managers to report information on soft dollar transactions involving securities of the System. These reports shall be provided periodically upon request to BAM in accordance with the Ethics and Compliance Policy of the System (see Appendix 2).

The Board supports diversity among brokers providing securities transaction services to its Investment Managers. Managers are encouraged, to the greatest extent possible consistent with best execution, to use minority- and women-owned brokerage firms. Investment Managers report the use of minority- and women-owned brokerage firms to BAM.

SECTION XI. PERFORMANCE MONITORING AND

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[9] The Board voted to expand the Emerging Managers Program to Fixed Income and to tilt the portfolio to a small-cap program in February 2012.

EVALUATION

A. Benchmarks

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The Board monitors Fund performance against a variety of applicable benchmarks.

1. Policy Benchmark

To monitor the Fund, the Board adopts a Policy Benchmark which reflects the performance of the markets to which the Board has allocated assets. Because of the allocations to new asset classes in ~~September 2003~~general, the Policy Benchmark has been and will continue to be adjusted as the allocations to ~~real estate and private equity~~new or existing asset classes are funded. The Policy Benchmark serves as a minimum performance objective for the Fund, and allows the Trustees to evaluate the implementation of its asset allocation strategy. The Policy Benchmark will be included in all quarterly evaluation reports of NYFDPF. As of ~~December 31~~June 30, ~~2006~~2013, the composition (i.e. the asset classes and the accompanying benchmark) of the Policy Benchmark was:

- US Equity: Russell 3000 Index
- EAFE: Morgan Stanley Capital International EAFE Index (Net)
- EAFE Small Cap: Small Cap S&P EPAC
- Emerging Markets Equities: MSCI Emerging Markets Free Index
- Core+ 5: Citigroup Core +5 Fixed Income Index
- Enhanced Yield: Citigroup BB & B Fixed Income Index
- Leveraged Loans: Credit Suisse Leveraged Loans Index
- TIPS: Barclays Capital US Inflation Linked Index
- Convertible Bonds: Bank of America Merrill Lynch All US Convertibles ex-Mandatory Index
- Opportunistic Fixed Income: 10% Absolute Annual Return*
- Private Equity: Russell 3000 Index + 300 bps
- Hedge Funds: 1yr Treasury Bill yield + 4%
- Real Estate: NFI - ODCE Index (Net) +100bps
- REITS: Dow Jones U.S. Select Real Estate Securities Index
- Infrastructure: Consumer Price Index ("CPI") plus 4% (net)

*The Opportunistic Fixed Income Portfolio is secondarily benchmarked to the JP Morgan Global High Yield Plus 3% for the purpose of capturing the Program's volatility.

- ~~46.8% Russell 3000 Index~~
- ~~13% Morgan Stanley Capital International EAFE Index~~
- ~~4% MSCI Emerging Markets~~
- ~~3% Wilshire RE Securities~~
- ~~21% NYC Core +5 Fixed Income Index~~
- ~~6% Citigroup BB & B Fixed Income Index~~
- ~~3% Lehman U.S. TIPS~~

- ~~2.4% Russell 3000 Index + 500 b.p.~~
- ~~0.8% NCREIF Property Index + 100 b.p.~~

2. Asset Class Benchmarks

The Policy Benchmark is composed of benchmarks which have been established for each individual asset class. The Board will review performance of each asset class relative to its selected benchmark on a quarterly basis.

3. Investment Manager Benchmarks

Each Investment Manager is evaluated relative to an Investment Manager Benchmark composed of a market index plus an active management premium reflecting the Manager's particular style or tactical role in NYFDPF investment program. Each Investment Manager Benchmark will be clearly specified, measurable, and, for liquid securities, investable. Benchmarks may be customized for a particular style or styles. The appropriate Investment Manager Benchmark and expected active management premium shall be determined in advance of funding by mutual agreement between the Investment Manager, BAM and the Consultant.

4. Peer Group Analysis

The Board reviews the performance of the Fund relative to a peer group of other major public pension funds on a quarterly basis. However, due to differences in asset allocation, time horizon, and risk tolerance between public pension funds, comparisons of Fund performance to the AIR assumption and Policy Benchmark are the primary evaluation methods used by the Board.

B. Investment Information

The Board monitors the performance of the Fund and of individual Managers through ongoing monthly and quarterly reviews of performance, market developments, and Manager reviews. The Board uses two primary reports to monitor investment information, the quarterly performance report and the monthly flash report. In addition, the Board may monitor individual Managers through the Watch List. BAM and the Consultant also report to the Board periodically on issues identified by BAM, the Consultant, or the Board as requiring additional review.

On a quarterly basis, the Board reviews a performance report that includes a commentary prepared by the Consultant summarizing portfolio developments and performance. The quarterly performance report also provides detailed quantitative information regarding the risk and performance of Plan assets. Performance is evaluated relative to appropriate market benchmarks, peer comparison universes, and a variety of relevant time periods.

In addition, the Board reviews a flash performance report at each investment meeting. The flash performance report includes asset class and policy benchmark returns for the prior fiscal year and

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Managers provide daily and monthly reports regarding portfolio holdings and transactions to BAM. Managers also complete a detailed quarterly questionnaire regarding portfolio holdings and organizational developments. Responses to the questionnaire are reviewed by the Consultant and BAM. Material developments affecting the Fund are reported to the Board.

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C. Manager Watch List

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The Board monitors the performance of its Investment Managers on an ongoing basis, through its quarterly reporting process. In general, Manager performance is evaluated over a full investment cycle.

The Board may terminate a Manager at any time. The Board or BAM may place a Manager on the watch list. When a Manager is placed on the watch list, the Board and BAM will specify the reasons for its decision. After BAM places a Manager on the watch list, BAM will notify the Board. BAM and the Board's General Consultant will report regularly to the Board on the Manager's progress toward resolving the issue(s) resulting in placement on the watch list. After the Manager is placed on the watch list, the Board will, typically within one year, either conclude that the issue(s) have been resolved, or terminate the Manager.

BAM and the Board may take both qualitative and quantitative factors into account in considering whether to place a Manager on the watch list or whether to terminate a Manager. Examples of qualitative factors include concerns regarding personnel, organizational changes, and ethical, legal or regulatory issues. Examples of quantitative factors are lagging performance or indicators that the investment mandate is not being implemented.

1. Watch List Guidelines - Qualitative Factors

The table below sets forth some of the *qualitative* factors that the Board may consider in determining whether to place a Manager on the watch list or to terminate a Manager.

FACTOR	EVALUATION TECHNIQUE	ACTION STEPS
Changes in ownership	Require immediate notification of any pending changes in ownership.	Assess risk that change may negatively affect investment performance.
Turnover of key personnel	Require immediate notification of any changes in personnel involved in the management of the System's assets, or the senior officers of the Manager.	Assess risk that change may negatively affect investment performance.
Litigation	Require immediate notification if the Manager, a parent, or affiliate is involved in any	Evaluate nature, seriousness and likely impact of charges on the investment process and take

	material litigation, regulatory or enforcement action.	appropriate action.
Conflicts of interest	Require Manager to provide immediate written disclosure.	Review to determine if conflict was material and should have been known by Manager and reported to the Board.
Failure to disclose material information which could affect Manager evaluation	Require Manager to provide immediate written disclosure.	Review information to determine materiality and reasons for failure to disclose.

2. Watch List Guidelines - Quantitative Factors

Managers are expected to exceed their Investment Manager Benchmark (which is composed of a market index plus an active management premium) net of fees over rolling three to five-year periods. Investment performance is measured on a quarterly basis in order to gauge shorter term progress toward long term goals.. Failure to outperform or, in the case of index Managers, to match the market index over time will typically result in placement on the watch list or in the Manager's termination. Failure to outperform the Investment Manager Benchmark (net of fees) may result in placement on the watch list after consideration of tracking error, information ratio, and other quantitative and qualitative factors.

Managers are expected to maintain their stated investment style and philosophy. Quantitative measures of investment style and philosophy include style mapping, style attribution analysis, and tracking error relative to a benchmark. The Consultant monitors these factors on a quarterly basis and advises BAM of potential deviations. Indications that a Manager is not maintaining its investment style and philosophy will typically result in the Board placing the Manager on the watch list. BAM and the Consultant will then present to the Board an evaluation of the Manager's consistency with the Board's asset allocation policy and the Manager's stated investment approach.

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SECTION XII. RISK MANAGEMENT

The Trustees recognize the inevitability of the assumption of risk in the management of the Fund's portfolio. The issue of risk is considered during many phases of the investment decision and implementation process. Risk will be analyzed during the asset allocation strategy and decision making phase using such analytic tools as optimization, risk budgeting, value at risk and volatility and tracking error analysis. The portfolio is diversified across both the public and private capital markets in order to achieve the optimal balance of risk and return among asset classes. Managers are required to have internal controls and risk management systems appropriate to their investment disciplines. Managers selected by the Board shall provide information adequate in quantity, quality and timeliness to permit BAM, the Custodian and the Consultant to monitor risk and compliance.

SECTION XIII. PORTFOLIO TRANSITIONS

Transition management is an integral part of portfolio management. When the Board terminates a Manager and re-allocates assets to another Manager, or funds a new mandate, the portfolio must be transitioned. In accordance with public procurement regulations, BAM selects and works with transition Managers to implement each transition.

Transitions are to be completed in a cost-efficient manner given the characteristics of the portfolios and market conditions. Cost-efficiency for equity portfolio transitions is measured by an analysis of total implementation shortfall. BAM presents a post-trade analysis of the transition to the Board upon completion.

SECTION XIV. SECURITIES LENDING

The Board has authorized the Comptroller to enter into agreements establishing participation in securities lending programs. Securities lending enables the Fund to use its asset base to augment investment income. It involves the temporary exchange of securities owned by the Fund for other securities or cash of a greater value, with an obligation of the borrower to pay a fee to the Fund, and to return a like quantity of the borrowed securities at a future date. The fee paid by the borrower is agreed in advance, while the Fund has contractual rights similar to those it would have as the beneficial owner of the securities except that the Fund does not retain voting rights on loaned equity securities.

The objective of securities lending is to earn income through a conservatively operated and well controlled program. There is no absolute return expectation; rather, income is expected to be commensurate with the market demand for the securities made available by the Fund and the return earned on the investment of cash collateral. 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. Those objectives are pursued within the parameters governing the program as outlined in the securities lending agreements with agent banks. Each agent bank is required to act as a fiduciary with respect to NYFDPF and 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.

SECTION XV. SECURITIES LITIGATION PROTOCOL

NYFDPF objectives in choosing to take an active role in securities litigation include the following:

- Preservation of Plan assets and collection of all amounts due to NYFDPF;

- Maximizing the net recovery to the class; and

- Effecting corporate governance reforms, when appropriate.

NYFDPF will use the process outlined in the Securities Litigation Protocol, (set forth in Appendix 1, Section 11~~0~~), in evaluating and acting on any situation in which securities litigation may be appropriate.

SECTION XVI. INVESTMENT EXPENSES

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It is the policy of the Board that expenses such as consultants' and investment advisors' fees, attorneys' fees and costs, funding for Personal and Other Than Personal Services resources for BAM and other costs that may necessarily be incurred in acquiring, managing and protecting the Fund's investments may be paid from any income, interest or dividends derived from the Fund's deposits or investments. The Board adopts a budget for the incurrence of consultants' and investment advisors' fees, attorneys' fees and other costs. BAM reviews the expenses and costs and arranges for their payment by the custodian bank. Pursuant to a budget, the Board also funds the expenditures of additional resources of Personal Services and Other Than Personal Services for BAM, which will report at least annually to the Board regarding the additional resources.

SECTION XVII. PROXY VOTING/SHAREHOLDER INITIATIVES

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The duty of pension fund fiduciaries to exercise the voting rights attached to the shares of stock owned by their funds has long been established. In the early 1980s, top officials of the Labor Department's Pension and Welfare Benefits Administration (PWBA) (renamed Employee Benefits Security Administration (EBSA), which enforces fiduciary standards for plan sponsors and Managers, repeatedly stated that the right to vote shares owned by a pension plan is, in itself, an asset of the plan, and, therefore, the fiduciary's responsibility to manage the assets includes voting proxies on issues that may affect the value of the shares.

While official pronouncements and guidance on proxy voting rights primarily have been directed to the private sector institutions which have established Plans governed by Employee Retirement Income Security Act of 1974 (ERISA), or to the mutual funds industry, many public pension funds, religious and tax-exempt institutions have followed this guidance. Many private and public pension funds have established proxy committees and guidelines for voting their proxies, and exercise their voting rights in accordance with these policies and guidelines.

This general acceptance of the proxy vote as a plan asset is the primary basis on which NYFDPF established a Proxy Committee. The Committee promulgates proxy voting policies and procedures, and oversees NYFDPF sponsorship of shareholder proposals to improve corporate governance and corporate social responsibility of companies in which NYFDPF invests. NYFDPF adopted a "Statement of Procedures and Policies for Voting Proxies" in 1987 which was last amended in 2012~~0~~[10]~~5~~. The Proxy Committee seeks to ensure that companies follow sustainable business practices which advance their long-term economic value.

The Board has constituted a Proxy Committee comprised of the following Trustees:

1. Commissioner, NYFD,
2. Treasurer, Uniformed Fire Fighters' Association of Greater NY,
3. Chief's Representative, Uniformed Fire Officers Association,

or their delegates.

The operations of this Committee are described in Appendix 1, Section 12~~1~~, and in the above-mentioned Statement of Procedures and Policies.

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SECTION XVIII. ETHICS AND COMPLIANCE POLICY

In furthering the Board's fiduciary duty to manage and invest the assets of the Fund, the Board of Trustees has adopted an Ethics and Compliance Policy (~~appended hereto as Appendix 2~~the Ethics Policy) establishing a comprehensive set of written requirements for the investment consultants (Consultants) and investment managers (Managers) who do or seek to do business with the Fund.

In accordance with the Ethics Policy (appended hereto as Appendix 2), the Consultants and Managers shall submit an Annual Compliance Statement to BAM. Such statement shall include a Certification representing that the Ethics Policy was received and read, and that the Manager or Consultant is in full compliance therewith. It shall also provide appropriate disclosures of real or potential conflicts, and/or of non-compliance with the law or with policies of the Fund or of the City of New York as they may apply to the Consultant or Manager.

To the extent BAM receives or obtains information indicating that the Consultant or Manager is substantially out of compliance with the Ethics Policy and/or substantially in violation of applicable law, BAM will report such information to the Board for whatever action the Board deems appropriate.

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SECTION XIX. REVIEW AND MODIFICATION OF THE IPS

The NYFDPF Board of Trustees reserves the right to amend the Investment Policy Statement at any time it deems such amendment to be necessary or to comply with changes in Federal, State or City Laws or regulations as these changes may affect the investment of Fund assets. In any event, a review of this Investment Policy Statement shall be undertaken no less frequently than every three years.

[10] New Proxy Voting Guidelines and additional methods for communicating with the Committee were adopted in April 2012.

The date and a summary description of amendments or modifications to the IPS are recorded below:

Date	Summary of Amendment or Modification
January 2008	The Board adopted a 1% allocation to Convertible Bonds from Core+ 5 Fixed Income.
May 2008	Board also adopted an allocation to Opportunistic Fixed Income: 5% of the Fixed Income portfolio
November 2008	The Board adopted the Economically Targeted Investments IPS to implement the allocation to that investment class.
April 2009	The Board approved the restructuring of the Core+ 5 Program.
October 2010	The Board adopted the ODCE Real Estate Index instead of the NPI as the Real Estate Program's Benchmark going forward. The Board also voted to hire a Hedge Fund Consultant at this meeting.
May & November 2010; February 2012	The Board approved Amendments to the US Equity sub-allocations and structure – including decisions on size and style mix and to terminate the Activist program. The Board also voted to expand the Emerging Managers Program to Fixed Income and to tilt the portfolio to a small-cap program.
February 2011	NYS Retirement Security Law was amended to increase the amount of assets that can be invested in real property; changing the basket clause.
March 2011	The Board also adopted the Hedge Fund IPS to prepare for an allocation to that asset class.
June 2011	The Board adopted the Opportunistic FI IPS to implement the allocation to that asset class.
June 2011	Adopted Asset Allocation to reflect new AA approved by the Board in June 2011 including the addition of certain other asset classes, and to update the Board's policy expectations in general and within asset classes.
September 2011	The Board approved an expansion to the REITs Program to expand the Managers mandates to include more flexibility to purchase Global REITs securities.
December 2011 & March 2013	Expanded Asset Allocation to update newly adopted rebalancing and pacing ranges for all asset classes, to update the cash balance limit for liquidity, and to update the "parking places" for unfunded alternative asset classes.
February 2012	The Actuary secured a legislative change to reduce the Actuarial Investment Rate from 8% to 7% (net of fees), subsequent to a resolution presented to the Board consistent with Chapter 3 of the Laws of 2013.
April 2012	New Proxy Voting Guidelines and additional methods for communicating with the Proxy Committee were adopted by the Committee.
June 2012	Adopted a sub-allocation to Leveraged Loans, as part of the previously adopted allocation to Enhanced Yield.
September 2012	Added a new allocation to Small Cap EAFE to be 10% of the total EAFE Policy allocation, and adopted a new active/passive split for the EAFE asset class.

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October 2012	Adopted the updated Private Equity IPS which also changed the Benchmark premium over the Russell 3000 Index.
December 2012	Adopted the Real Assets IPS to include Real Estate and any other Real Asset investments, thus approving an allocation to Infrastructure. An active premium of 100 bps was also added to the RE Benchmark with the new Real Assets IPS. Implementation to be determined for the new asset class.
April 2013	The Board adopted a resolution to omit the requirement that evaluation counsel cannot serve as litigation counsel in the same matter, thus amending the Securities Litigation Protocol.
May 2013	The Board approved the expansion of the ETI Public/Private Apartment Rehabilitation Program to include additional NYS Counties.

APPENDIX I - ASSET CLASS AND SPECIFIC POLICIES

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1. U.S. Equities~~y~~

Definition and Purpose

U.S. Equity is defined as common and preferred stock of U.S. and foreign corporations, denominated in U.S. dollars and traded on a U.S. exchange. With a strategic policy weight of ~~40~~29%, U.S. Equity is the largest asset allocation of the Fund. At the total fund level it is the primary driver of risk and return for the Fund.

Philosophy and Strategy

The U.S. Equity portfolio is structured to capture exposure to the broad U.S. Equity market as represented by the Russell 3000 Index. The U.S. Equity portfolio is diversified across industries, economic sectors and other appropriate investment characteristics.

The Board primarily employs passive management (index funds) in market sectors that it views as efficient. Index funds provide broadly diversified market exposure with controlled market risk and minimal cost.

However, the Board employs active Managers for a significant portion of its investments in each of the capitalization ranges. In these less efficient sectors of the U.S. Equity Markets, the Board believes that selected Managers possess skill identifying companies that may be undervalued or have substantial growth potential that will enable them to capture excess returns relative to the sector benchmark, adjusted for risk and fees. The Board has allocated ~~a significant percentage~~26.4% of its ~~large capitalization~~ portfolio to active managers (see the Table below for a breakdown ~~and approximately 12%~~ of the U.S. Equity portfolio to active large, small and mid-cap Managers). The Board employs large, small and mid~~-~~-cap Managers who, in combination, are style-neutral.

Style Allocation:

The U.S. Equity portfolio, in aggregate, is managed in a style- and size-neutral basis.

Use of External Managers

The U.S. Equity Portfolio is implemented through the use of external Managers. Multiple Managers may be used for similar or identical mandates in order to reduce Manager-specific risk. Managers shall be banks, insurance companies, or investment management companies, or investment advisers as defined by the Registered Investment Advisers Act of 1940. Managers are selected in compliance with a competitive RFP process designed to identify Managers with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate that outlines the Manager's individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives. Active Manager performance objectives are expressed as a positive outperformance of their Benchmark.

Managers are to be evaluated through a formal annual account review process conducted by the Bureau of Asset Management staff. Managers exhibiting under-performance, personnel turnover and/or other issues may be monitored more closely through the "Watch List" process.

Proxy Voting

The Board retains Proxy Voting rights, which are exercised by BAM in accordance with the NYFDPF Proxy Voting policy.

Asset Class Objectives:

Trustees review Manager and portfolio performance quarterly. The total U.S. Equity portfolio is expected to marginally outperform the Russell 3000 Index Fund over a full market cycle. Individual Manager performance will be evaluated quarterly and annually in the short-term and over a full market cycle (typically 3-5 years) using benchmarks appropriate to capitalization and style characteristics.

Market Sector Allocations[11]

Fire	
U.S. Equity	**Policy Target**
Large Cap Active	15.00%
Large Cap Passive	85.00%
Large Cap Total	***50.00%***
Mid Cap Active	30.00%
Mid Cap Passive	70.00%
Mid Cap Total	***37.00%***
Small Cap Active	60.00%
Small Cap Passive	40.00%
Small Cap Total	***13.00%***
Subtotal Active	26.40%
Subtotal Passive	73.60%
Total	**100.0%**

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[11] The Board has adopted several sub-allocation changes to the US Equity Program over the years, including May 2010, November 2010 and February 2012.

	~~**Percent of US Equity Program**~~	~~**Expected Active Return over appropriate Benchmark (gross)**~~
~~**Passive**~~		
~~Russell 3000~~	~~54.0%~~	~~0 bp~~
~~**Total Passive**~~	~~**54.0%**~~	~~**0 bp**~~
~~**Active**~~		
~~Enhanced Index~~	~~9.8%~~	~~50 bp~~
~~Large Cap Value and Growth~~	~~21.8%~~	~~100 bp~~
~~Large Cap – Other~~	~~0.1%~~	~~800 bp~~
~~Mid Cap~~	~~5.1%~~	~~150 bp~~
~~Small/Mid Cap~~	~~5.2%~~	~~175 bp~~
~~Small Cap~~	~~2.6%~~	~~200 bp~~
~~Emerging Managers~~	~~1.4%~~	~~65 bp~~
~~**Total Active**~~	~~**46.0%**~~	~~**110 bp**~~
~~**Total U.S. Equity**~~	~~**100.0%**~~	~~**51 bp**~~

~~**Sector Benchmarks**~~

	~~**Benchmark**~~	~~**Comparison Universe**~~
~~**Passive**~~		
~~Russell 3000~~	~~Russell 3000 Index~~	~~N/A~~
~~**Total Passive**~~		
~~**Active**~~		~~**Top Half of:**~~
~~Enhanced Index~~	~~S&P 500~~	~~TUCS Large-Cap Managers~~
~~Large Cap~~	~~Russell 1000~~	~~TUCS Large-Cap Managers~~
~~Large Cap – Other~~	~~S & P 500 + 800~~	~~TUCS Large-Cap Managers~~
~~Mid Cap~~	~~Russell Mid-Cap Index~~	~~TUCS Mid-Cap Managers~~
~~Small/Mid Cap~~	~~Russell 2500 Index~~	~~TUCS Small-Mid Cap Mgrs.~~
~~Small Cap~~	~~Russell 2000 Index~~	~~TUCS Small-Cap Managers~~
~~Emerging Managers~~	~~Russell 3000 Index~~	~~TUCS Large-Cap Managers~~
~~**Total Active**~~		
~~**Total U.S. Equity**~~	~~Russell 3000 Index~~	~~N/A~~

Liquidity:

Managers are expected to be fully invested. Index funds are managed with cash levels below 1%. Active Managers are limited to a maximum of 5% cash for trading purposes. As necessary, BAM may direct Managers to sell securities to fund benefit payments and other eligible System expenses, or as otherwise appropriate for rebalancing purposes.

~~2. U.S. Real Estate Equity Securities~~

~~Definition and Purpose~~

~~The U.S. Real Estate Equity Securities (REES) program is dedicated to equity and convertible securities of U.S. real estate companies, defined as real estate investment trusts (REITs) and/or real estate operating companies (REOCs) organized under the laws of any state of the United States or province of Canada.~~

~~The strategic policy weight for the REES program is 3%.~~

~~Philosophy and Strategy~~

~~The REES program is structured to capture exposure to the U.S. REIT and REOC markets as represented by the Wilshire Real Estate Securities Index. The REES program is diversified across property types and sectors, geographical regions, and other appropriate investment characteristics. Additionally, equity securities of Canadian real estate companies may be purchased to a limited degree.~~

~~Historically over long periods of time, managers of real estate securities have outperformed the Wilshire Real Estate Securities Index adjusted for risk and fees. Therefore, the Board has allocated the entire REES portfolio to active Managers.~~

~~Use of External Managers~~

~~The REES program is implemented through the use of external Managers. Managers shall be banks, insurance companies, or investment management companies, or investment advisers as defined by the Registered Investment Advisers Act of 1940. Managers are selected in compliance with a competitive RFP process designed to identify Managers with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the OTC pursuant to the Board's mandate. The guidelines outline the Manager's individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives. Managers are monitored through the Watch List process.~~

~~Proxy Voting~~

~~The board retains proxy voting rights, which are exercised by Office of the Comptroller in accordance with the Board's proxy voting policy.~~

~~Asset Class Objectives~~

~~Trustees review manager and portfolio performance quarterly. The total REES program is expected to outperform the Wilshire Real Estate Securities Index by 200 basis points per year gross of fees over a full market cycle. Individual manager performance will be evaluated quarterly, annually, and over a full market cycle (typically 3-5 years).~~

~~Liquidity~~

~~The REES program is generally not a source of liquidity for the Fund, although, benefits may be paid out of the portfolio as required. Managers are expected to be fully invested, and are limited to a maximum of 5% cash for trading purposes. As necessary, OTC may direct Managers to sell securities to fund benefit payments and certain other eligible system expenses, or as otherwise appropriate for rebalancing purposes.~~

2~~3~~. International Equities – EAFE Markets

Definition and Purpose

EAFE Equity is defined as common and preferred stock of foreign corporations domiciled in developed markets, denominated in foreign currency and traded on foreign exchanges.

Philosophy and Strategy

The EAFE Equity portfolio is structured to capture exposure to the broad non-U.S. Equity market as represented by the MSCI EAFE (Europe, Australasia & Far East) Index. The EAFE Equity portfolio is to be diversified across countries, industries, economic sectors and other appropriate investment characteristics.

Historically, over long periods of time EAFE Equity Managers have outperformed the EAFE index adjusted for risk and fees. Therefore, the Board has allocated the portfolio to be split 90.4% active and 9.6% passive[12] Managers.
~~a larger proportion of the allocation to active Managers.~~

Also, In September 2012, the Board voted to add a Small Cap EAFE allocation to its portfolio, to represent 10% of the Non-US Equity allocation.

[12] In September 2012, the Board voted to re-structure the Non-US Equity portfolio, including a specific allocation to Small Cap EAFE.

EAFE Index funds provide broadly diversified market exposure with controlled market risk and minimal cost. The Index fund provides a core EAFE Equity exposure.

Style Allocation:

The EAFE Equity portfolio style allocation changes depending upon market trends and individual manager performance. ~~However, due to the structure of the EAFE index and active Managers' styles, t~~The ~~Fund~~ EAFE Equity portfolio, in the aggregate, is managed on a style-neutral basis~~has a large cap bias~~.

Use of External Managers

The EAFE Equity Portfolio is implemented through the use of external Managers. Managers shall be banks, insurance companies, investment management companies, or investment advisers as defined by the Registered Investment Advisers Act of 1940. Managers are selected in compliance with a competitive RFP process designed to identify Managers with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate. The guidelines outline the Managers' individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives.

Managers are to be evaluated through a formal annual account review process conducted by the Bureau of Asset Management staff. Managers exhibiting under-performance, personnel turnover and/or other issues may be monitored more closely through the "Watch List" process.

Proxy Voting

Proxies are voted by the Managers.

Asset Class Objectives:

The total EAFE Equity portfolio represents 10~~3~~% of the Fund's asset allocation and is expected to outperform the MSCI EAFE index by 200 basis points per year gross of fees over a full market cycle. Individual Manager performance will be evaluated quarterly and annually in the short-term and over a full market cycle (typically 3-5 years) using the index and a comparison universe of the top half of TUCS non-US equity managers. Trustees review portfolio performance quarterly.

Market Sector Allocations[13]

[13] In September 2012, the Board voted to re-structure the Non-US Equity portfolio, including a specific

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	Target Sub-allocations	Expected Active Return (gross)
Passive		
EAFE Index	9.6~~20~~%	0
Total Passive	**9.6~~20~~%**	**0**
Active		
Growth	20.~~1~~6%	
Core	44.7~~32~~%	
Value	25.1~~32~~%	
Total Active	**9~~8~~0.4%**	**250 bp**
Total EAFE Equity	**100%**	**200 bp**

Liquidity:

The EAFE Equity portfolio is not a source of liquidity for the Fund, although benefits may be paid out of the portfolio as required. Managers are expected to be fully invested. Index funds are managed with cash levels below 1%. Active Managers are limited to a maximum of 7% cash for trading purposes. As necessary, BAM may direct Managers to sell securities to fund benefit payments and certain other eligible system expenses, or as otherwise appropriate for rebalancing purposes.

Currency Hedging:

Managers are permitted to hedge a portion of their currency exposure. Hedging may only be used for defensive purposes and not as a form of leverage.

Emerging Equity Markets:

Managers are permitted limited exposure to emerging equity markets. Holdings in emerging markets countries must not exceed 15% of the portfolio.

3~~4~~. International Equities - Emerging Markets

Definition and Purpose

allocation to Small Cap EAFE.

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Emerging Markets Equity is defined as common and preferred stock of foreign corporations domiciled in countries included in the MSCI Emerging Markets Index, denominated in foreign currency and traded on foreign exchanges. It may also include emerging market American Depository Receipts (ADRs) or Global Depository Receipts (GDRs) denominated in U.S. dollars.

Philosophy and Strategy

The Emerging Markets Equity portfolio is structured to capture broad exposure to the high growth economies of developing countries. ~~In addition to~~There are higher risk-adjusted expected returns from this investment~~, the Fund will also benefit from the low return correlation with the U.S. Equity portfolio~~.[14]

Historically over long periods of time Emerging Markets Equity Managers have outperformed the MSCI Emerging Equity Market Index adjusted for risk and fees. Therefore the Board has allocated the entire emerging markets portfolio to active Managers.

The Board currently maintains a large allocation to passive management until such time as highly rated closed managers reopen, to allow for a higher allocation to active managers at that time.[15]

Style Allocation:

The Emerging Markets Equity portfolio, in the aggregate, is managed in a style-neutral basis but may change based upon market trends and individual manager performance.

Use of External Managers

The Emerging Markets Equity Portfolio is implemented through the use of external Managers. Managers shall be banks, insurance companies, investment management companies, or investment advisers as defined by the Registered Investment Advisers Act of 1940. Managers are selected in compliance with a competitive RFP process designed to identify Managers with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate that outline the Managers' individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives.

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Managers are to be evaluated through a formal annual account review process conducted by the Bureau of Asset Management staff. Managers exhibiting under-performance, personnel turnover and/or other issues may be monitored more closely through the "Watch List" process.

[14] EM Equities and US Equities are now much more highly correlated in recent years.

[15] Per Board Memorandum adopted in December 2011.

Proxy Voting

Proxies are voted by the Managers.

Asset Class Objectives:

The Board reviews portfolio performance quarterly. The total Emerging Markets Equity portfolio is expected to outperform the MSCI Emerging Markets Free Index by 200 basis points per year gross of fees over a full market cycle. Individual Manager performance will be evaluated quarterly and annually in the short-term and over a full market cycle (typically 3-5 years).

~~**Market Sector Allocations**~~

	~~**Percent of Program**~~	~~**Expected Active Return (Gross)**~~
~~**Active**~~		
~~Growth~~	~~33 1/3~~	
~~Core~~	~~33 1/3~~	
~~Value~~	~~33 1/3~~	
~~**Total Emerging Markets Equity**~~	~~**100%**~~	~~**200 bp**~~

Liquidity:

The Emerging Markets Equity portfolio is not a source of liquidity for the Fund, although benefits may be paid out of the portfolio as required. Managers are limited to a maximum of 7% cash for trading purposes. As necessary, BAM may direct Managers to sell securities to fund benefit payments and certain eligible system expenses, or as otherwise appropriate for rebalancing purposes.

Currency Hedging:

Managers are permitted to hedge a portion of their currency exposure. Hedging may only be used for defensive purposes and not as a form of leverage.

4. U.S. Real Estate Equity Securities

Definition and Purpose

The U.S. Real Estate Equity Securities (REES) program is dedicated to equity and convertible securities of U.S. real estate companies, defined as real estate investment trusts (REITs) and/or real estate operating companies (REOCs) organized under the laws of any state of the United States or province of Canada.

The strategic policy weight for the REES program is 3%.

Philosophy and Strategy

The REES program is structured to capture exposure to the REIT and REOC markets as represented by the Dow Jones U.S Select Real Estate Securities Index. The REES program is diversified across property types and sectors, geographical regions, and other appropriate investment characteristics. Additionally, equity securities of developed markets real estate companies may be purchased in the REES Program.[16]

Historically over long periods of time, managers of real estate securities have outperformed the Dow Jones U.S Select Real Estate Securities Index adjusted for risk and fees. Therefore, the Board has allocated the entire REES portfolio to active Managers.

Use of External Managers

The REES program is implemented through the use of external Managers. Managers shall be banks, insurance companies, or investment management companies, or investment advisers as defined by the Registered Investment Advisers Act of 1940. Managers are selected in compliance with a competitive RFP process designed to identify Managers with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by BAM pursuant to the Board's mandate. The guidelines outline the Manager's individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives. Managers are monitored through the Watch List process.

Proxy Voting

The Board retains proxy voting rights for the domestic securities in the REES Program, which are exercised by the Office of the Comptroller in accordance with the Board's Proxy Voting Policy. Managers retain proxy voting rights for international securities held in the REES Program, similar to the process for the EAFE and Emerging Markets equities programs.

Asset Class Objectives

Trustees review manager and portfolio performance quarterly. The total REES program is expected to outperform the Dow Jones U.S Select Real Estate Securities Index by 200 basis

[16] In September 2011, the Board approved changes to the REES Program to expand the Managers' mandates to include more flexibility to purchase Global REIT securities.

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points per year gross of fees over a full market cycle. Individual manager performance will be evaluated quarterly, annually, and over a full market cycle (typically 3-5 years).

Liquidity

The REES program is generally not a source of liquidity for the Fund, although, benefits may be paid out of the portfolio as required. Managers are expected to be fully invested, and are limited to a maximum of 5% cash for trading purposes. As necessary, BAM may direct Managers to sell securities to fund benefit payments and certain other eligible system expenses, or as otherwise appropriate for rebalancing purposes.

5. Fixed Income: NYC Core +5 Program[17]

Definition and Purpose

Fixed income securities are bonds and other debt securities such as mortgage-backed securities, most paying interest on a current basis. The NYFDPF Fixed Income allocation consists of the Core + 5 Portfolio, the Enhanced Yield Portfolio~~-~~ – including an allocation to leveraged loans, the Convertibles Portfolio, the Opportunistic Fixed Income Portfolio, the TIPS Portfolio, and the Fixed Income portion of the ETI Program. The Core +5 Program is the dominant NYFDPF Fixed Income Program, the second largest investment program after U.S. Equity. It is a driver of return and diversification at the total fund level. While the explicit objective is total return, given the fundamental nature of fixed income – relatively predictable income and principal payouts – it also extends the duration of the total fund to better match liabilities, and may be used to provide cash for benefit payments if the portfolio is otherwise within rebalancing ranges.

Most of the securities of the Fixed Income Programs are registered in the U.S. 144~~-~~A securities, Global bonds, and Eurodollar bonds may be permitted investments.

Philosophy and Strategy

The Core +5 Program is benchmarked to a customized version of the Citigroup (formerly Salomon Smith Barney) U.S. Broad Investment Grade Index (the “BIG Index”), known as the ***NYC Core +5 Index***. The NYC Core +5 index comprises sub-indices for three~~four~~ sectors: (1) U.S. Treasury and Agency issues excluding one to five-year maturities; (2) mortgage backed securities; and (3) ~~U.S. corporate bonds; and (4) Yankee bonds (including Canadians and Supranationals)~~Investment Grade Credit. The total allocation to each sector mirrors that sector’s proportion of the custom NYC Core +5 Index, which is revised by Citigroup monthly to reflect market changes.

Concurrent with the implementation of the results of an RFP, the Investment Grade Credit Sector

[17] The Board approved the restructuring of the Core +5 Fixed Income Program in February 2009, reducing the sub-indices from four sectors, among other changes.

was created by combining the previously existing Corporate and Yankee sectors.

The Core + 5 Program is implemented through a sector specialist program, in which Managers are selected for mandates benchmarked to one of the sub-indices. Managers may employ index-like, enhanced index, or active approaches within their sector. Major characteristics of the ~~four~~ three sectors are:

- **U.S. Government**: Consists primarily of U.S. Treasury and Agency debt. Does not include mortgage-backed securities. Managers are permitted to invest in Supranationals to a very small degree. Securities of any maturity may be used, provided that the weighted average duration of the portfolio is within a range of -1.0 year and +0.5 year of the Citigroup Core +5 Treasury/Government Sponsored Index, which includes only those securities with a maturity in excess of five years.

- **Mortgage-Backed Securities (MBS)**: Consists primarily of Agency mortgage pass-throughs and Agency and non-agency securities collateralized by mortgage pass-throughs. Managers are permitted to invest in certain non-benchmark sectors and security types. Securities of any maturity may be used, provided that the weighted average duration of the portfolio is within +/- 0.75 year of Citigroup's standard Mortgage Index, which includes GNMA, FNMA and FHLMC mortgage pass-throughs.

- **Investment Grade Credit:** U.S.-dollar denominated debt securities of domestic corporations and foreign and Supranational entities rated BBB- or higher. Managers are permitted to invest in certain non-benchmark securities to a limited degree, including 10% in high yield securities. Securities of any maturity may be used, provided that the weighted average duration of the portfolio is within +/- 0.5 years of the customized Citigroup Investment Grade Credit Index (which combines the former Domestic Corporate Index and Yankee Index), and includes industrial, utility, financial, asset-backed and credit-enhanced securities.
- ~~**Domestic Corporate**: Consists of debt securities of domestic corporations primarily rated BBB- or higher. Managers are permitted to invest in certain non-benchmark securities to a limited degree, including up to 10% in high yield securities. Securities of any maturity may be used, provided that the weighted average duration of the portfolio is within 0.5 year of the customized Citigroup Domestic Corporate Index, which includes industrial, utility, financial, and asset-backed securities but excludes Canadian and Yankee securities.~~

- ~~**Yankee**: Consists of U.S. dollar denominated debt securities of foreign, Canadian, and Supranational entities. Managers are permitted to invest in certain non-benchmark securities to a limited degree, including up to 10% in high yield securities. Securities of any maturity may be used, provided that the weighted average duration of the portfolio is within 0.5 year of the customized Citigroup non-U.S. BIG Index, which includes foreign, Canadian and Supranational securities.~~

The Program is implemented through the use of external Managers. Managers are selected in compliance with a competitive RFP process designed to identify firms with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate that outlines the Managers' individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives. Subject to constraints contained in guidelines issued by the Comptroller pursuant to Board mandates, value may be added through:

- Duration management, within stated constraints
- Sub-sector weights (within specified ranges of the benchmark weights)
- Security selection, including certain securities/issuers not specifically included in the benchmark

Managers are monitored through the Watch List process.

Asset Class Objectives:

- Trustees review Manager and portfolio performance quarterly. The total Core +5 Program is expected to outperform the custom index over a full market cycle, as indicated below. Individual Manager performance expectations vary, as each employs a distinct approach that may be categorized as index-like, enhanced index or active.

Each Manager will be evaluated quarterly, annually and over a full market cycle (typically 3-5 years).

Market Sector Allocations

Core + 5 Program	**Percent of Program* (as of 6~~12~~/30~~1~~/13~~06~~)**
Government +5	~~20~~18.63%
Mortgage-backed	40.00~~7~~%
~~Domestic Corporate~~Investment Grade Credit	~~25~~41.33%
~~Yankee~~	~~8%~~
Total Core +5	**100%**

(*~~—~~Market sector allocations are adjusted monthly by the benchmark provider, Citigroup, to reflect market weight. The Fund policy is to be neutral to the benchmark/market.)

Liquidity and Cash Management:

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As a fixed income alternative, cash equivalents (or "*short-term fixed income*") are integral to managing risk in fixed income portfolios through portfolio duration. Fixed Income Managers, unlike the Equity Managers, are given wider latitude to use cash equivalents. Government Sector Managers have no explicit limits on cash; however the relatively long duration requirements for this sector indirectly limit the Managers' use of cash equivalents. Corporate and Yankee Sector Managers are allowed to invest up to 10% in cash. MBS Sector Managers are also allowed to invest up to 10% in cash; however, they may hold significantly more cash to back a widely used MBS instrument ("TBA"). These large cash balances, nonetheless, are not considered an immediate source of liquidity. As necessary, BAM may direct Managers to sell securities to fund benefit payments and certain other eligible System expenses, or as otherwise appropriate for rebalancing purposes.

6. Fixed Income: Enhanced Yield Program (Includes Leveraged Loans Sub-Sector) [18]

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Definition and Purpose

Fixed income is defined as bonds and other debt securities, most paying interest on a current basis. While most securities are registered in the U.S., the NYC Fixed Income Programs allow for use of 144 A securities, Global bonds, and Eurodollar bonds. In the Enhanced Yield Program (traditionally referred to as "high yield," or "non-investment grade"), most securities are denominated in $U.S, while a small allocation is permitted for $Canada-denominated issues. Additionally, deferred-interest securities that do not pay interest on a current basis (such as zero-coupon bonds) are permitted. The high yield sector has equity-like features, including convertible securities, preferred stocks, and warrants. Common stock may appear in traditional high yield portfolios as a result of debt restructuring. The characteristics of the high yield sector may be viewed as a cross between traditional bonds and stocks. The objective of the Enhanced Yield Program is total return~~. It is the second oldest and second largest fixed income program, with~~ and has a current policy weight of 4~~6~~%.

Within the overall Enhanced Yield program, the Leveraged Loans program (also known as "Bank Loans") has been established as a sub-sector and is designed to invest up to one-third of total Enhanced Yield as described in the Asset Allocation section.

Philosophy and Strategy

The Enhanced Yield Program employs a variety of external Managers with active management approaches. The Program benchmark and the benchmark for most of NYFDPF Managers is the Citigroup (formerly Salomon Smith Barney) BB & B Index. It is a subset of the widely-used

[18] In June 2012, the Board voted to adopt a sub-allocation to Leveraged Loans and adopted appropriate IPS language for the new Program.

Citigroup High Yield Index and excludes securities with ratings of only CCC or lower. The index includes only securities of U.S. and Canadian corporations. As appropriate, an individual Manager's benchmark may be different from the Program benchmark, depending on the Manager's investment approach.

Managers are selected in compliance with a competitive RFP process designed to identify firms with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate that outlines the Managers' individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives.

Subject to guideline limitations (which may vary modestly by Manager due to stylistic differences), value may be added through:

- Industry / sector allocation
- Quality sector allocation
- Security selection, including certain securities/issuers not specifically included in the benchmark, such as convertibles and investment-grade
- However; direct purchase of defaulted securities and securities of bankrupt companies is explicitly prohibited.
- Cash equivalents may be used on a limited basis
- Duration decisions are not expected to be a notable contributor to performance

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Managers are to be evaluated through a formal annual account review process conducted by the Bureau of Asset Management staff. Managers exhibiting under-performance, personnel turnover and/or other issues may be monitored more closely through the "Watch List" process.

Asset Class Objectives:

Trustees review portfolio performance quarterly. The total Program is expected to outperform the Citigroup BB& B Index over a full market cycle. Individual Manager performance expectations vary, as each employs a distinct approach. The expected active return is at least 125 basis points (bp). Each Manager will be evaluated quarterly, annually and over a full market cycle (typically 3-5 years).

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Liquidity and Cash Management:

The Enhanced Yield Program is not a source of liquidity for the Fund, although, benefits may be paid out of the portfolio as required. Typically, cash equivalents are integral to managing the interest rate risk in fixed income portfolios. However, for high yield, interest rate risk is less of a consideration than for investment-grade bond portfolios like those in NYFDPF main Core + 5 Program. Nevertheless, as the high yield asset class is heavily dependent on new security issuance and may be characterized by extended periods of relative illiquidity (as compared to the U.S. equity market), the Enhanced Yield Managers have been given more latitude to hold cash – the maximum is 8%. As necessary, BAM may direct Managers to sell securities to fund benefit payments and certain other eligible System expenses, or as otherwise appropriate for rebalancing purposes.

7. Fixed Income: Leveraged Loans[19]

Definition and Purpose

Fixed income is defined as bonds and other debt securities, most paying interest on a current basis. While most securities are registered in the U.S., the NYC Fixed Income Programs allow for use of 144 A securities, Global bonds, Eurodollar bonds and Leveraged Loans. In the Leveraged Loans Program (also referred to as "Bank Loans"), most securities are denominated in $US. Common stock may appear in traditional Leveraged Loans portfolios as a result of debt restructuring. The characteristics of the Leveraged Loans sector may be viewed as a cross between Core +5 and High Yield and securities are typically non-investment grade and senior debt obligations in an entity's capital structure. Typically, Leveraged Loans are floating rate debt obligations. The objective of the Leveraged Loans Program is total return.

Philosophy and Strategy

The Leveraged Loans Program employs a variety of external Managers with active management approaches. The Program benchmark is the Credit Suisse Leveraged Loans Index, which includes mostly BB, B, CCC and non-rated securities. The index includes only securities denominated in US dollars. As appropriate, an individual Manager's benchmark may be different from the Program benchmark, depending on the Manager's investment approach which could include securities denominated in currencies other than the US dollar.

Managers are selected in compliance with a competitive RFP or search process designed to identify firms with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate that outlines the Managers' individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives.

[19] In July 2012, the Board voted to adopt a sub-allocation to Leveraged Loans and adopted appropriate IPS language for the new Program.

Subject to guideline limitations (which may vary modestly by Manager due to stylistic differences), value may be added through:

- Industry / sector allocation
- Quality sector allocation
- Security selection, including certain securities/issuers not specifically included in the benchmark
- Direct purchase of defaulted securities and securities of bankrupt companies is generally prohibited
- Cash equivalents may be used
- Duration decisions are not expected to be a notable contributor to performance

Managers are monitored through the Watch List process.

Asset Class Objectives

At a minimum, Trustees review portfolio performance quarterly. The total Program is expected to outperform the Credit Suisse Leveraged Loan Index over a full market cycle by a minimum 100 basis points (gross). Individual Manager performance expectations vary, as each employs a distinct approach. Each Manager will be evaluated quarterly, annually and over a full market cycle (typically 3-5 years).

Liquidity and Cash Management

The Leveraged Loans Program is generally not a source of liquidity for the Fund, although, benefits may be paid out of the portfolio as required. Typically, cash equivalents are integral to managing the interest rate risk in fixed income portfolios. However, for Leveraged Loans, interest rate risk is less of a consideration than for investment-grade bond portfolios like those in NYCRS' main Core + 5 Program due to the floating rate nature of most of the securities. Nevertheless, as the Leveraged Loans asset class is heavily dependent on new security issuance and may be characterized by extended periods of relative illiquidity (as compared to the U.S. equity market), the Leveraged Loans Managers have been given more latitude to hold cash. As necessary, BAM may direct Managers to sell securities to fund benefit payments and certain other eligible System expenses, or as otherwise appropriate for rebalancing purposes.

~~7~~8. Fixed Income: U.S. TIPS Program

Definition and Purpose

Fixed income is defined as bonds and other debt securities, most paying interest on a current basis. In the U.S. TIPS Program, U.S. Treasury Inflation-Protected Securities will be the predominant holding, and most other securities will also be denominated in $U.S. Limited use of inflation linked bonds (ILBs) of foreign developed-market sovereigns will be permitted. The U.S. TIPS Program’~~ is the newest NYFDPF fixed income program and at 3% is one of the~~

~~smallest.~~ ~~It~~s primary purpose is to hedge inflation (as measured by the CPI - U) and, secondarily, to provide diversification.

Philosophy and Strategy

The U.S. TIPS Program will be managed using a combination of index and active management approaches. The policy mix is 25% passive/75% active. The Program and individual Managers' benchmark is the ~~Lehman~~ Barclays Capital[20] U.S. ~~TIPS~~ Inflation-Linked Index, which is comprised of all outstanding TIPS of the U.S. Treasury.

The Program will be implemented through the use of external Managers. Managers are selected in compliance with a competitive RFP process designed to identify firms with demonstrated ability to implement defined mandates. Managers operate subject to a set of detailed investment guidelines developed by the Comptroller's Bureau of Asset Management pursuant to the Board's mandate that outlines the Managers' individual investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities, benchmarks and performance objectives. The portfolio of the passive (or index) Manager will mirror the benchmark index with minimal tracking error; value may be added through trading strategies. Subject to constraints contained in guidelines issued by the Comptroller, which may change over time, the active Managers may add value through:

- Duration and yield curve management
- Individual U.S. TIPS weightings that vary from the benchmark
- Use of nominal U.S. Treasury and inflation-indexed U.S. Agency securities
- Use of inflation linked bonds (ILBs) of foreign developed-market sovereigns, however the position must be hedged back to $U.S. Foreign inflation linked corporate and agency bonds are not permitted.
- Cash equivalents may be used on a limited basis

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Managers will be monitored through the Watch List process.

Asset Class Objectives

Trustees review portfolio performance quarterly. The total U.S. TIPS Program is expected to exceed the inflation rate and to outperform the ~~Lehman Brothers~~Barclays Capital U.S. ~~TIPS~~ Inflation-Linked Index over a full market cycle, as indicated below. Individual Manager performance expectations vary, as each employs a distinct approach that may be categorized as index or active. Each Manager will be evaluated quarterly, annually and over a full market cycle

[20] Barclays Capital has taken over the Lehman Indices, after Lehman Brothers went out of business.

(typically 3-5 years).

Market Sector Allocations

U.S. TIPS Program	Percent of Program	Expected Active Return (gross)
Active Managers	75%	75 bp
Passive (Indexed) Managers	25%	
Total U.S. TIPS Program	**100%**	**55 bp**

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Liquidity and Cash Management:

The U.S. TIPS Program is not a source of liquidity for the Fund, although, benefits may be paid out of the portfolio as required. As a fixed income alternative, cash equivalents are integral to managing risk in fixed income portfolios through portfolio duration. Active Fixed Income Managers, unlike Equity Managers, are given wider latitude to use cash equivalents. The U.S. TIPS Index Manager will be permitted to hold up to 2% cash and the active Managers, up to 20%.

9. Fixed Income: Convertible Bonds[21]

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Definition and Purpose

A convertible bond has the characteristics of two types of securities: a bond and an equity option. Convertible bonds are issued by publicly held companies and come in a variety of forms. At the simplest level, they combine a corporate bond paying a fixed interest rate with an equity warrant (a long term equity call option) on the issuer's common stock. The bonds are senior to equity in a company's capital structure. The allocation of the Fund to this sub-asset class is 1% of the value of the total Fund.

Convertible bonds have higher expected returns and higher risk than conventional corporate bonds. The link to equity volatility through the equity option adds an extra return driver that is not available from a portfolio of stocks and bonds alone. The convertible bond market can be relatively inefficient and therefore provides opportunities for total return oriented investors such as the Fund. The primary purpose of the program is to provide a higher total return than the corporate bond market with less volatility than the equity market, in addition to providing diversification.

Philosophy and Strategy

The Convertible Bond Program employs a variety of external Managers with active management

[21] The Board adopted a 1% allocation to Convertible Bonds in January 2008.

approaches. The Program benchmark is the Bank of America Merrill Lynch All U.S. Convertibles ex-Mandatory Index. As appropriate, an individual Manager's benchmark may be different from the Program benchmark, depending on the Manager's investment approach.

Subject to guideline limitations (which may vary modestly by Manager due to stylistic differences), value may be added through:

- Industry / sector allocation
- Quality sector allocation
- Security selection, including certain securities/issuers not specifically included in the benchmark

Cash equivalents may be used on a limited basis. Duration decisions are not expected to be a notable contributor to performance.

Asset Class Objectives:

Trustees review portfolio performance at least quarterly. The total Program is expected to outperform the Bank of America Merrill Lynch All U.S. Convertibles ex-Mandatory Index over a full market cycle. Individual Manager performance expectations vary, as each employs a distinct approach. Each Manager will be evaluated quarterly, annually and over a full Manager Market Cycle.

Liquidity and Cash Management:

The Convertible Bond Program is not typically a source of liquidity for the Fund, although, benefits may be paid out of the portfolio as required. Typically, cash equivalents are integral to managing the interest rate risk in fixed income portfolios. However, for convertibles, interest rate risk is less of a consideration than for investment-grade bond portfolios like those in the Fund's main Core + 5 Program. Nevertheless, as the asset class is heavily dependent on new security issuance and may be characterized by extended periods of relative illiquidity (as compared to the U.S. equity market), the Convertible Bond Managers have been given more latitude to hold cash – the maximum is generally 5%.

10~~8~~. Alternative Investment Policies - Policy Listing and Approved Dates

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PRIVATE EQUITY INVESTMENTS POLICY; ADOPTED OCTOBER 17, 2012. SEE APPENDIX #3 FOR THE POLICY

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REAL ASSETS EQUITY INVESTMENTS POLICY; ADOPTED DECEMBER 7, 2012. SEE APPENDIX #4 FOR THE POLICY

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ECONOMICALLY TARGETED INVESTMENTS POLICY; ADOPTED NOVEMBER 11, 2008. SEE APPENDIX #5 FOR THE POLICY

HEDGE FUNDS INVESTMENTS POLICY; ADOPTED MARCH 30, 2011. SEE APPENDIX #6 FOR THE POLICY

OPPORTUNISTIC FIXED INCOME INVESTMENTS POLICY; ADOPTED JUNE 22, 2011. SEE APPENDIX #7 FOR THE POLICY

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~~The Alternative Investment Policy (the "Policy") for the New York Fire Department Pension Fund in its most currently adopted or amended form is a part of this overall policy by reference. The current policy is appended hereto. This policy may be amended from time to time as necessary. The following is a general description of the policy.~~

~~Purpose of Alternative Investments Policy~~

~~The purpose of the Alternative Investments Policy is to establish the parameters by which the System may invest through its Alternative Investments Program (the "Program"), to ensure that the Managers, Advisors, Consultants and other external resources retained by the System adhere to the investment principles and guidelines of the Board, while preserving the flexibility necessary to accomplish its mandates, minimizing risk and correlation, maximizing diversification and consequently minimizing volatility and maximizing risk adjusted returns.~~

~~Objectives of Alternative Investments~~

~~The System has mandated investments in Alternative Investments in general, and the private equity asset class in particular:~~

- ~~To increase the diversification of its assets.~~
- ~~To take advantage of the ability to accept illiquidity in the short term in exchange for an illiquidity premium.~~
- ~~To provide an opportunity to invest in securities with a relatively lower correlation with the performance of the public markets.~~
- ~~To take advantage of quality Managers who are able to transform the asymmetries of information and high transaction costs which characterize the market for Alternative Investments into excess returns.~~
- ~~To reduce the volatility and increase the risk adjusted returns of the overall portfolio of the System.~~

~~The System also expects that commitments to and investments in Alternative Assets will establish, maintain and continually improve the reputation of the System as an investor, and that~~

~~the System will make both continuous use of and contributions to the best practices of investors in Alternative Investments. NYFDPF will seek investments in which the proposer demonstrates a commitment to standards of good conduct, including compliance with all Federal, State and local laws, including, but not limited to, labor, anti-discrimination, environmental, and health and safety laws, and will reject investments that would serve to embarrass investors or bring public or regulatory scrutiny. NYFDPF encourages the submission of proposals for review from proposers that demonstrate a strong commitment to diversity in their firms.~~

~~Alternative Investments are non-traditional investments made with the objective of achieving returns that are greater than those earned in the traditional public equity and debt markets. Alternative asset class components may be broadly categorized as (1) non-marketable, illiquid assets, and (2) marketable, liquid securities managed in a nontraditional format. Special debt, private equity, (including venture capital) real estate-related investments, oil and gas, as well as timber, are examples of non-marketable assets. Risk arbitrage, commodities and derivatives are examples of the more liquid alternative asset types.~~
~~The operation of the Program is subject to the exclusive benefit rule and all other applicable laws, including requirements of prudence.~~

~~Asset Allocation~~

~~The asset allocation study conducted in 2003 authorized a three percent (3%) portfolio market value exposure to private equity. This allocation was increased to five percent (5%) in May 2007. Sub-allocation sectors and percentages are recommended by BAM and the consultant and presented to the Board for approval in the annual plan and at other times as may be deemed appropriate. Current sectors being targeted are buy-outs, venture capital, international, co-investments and other (incl. mezzanine debt and distressed).~~

~~The Board of Trustees recognizes it will take several years to achieve this market value exposure. As it is the case that commitments in connection with the Program are drawn down over time, such commitments at any particular time may exceed the target market value exposure in a mature Program.~~

~~9. Real Estate Investment Policy~~

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~~The Real Estate Investment Policy for the New York Fire Department Pension Fund in its most currently adopted or amended form is a part of this overall policy by reference. The current policy is appended hereto. This real estate investment policy may be amended from time to time as necessary. The following is a general description of the policy.~~

~~Purpose of Real Estate Investment Policy~~

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~~The purpose of the Real Estate Investment Policy is to establish the parameters by which the Fund may invest through its Real Estate Program, to ensure that the Managers (which term~~

~~collectively refers to and includes, but is not limited to, "principals," "managing members," "general partners," "sponsors," "advisors," and "proposers"), and the Consultant and other external resources retained by the Fund, adhere to the investment principles and guidelines of the Board of Trustees while preserving the flexibility necessary to accomplish the objectives of the Program.~~

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~~Objectives of Real Estate Investments~~

~~Consistent with the strategy approved by the Board, the role of real estate investments made through the Program is:~~

- ~~To enhance the diversification of the Fund's investments through the historically low or negative correlation between real estate and other financial asset classes;~~
- ~~To provide competitive risk-adjusted returns relative to other asset classes;~~
- ~~To serve as a hedge against inflation;~~
- ~~To emphasize long-term income returns.~~

~~Domestic private market equity real estate possesses the best attributes to meet the role defined for the Program.~~

~~The Fund also expects that commitments to and investments in the real estate asset class will establish, maintain and continually improve the reputation of the Fund as an investor, and that the Fund will make both continuous use of, and contributions to, the best practices of investors in real estate. The Fund will seek investments in which the proposer demonstrates a commitment to standards of good conduct, including compliance with all Federal, State and local laws, including, but not limited to, labor, anti-discrimination, environmental, and health and safety laws. The Fund encourages the submission of proposals for review from proposers that demonstrate a strong commitment to diversity in their firms.~~

~~The operation of the Program is subject to the exclusive benefit rule and all other applicable laws, including requirements of prudence.~~

~~Asset Allocation~~

~~Pursuant to a 2003 asset allocation study performed by the Fund's general consultant, the Board adopted an allocation to private market real estate of three percent (3%) of the market value of the total investable assets of the Fund. This allocation was increased to five percent (5%) in May, 2007. Sub-allocation sectors and percentages are recommended by BAM and the consultant and presented to the Board for approval in the annual plan and at other times as may be deemed appropriate.~~

~~The Board of Trustees recognizes that it will take several years to achieve this market value exposure. As it is the case that commitments in connection with the Program are drawn down over time, such commitments at any particular time may exceed the target market value exposure~~

~~in a mature Program.~~

~~10. Economically Targeted Investment Policy~~

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~~The Economically Targeted Investment Policy for the New York Fire Department Pension Fund in its most currently adopted or amended form is a part of this overall policy by reference. The current policy is appended hereto. This investment policy may be amended from time to time as necessary. The following is a general description of the policy.~~

~~Purpose of Economically Targeted Investments Policy~~

~~The purpose of this Policy is to establish the parameters by which the New York Fire Department Pension Fund may invest through its Economically Targeted Investments ("ETI") Program. ETIs are investments in a variety of asset classes that generate rates of return commensurate with the overall risk, liquidity, security and structure of comparable non-targeted investments while providing collateral economic benefits (benefits that enhance quality of life and promote economic development and activity) to the targeted areas. ETIs address capital gaps, thereby promoting the quality of life, growth and economic development in the targeted areas. For the purpose of this Policy, targeted areas are defined as the five boroughs of New York City.~~

~~Objectives of Economically Targeted Investments~~

~~The System has mandated investments in Economically Targeted Investments:~~

- ~~To achieve competitive returns commensurate with the risk, liquidity and structure of the investment.~~
- ~~To provide collateral economic benefits for the Targeted Areas.~~
- ~~To address market inefficiencies in the Targeted Areas, and in particular capital gaps that affect the low-, moderate- and middle-income neighborhoods and populations of the Targeted Areas.~~
- ~~To promote economic development and attract additional investment in the Targeted Areas.~~
- ~~To increase the diversification of its assets.~~
- ~~To reduce the volatility of the overall portfolio of the System.~~

~~The System also expects that investments in ETIs will improve its reputation as an investor. The System will make both continuous use of and contributions to the best practices of investors in ETIs, including rigorously applying the standard of valuing the achievement of risk-adjusted, market rates of return above the achievement of any collateral results. NYFDPF will seek investments in which the proposer demonstrates a commitment to standards of good conduct, including compliance with all Federal, State and local laws, including, but not limited to, labor, anti-discrimination, environmental, and health and safety laws, and any of the stated policies of NYFDPF. NYFDPF will seek to avoid investment programs that at the time commitment to the investment or investment program is made by the Trustees, the Trustees reasonably believe~~

~~would likely (i) embarrass the Investor or (ii) generate public or regulatory scrutiny greater than that which is required by law or regulation to consummate the investment. NYFDPF encourages the submission of proposals for review from proposers that demonstrate a strong commitment to diversity in their firms.~~

~~The operation of the Program is subject to the exclusive benefit rule and all other applicable laws, including requirements of prudence and will be operated in accordance with 29 CFR 2509.94.1.~~

~~Asset Allocation~~

~~ETIs may cross a variety of asset classes, where practical and consistent with the standards in this and other policies. The System will seek to achieve a target allocation of 2% of assets to ETIs, by setting a target of 6% for the fixed income asset class and a target of 2% for the private equity and real estate asset classes respectively.~~

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11. Securities Litigation Protocol

I. Overview

The recent revelations of corporate fraud and other misdeeds that have resulted in significant losses to shareholders, and the ensuing litigation, have underscored the need for an internal set of policies and procedures to guide the New York City Pension and Related Funds ('the Funds'), including the New York Fire Department Pension Fund ('NYFDPF'), in identifying, evaluating and ultimately managing securities litigation. The Funds are increasingly being presented with potential cases by the class action bar and a set of established procedures will help facilitate the Funds' decision-making process and ensure that the Funds are pursuing active involvement in cases when it is in their best interests to do so. Across the country, pension funds have started clearly identifying their objectives in pursuing actions and are becoming more proactive in identifying these claims themselves and reducing their reliance on the class action bar. They are also looking at other ways to participate actively in securities class actions. In addition, many pension funds are employing a two-tiered approach to their use of counsel; *i.e.,* they are expanding their counsel pool and are engaging counsel to help in the evaluation of claims. Thereafter, they engage separate counsel to represent them in the litigation, if they decide to proceed. This process provides additional resources and expertise in the evaluation process while ensuring that the resulting recommendations are as unbiased as possible.

II. Objectives

NYFDPF's objectives in choosing an active role in securities litigation include the following:

a. Preservation of plan assets and collection of all amounts due to NYFDPF;

b. Maximizing the net recovery to the class; and

c. Effecting corporate governance reforms, when appropriate.

Out of the enormous volume of securities cases being filed, the Funds will consider those where the amount of loss sustained by the Funds and attributable to some type of wrongdoing is of a magnitude to justify the time, expense and effort involved in being lead plaintiff in a class action or in filing an independent action either in state or federal court or in pursuing some other litigation alternative. The Law Department as the Funds' legal representative and the Comptroller's Office as its investment advisor will work together in the best interests of the Funds to recommend those cases best suited for the Funds' active participation.

III. Identification of Potential Cases

The first step in this process is to identify those cases or claims that would warrant the Funds' active involvement in securities litigation. Early identification of potential cases will allow the Law Department and the Comptroller's Office more time to analyze the case and recommend strategies, and allow the Funds more time to respond to any such joint recommendations. To meet this goal, the Funds will engage outside data consultants. Consultants can better monitor new case filings, follow the financial news as well as the activities of government agencies such as the SEC. Consultants will also interface directly with the custodial banks for the five Funds as well as the custodian for the TRS Variable Annuity Funds in order to compute loss estimates. The consultant should be able to provide the Law Department and the Comptroller's Office with loss estimates for each Fund as well as the TRS Variable Funds within days of a federal securities class action being filed, early enough in the 60-day statutory time period for filing a lead plaintiff motion to allow for careful analysis of potential cases by the Law Department and the Comptroller's Office and a thoughtful consideration of any joint recommendations from the Law Department and the Comptroller's Office by NYFDPF and the other Funds.

IV. Review and Analysis of Potential Cases

A two-tiered approach, involving Evaluation Counsel and Litigation Counsel, will be used to expedite the review and analysis of potential cases. After a reasonable time period, this approach will be evaluated and, if necessary, modified.

A. Evaluation Team

The Funds' current pool of five securities litigation law firms will be expanded pursuant to a competitive solicitation for outside counsel. The enlarged pool will permit two or more pool members to serve as an evaluation team on a rotating basis ('Evaluation Team'). Evaluation Team members ~~will not be eligible to serve~~are not precluded from serving[22] as Litigation Counsel on any matter they have evaluated~~ thus removing the financial incentives that might bias a firm's recommendation to pursue litigation~~.

[22] In April 2013, the Board adopted a resolution to omit the requirement that evaluation counsel is not eligible to serve as litigation counsel in the same matter.

Utilizing a consultant's services as described in Section III of this Protocol, the Comptroller's Office will forward to the Law Department information on any case filed that satisfies the minimum loss requirement, a monetary threshold to be established by consent by the Funds. The Evaluation Team, in conjunction with the Law Department and the Comptroller's Office, will review cases given to them by the Law Department and evaluate potential securities litigation claims, advising the Law Department on ways to best protect the interests of the Funds. The Evaluation Team will also perform additional due diligence on claims (*i.e*., contact counsel for both sides; review complaints, SEC filings and company disclosures; examine contents of relevant internal files, interview investment staff, and contact other investors as appropriate).

Each Evaluation Team law firm for a particular case will provide the Law Department with a written evaluation of that case including an opinion as to what, if any, action would be in the best interests of the Funds and why. The memorandum will evaluate options available to protect the Funds' interests. Options may include doing nothing, filing for lead plaintiff status or actively participating in ways other than becoming lead plaintiff.

These other types of active participation include attempting to get a claimant with larger losses to become lead plaintiff; monitoring the case from the sidelines; writing a letter to the court and/or lead counsel to bring up issues being ignored; filing a motion to support or oppose a particular lead plaintiff or lead counsel candidate; filing a notice of appearance and more actively monitoring the case; attempting to negotiate an agreement with prospective lead counsel that will require them to keep the Funds informed of case developments, provide the Funds with access to discovery upon request and allow the Funds to participate in settlement negotiations or be consulted on a settlement; waiting until settlement and reviewing the settlement carefully with the option to object to a poor settlement or excessive fees; opting out of the class to file a separate action; or bringing a derivative action. The memorandum should also discuss the most advantageous means of bringing a suit; *i.e.,* individual federal action or federal class action; state law individual action; or derivative action.

B. Joint Recommendation to the Funds from the Law Department and the Comptroller's Office.

The Law Department will consult with each Evaluation Team member and will fully analyze all relevant legal issues. The Law Department, in conjunction with the Comptroller's Office, might consider, among other things, the following in issuing a recommendation to the Trustees:

a. What was the alleged wrongdoing? What are the legal claims?

b. What is the degree to which the Funds are offended by the wrongdoing?

c. What is the amount of NYFDPF's loss and the Funds' losses collectively?

d. What are the defenses? What are the merits of the case? Are the Funds likely to prevail?

e. Are the losses collectible? What is the defendant's financial condition? Are insurance carriers involved? How many defendants will there be?

f. Will there be other consequences if the Funds win or lose? For instance, will success bankrupt the company or adversely affect other investments that the Funds have in the same company?

g. Are there others who are more appropriate to serve as lead plaintiff? (In which case, the Funds may defer to them or seek to join them as co-lead plaintiff.)

h. What economic and administrative costs will be involved? (Typically, all out-of-pocket costs should be advanced by Litigation Counsel who accepts the case on a contingency basis. However, some law firms prefer that out-of-pocket costs are advanced by the client.)

i. Does NYFDPF have a separate claim which is not covered by the class complaint or are there unusual facts that suggest a benefit to independent non-class litigation?

j. Would failure in the litigation adversely affect NYFDPF? For example, might the litigation result in the disclosure, subject to a protective order, of material non-public information about the company that could interfere with NYFDPF's future anticipated trading strategy? Are there other possible adverse consequences?

k. Do the Funds have time to interact with legal counsel and make decisions as required?

l. Should NYFDPF and the other Funds consider seeking to serve as co-lead plaintiff with other parties?

m. Is the suit a nuisance suit? Should NYFDPF consider supporting the company in a motion to dismiss?

n. Are there any potential conflicts with other members of the class?

o. Is there a need for corporate governance changes? Are there individual actors that need to be pursued to deter future wrongdoing?

The Law Department, in conjunction with the Comptroller**,** will then make a written recommendation to NYFDPF and the other Funds to pursue a particular case in which active participation would be in the Funds' best interest. If time permits, such a recommendation would be presented in person by representatives of both the Law Department and the

Comptroller's Office who would be available to answer questions the Trustees may have. Because of the statutory deadlines involved in this type of litigation, a representative from each Fund and the TRS Variable Annuity Funds will be appointed to attend one meeting where the joint recommendation can be presented. This approach will only be used when time limitations require it.

C. Litigation Counsel

Litigation Counsel will be selected after the Funds have made a decision to pursue an active role in litigation. The panel of law firms available to be assigned cases will be expanded through a competitive process. Each firm selected must have a recognized expertise in the area of securities litigation. Special attention will be paid to experience in class actions, especially under the PSLRA, experience as counsel to other institutional investors (preferably other public pension funds), a demonstrated understanding of the special responsibilities of a public fund trustee and how public employees' retirement systems function as well as experience with corporate governance reforms.

Litigation Counsel will be selected by the Law Department based on, among other things, suitability for a particular matter (including, for example, their expertise in the jurisdiction in which a case is being brought and expertise in the particular type of suit. For each case approved by the Funds, the Law Department will invite pool members, [23]~~who did not~~including those who served as members of the Evaluation Team for that case, to submit written proposals for handling the litigation. The proposal will focus on the litigation factors discussed in Section IV, B of this Protocol and propose the most appropriate strategy for the conduct of the litigation. The proposal will also include a fee schedule. Selection of counsel for any given case will be based on an evaluation of the litigation strategy proposed, the suggested fee and the expertise and resources of the firm. Thus increasing the size of the panel will also increase competition regarding the fee to be charged against any recovery by the Funds, and, in PSLRA cases, the recovery of other class members.

V. Interaction with the Funds

The Law Department will also issue a monthly report to the Funds, which will include significant potential cases being evaluated as well as the status of pending securities litigation. The Funds will make the final determinations on whether to proceed or not with a particular securities law case. In the event that there is disagreement amongst the Funds with regard to a particular course of action, the Funds may wish to consider acting independently. The advisability of such independent action would have to be examined on a case by case basis.

NYFDPF counsel ("Fund Counsel") shall serve as liaison between the Trustees and the Law Department in order to keep the Trustees advised on securities litigation issues, provide written opinions to the Trustees and convene voice votes and/or special meetings. Fund Counsel shall be included in meetings with and on the distribution list for the Evaluation and Litigation Counsel

[23] In April 2013, the Board adopted a resolution to omit the requirement that evaluation counsel is not eligible to serve as litigation counsel in the same matter.

and shall review any joint recommendations from the Law Department and the Comptroller's Office after such recommendation is made to the Trustees to pursue a particular case as described in Section IV, B of this protocol. The Fund Counsel shall also review the Law Department's monthly litigation report to the Trustees once it is issued.

12. Proxy Voting Policies and Procedures[24]

In fulfilling the Proxy Voting Policy of the Board, the following procedures shall be used.

Each year, the Proxy Committee, on behalf of the Board, reviews the Comptroller's recommendations for shareholder proposals and target companies, and decides which proposals and companies will comprise NYFDPF annual shareholder proposal program. The committee considers the Comptroller's recommendations for voting proxy issues that are not covered by NYFDPF proxy voting policies and procedures and, on behalf of the Board, promulgates voting policies and procedures on such issues.

The Chair, or the Office of the Comptroller with notification of the Chair, shall call all committee meetings. If time does not allow a meeting to be called, the Chair or the Office of the Comptroller shall set up a conference call among the committee members and the Comptroller's staff. If a conference call is not feasible, the Chair or the Comptroller's Office shall conduct a telephone or an e-mail poll of committee members. If a Trustee is not available his/her vote shall be recorded as an abstention.

In voting proxies, the Comptroller shall follow the following guidelines:

Vote Action – For Proposal

> The Comptroller shall vote FOR a proposal if such proposal is consistent fully with the provision(s) stipulated in the resolutions/policies promulgated by the NYFDPF Proxy Committee.

Vote Action – Against Proposal

> The Comptroller shall vote AGAINST a proposal if such proposal is inconsistent with, or contrary to, the philosophy, intent and spirit of resolutions/policies promulgated by the NYFDPF Proxy Committee.

Vote Action - Abstain

> Absent enabling NYFDPF resolutions/policies and past history, or the availability of adequate information, the Comptroller shall ABSTAIN. If time does not permit the

[24] New Proxy Voting Guidelines and additional methods for communicating with the Committee were adopted in April 2012.

Comptroller's Office to present to the Proxy Committee, for its review and voting decision, a proposal with voting-policy recommendation and adequate background information, the Comptroller shall ABSTAIN.

Review of New Issues

Each spring, the Comptroller's Office and the Proxy Committee shall meet to review new proxy issues. The Proxy Committee may review and revise existing policies and procedures.

Proposal not Covered by Existing Board Resolution – Time Permitting

If time permits, the Comptroller shall present to the Proxy Committee, for review, deliberation and vote decision, proposals pertaining to issues which are not covered by past practice or existing policies. To facilitate this process, the Comptroller's Office shall provide the Board the full text of such proposals, supporting and opposing statements, and other available background information that would represent fairly the views of proponents and opponents of issues.

Proposal not Covered by Existing Board Resolution – Time Limited

In the event that the distribution of proxy statements is delayed through corporate, postal, or other setback, particularly as it relates to issues not covered by past practice or existing policy, the Comptroller's Office or the Chair shall conduct a telephone conference call of the members of the Proxy Committee and the Comptroller's Staff and obtain the votes of the members on the proposal). If a conference call is not feasible, the Chair or the Comptroller's Office shall conduct a telephone or an e-mail poll of committee members. The Comptroller's Office shall be guided by the consent of a simple majority. In the event of a deadlock, the Comptroller's Office shall ABSTAIN.

Mergers and Acquisitions[25]

The Comptroller's Office casts votes on mergers and acquisitions consistent with the Proxy Voting Guidelines adopted by the Trustees.

~~In voting on proposed mergers and acquisitions, the Comptroller's Office shall consult Investment Managers of NYFDPF accounts in which shares of the stocks of companies involved in a proposed transaction are held. The Comptroller's Office shall be guided by the analyses and recommendations of the majority of Investment Managers. However, in so doing, the Comptroller's Office shall determine whether the analyses examined salient features, including but not limited to: whether a transaction represents a premium to the company's trading price; whether there are compelling business reasons for a proposed merger or acquisition; whether the boards of both companies are in agreement on a proposed transaction; whether shareholder interests and rights are protected; and whether the companies obtained, and the proposal included, a fairness opinion of a reputable~~

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[25] New Proxy Voting Guidelines governing votes on mergers and acquisitions were adopted in April 2012.

~~financial Advisor.~~

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Reports to the Trustees

The Comptroller's Office shall submit annual summary[26] reports to the Proxy Committee on the results of the NYFDPF shareholder proposal programs, and on votes cast by the Comptroller's Office against management director nominees.

[26] Summary reports were accepted by the Committee since the Fall 2011 reporting.

THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER
BUREAU OF ASSET MANAGEMENT
1 CENTRE STREET
NEW YORK, N.Y. 10007-2341

WWW.COMPTROLLER.NYC.GOV

JOHN C. LIU
COMPTROLLER

New York City Retirement Systems: Ethics and Compliance Policy

I. Purpose of the Policy

The New York City Retirement Systems (the "Systems"), in furtherance of the management and investment of the assets of the Systems, have determined to establish a comprehensive written Ethics and Compliance Policy (the "Policy") for investment consultants (the "Consultants") and for investment managers (the "Managers") that do or seek to do business with the Systems. The Boards of Trustees of the Systems (the "Boards") have requested that the Bureau of Asset Management ("BAM") of the New York City Office of the Comptroller implement the Policy on behalf of the Systems.

The purposes of the Policy are:

- to identify and ensure disclosure of any potential risk, conflicts of interest and/or other ethical issues both before and after entering into contracts or transactions with the Consultants' and the Managers' firms;
- to ensure that proper internal compliance controls are in effect at the Consultants' and Managers' firms, so as to reduce the risk to the Systems;
- to provide a protocol for ensuring that Consultants and Managers are in compliance with the federal securities laws and the rules of the U.S. Securities and Exchange Commission ("S.E.C."), and other applicable law;
- to obtain timely disclosure from the Consultants and the Managers as to actual or alleged non-compliance with the Consultants' and the Managers' internal controls or with applicable law; and
- to assist BAM and the Systems in identifying and responding to non-compliance on the part of any Consultant and/or Manager.

BAM will not recommend continuation of or selection of any Consultant or Manager which does not meet the standards of compliance with this Policy. In addition, a Consultant or Manager which discloses a conflict of interest or other violation of this Policy to BAM must refrain from giving advice or making decisions about any matters affected by the conflict of interest or other violation of this Policy, until and unless authorized by the Board.

II. Annual Certification Obligation of Consultants and Managers

Annually, on or before June 15th of each year, Consultants and Managers shall submit an Annual Certification and Compliance Statement (the “Annual Statement”) to BAM, which Annual Statement shall, in addition to providing an update on conflicts of interest, include a certification in the form attached hereto, in which the Consultant or Manager makes the following representations: 1) that the Consultant or Manager is a fiduciary of the Systems; 2) that the Consultant or Manager has received and read this Policy; 3) that the Consultant or Manager is in full compliance with the Policy, except as disclosed in the Annual Statement; 4) that the Consultant or Manager is in full compliance with any other applicable policies and procedures of the Systems that apply to such Consultant or Manager, except as disclosed therein; and 5) that the Consultant or Manager is in full compliance with all applicable laws and regulations.

In addition to the above certification, Consultants and Managers, in their Annual Statements, must disclose all information specified in sub-sections A and B below. Although the firm’s Form ADV or other S.E.C. filings may be provided as a supplement; the firm must make full and complete disclosure in the body of the Annual Statement itself.

A. Conflicts

A conflict of interest exists for a Consultant or Manager whenever the Consultant or Manager has a direct or indirect pecuniary interest or a relationship (without regard to whether the relationship is direct, indirect, personal, private, commercial, or business) with a third party, and the interest or relationship could diminish the Consultant’s or the Manager’s independence of judgment in the performance of the Consultant’s or the Manager’s responsibilities to the Systems.

Consultants and Managers must promptly disclose conflicts of interest in writing to BAM, which shall promptly disclose such conflicts to the Systems for review.

1. Relational Conflicts, Generally

a) Each Manager/Consultant is required to include a written statement to BAM specifying its affiliates and the lines of relationship between itself and said affiliates, their lines of business, and whether affiliates have any role in the investment process related to the Systems.

b) Each Manager/Consultant must also disclose to the Systems at least annually any actual or potential conflicts of interests between the Manager/Consultant (including its affiliates) and the Systems, such as with respect to: i) investment of the Systems’ assets in investment vehicles marketed or managed by the Manager/Consultant or affiliates; ii) allocation of investment opportunities as between the Systems and either the Manager/Consultant, affiliates or other clients; or iii) use, on behalf of the Systems, of services provided by affiliates, such as brokerage or auditing services. Managers/Consultants must also immediately notify BAM of any additional such conflicts that have arisen since the last Annual Statement.

c) Managers/Consultants must also report to the Systems the procedures in place to prevent such conflicts and/or mitigate their effects should they occur; and to the Manager’s/Consultant’s policy in relation to the allocation of investment opportunities among its affiliates, between itself and outside clients, and also among outside clients.

2. Compensation Conflicts

a) Managers/Consultants must disclose to the Systems all matters, including beneficial ownership of securities or other investments that reasonably could be expected to interfere with their duty to the Systems or with their ability to make unbiased and objective decisions in the investment of the Systems' assets. Managers/Consultants must also promptly notify the Systems of any additional such matters that have arisen since the last Annual Statement.

b) Managers/Consultants must also disclose to the Systems:

> i) all monetary compensation or other benefits that are in addition to compensation or benefits conferred by the Systems, and that they, their affiliates or their personnel have received or may receive for any services performed or to be performed that relate in any way to assets of the Systems, including services for "portfolio companies" of the Systems (those companies whose securities the Manager holds on behalf of the Systems, other than in an index fund);
>
> ii) any referral fees or other consideration or benefit received by the Manager/Consultant or delivered to others for the recommendation of any services to the Systems; and
>
> iii) the full details of any services for portfolio companies of the Systems that the Manager/Consultant has undertaken, performed, or agreed to perform.

c) Managers/Consultants must also promptly notify the Systems of any additional such compensation or benefits or earned, received or agreed, or services undertaken, performed, or agreed to, to since the last Annual Statement.

3. Conflicts Relating to Systems' Other Advisors

a) Managers must disclose whether any Consultant is an affiliate of the Manager. Consultants must disclose whether any Manager is an affiliate of the Consultant. Affiliate for this purpose includes a parent, subsidiary, debtor, creditor, entity under common ownership, entity in which the Manager/Consultant has invested or which has an investment in the Manager/Consultant or entity with which the Manager/Consultant has a strategic alliance. If yes, the Annual Statement must include a detailed description of the nature of the affiliation.

b) Managers must further disclose whether in the past five years, the Manager or any affiliate of the Manager has paid any compensation to any Consultant, or entered into any agreement with any Consultant, under which the Manager or any affiliate of the Manager may pay compensation in the future. Compensation for this purpose means any payment, product or service, and includes, but is not limited to, conference registration fees, research or consulting fees, and brokerage commissions, paid either directly or through soft-dollar arrangements. If so, the Annual Statement must, with respect to each and every such Consultant, describe in detail:

> (i) the full name of the Consultant;
>
> (ii) the amount(s) of the compensation;
>
> (iii) the year(s) in which it was paid;
>
> (iv) the purpose of the compensation; and
>
> (v) the terms of the agreement.

c) Consultants must further disclose whether in the past five years, the Consultant, or any affiliate of the Consultant, has paid to or received from any Manager any compensation, or has entered into any agreement with any Manager, under which the Consultant or any affiliate of the Consultant may pay or receive compensation in the future. Compensation for this purpose means any payment, product or service, and includes, but is not limited to, conference registration fees, research or consulting fees, and brokerage commissions, paid either directly or through soft-dollar arrangements. If so, the Annual Statement must, with respect to each and every such Manager, describe in detail:

(i) the full name of the Manager;

(ii) the amount(s) of the compensation;

(iii) the year(s) in which it was paid;

(iv) the purpose of the compensation; and

(v) the terms of the agreement.

d) Consultants must further disclose:

(i) whether they have any arrangements with broker-dealers under which they or an affiliate will benefit if any Managers place trades for the Systems with such broker-dealers, and if so, must disclose the full details of those arrangements; and

(ii) what percentage of their public pension plan or ERISA clients utilize investment managers, investment funds, brokerage services or other service providers from whom the Consultant or any affiliate receives fees.

e) Managers that have "soft dollar" arrangements with broker-dealers must further disclose whether, in connection those arrangements, they have received any of the following three categories of compensation from any broker-dealer in the past twelve months, and if so, must disclose in detail what they received in those three categories, and from whom

(i) physical or tangible items, such as computer hardware and accessories, phone lines or office equipment;

(ii) payment of travel expenses or meals or entertainment associated with attending seminars; or

(iii) software or consultant services that relate primarily to a Manager's internal management or internal operations.

B. Compliance with Law

Managers and Consultants, as applicable, shall further certify compliance with, and provide any disclosures required by, the following:

1. Managers/Consultants Must Have a Code of Ethics.

Every Manager/Consultant must have a Code of Ethics that satisfies the requirements of Rule 204A-1 under the Investment Advisers Act, regardless of whether the Manager/Consultant is required to register under that Act.

2. Managers/Consultants Must Have Third-Party Review of Controls.

a) Each Manager/Consultant must certify that it has a periodic review of its Compliance Manual and compliance controls by an independent third-party at least once every three years. Internal review by the General Counsel, Chief Compliance Officer, or similar official of the firm or any of its affiliates does not qualify as an independent review. If the Manager/Consultant has not yet completed an independent third-party review, the first review must be completed no later than June 2008. However, Managers/Consultants first entering into contract(s) with the Systems after June 2005 must complete their first such review no later than 3 years from the date of the initial contract with the Systems. Should any third-party review identify any deficiencies in the compliance controls or Compliance Manual, the firm must provide to BAM a copy of the third-party's report and an explanation of any remedial actions taken or planned.

b) In addition to the third-party review of the Compliance Manual and compliance controls, the Systems encourage Managers managing assets aggregating over $3 billion for all clients to have conducted at least a Level I SAS 70 review, or the equivalent of a SAS 70 in the country of incorporation or formation. The third party review of the Compliance Manual and compliance controls may be conducted as an explicit add-on to a SAS 70 review.

3. Managers/Consultants Must Monitor Personal Trading.

Each Manager/Consultant must certify that it has a written personal trading policy with an established method for monitoring same. For Managers/Consultants managing, or advising as to, assets aggregating over $3 billion for all clients, the Systems encourage the use of an automated system, such as STAR Compliance. The Manager/Consultant must report in detail any personal trading violations within the last 12 months and report the Manager/Consultant's response to it. It is acceptable if the disclosure of these violations is grouped according to categories of violations and of employees in some reasonable manner.

4. Managers Must Have a Policy on Mutual Funds Trading.

The Manager must certify that it has a written policy on disclosure of market timing and late trading of mutual funds, where applicable, which should comply with the requirements of the SEC RIN 3235-AI99. The Manager should notify BAM, i) annually; and ii) promptly upon occurrence, of any violations and/or any investigations by any government agency or any securities exchange involving or against the Manager or any of its personnel within the last three years with respect to such trading.

5. Managers Must Report Violations Relating to Restricted Securities.

Managers are required to include a report to BAM on any inquiry or other action by any governmental agency relating to the improper sale within the last three years by the Manager to any person of any restricted securities (such as those covered by Rule 144a).

6. Managers/Consultants Must Provide Updates on Government Investigations and Enforcement Actions.

a) Managers and Consultants must, unless prohibited by law, regularly and promptly notify

BAM in detail with respect to the commencement of, status of, or significant developments in, any government investigation of the Manager or Consultant or its employees in connection with any potential violations of applicable laws, or any enforcement action in connection therewith.

b) Managers and Consultants must promptly provide such updates, and must promptly provide all disclosure called for by this Policy, regardless of whether the Manager or Consultant is required to file an S.E.C. Form 8K or is yet due to file a Form ADV.

III. Non-Compliance with this Policy - Reporting Requirements

BAM Will Report Non-Compliance to the Boards

To the extent BAM receives or obtains information indicating that a Consultant or Manager is substantially out of compliance with the Policy and/or substantially in violation of applicable law, BAM will report such information to the Board for whatever action the Board deems appropriate, which may include termination of the Consultant or Manager.

IV. Dissemination of Policy to Consultants and Managers

A. Current Consultants and Managers

Upon amendment of this Policy by the Boards, BAM shall immediately forward copies of the amended Policy to all current Consultants and Managers.

B. Prospective and New Consultants and Managers

1. Consultants and Managers seeking to do business with the Systems will be required to certify compliance with the Policy, and provide the disclosures required by the Policy, at the time they submit their response to a Request for Proposals ("RFP") or, in the event that there is no RFP process, during the selection process.

2. If awarded a contract with the Systems, including any assignment of an existing contract, all new Consultants and Managers will be required to file with BAM, prior to signing the contract, their first Annual Certification and Compliance Statement, as described above (the "Initial Statement"). If the date of a new Manager/Consultant's submitting its Initial Statement is after January 1 of a given year; then on June 15 of that year, the Manager/Consultant need only file a statement disclosing any updates to the information contained in its Initial Statement.

Adopted: Effective May 2005

Amended: Effective March 2006

CERTIFICATION: ETHICS AND COMPLIANCE POLICY

I, [name of individual:]____________________, in connection with the Ethics and Compliance Policy (the "Policy") of the New York City Retirement Systems (the "Systems"), hereby certify:

1. That I am the duly authorized representative of [name of firm:] ____ (the "Undersigned"), and that I have been duly authorized to execute this Certification on behalf of the Undersigned;

2. That the Undersigned acts as an investment advisor/consultant for (check as appropriate):

   NYCERS ☐
   TRS ☐
   Police ________
   Fire __________
   BERS ________

and advises on the following asset classes: ____

____

3. That the Undersigned is a fiduciary to the System(s) and in investing or in consulting with respect to a System's assets, shall exercise at all times the diligence and standard of care which is the highest to which any of the following is subject: (i) a professional fiduciary; (ii) a trustee of an express trust under the laws of the State of New York; (iii) a fiduciary under Section 404 of ERISA or (iv) an investment manager and analyst in the industry

4. That the Undersigned:

   a) has received copies of and read the Policy;
   b) is currently in full compliance with all terms and conditions of the Policy, unless otherwise disclosed in the Annual Certification and Compliance Statement;
   c) has attached to this Certification all written disclosures that are required in the Annual Certification and Compliance Statement;
   d) for as long as it does business with any of the Systems, will continue to comply with the Policy, and will make all subsequent disclosures required by the Policy in a timely manner; and

e) has completed the required third party review in accordance with sub-section II(B)(2) of the Policy on [enter date] __________________. (In the event such review has not been completed, enter the anticipated review completion date.)

Dated:________________________________

Firm name:________________________________

By:________________________________
(please sign above this line)

Name of individual:________________________, Authorized Representative

Title: ________________________________

NEW YORK CITY FIRE DEPARTMENT PENSION FUND, SUBCHAPTER 2

PRIVATE EQUITY INVESTMENT POLICY

Adopted: September 9, 2003
Amended: October 17, 2012

I. SCOPE

The Private Equity Program Investment Policy Statement (the “IPS”) applies to the Private Equity Program assets within the New York City Fire Department Pension Fund, Subchapter 2 (“Fire”, the “Fund”, or the “System”).

II. PURPOSE

The IPS provides the broad strategic framework for managing the Systems’ Private Equity assets. The design of the IPS ensures that Managers, Advisors, Consultants and other participants selected by the System adhere to the investment principles and guidelines of the Fund. Additionally, the use of the IPS assures sufficient flexibility in managing investment risks and returns associated with the Private Equity Program (the “Program”). The purpose of the Program is to provide access to a portion of the global markets that are not publicly-traded as well as to access strategies which benefit from longer holding periods. The Program targets superior risk adjusted returns to what is generally available in public equity markets.

III. INVESTMENT PHILOSOPHY

The System’s Board of Trustees believes that Private Equity markets are inefficient and illiquid and should therefore provide superior returns for risk taken, and that there is a return premium for investors who are willing to take an opportunistic approach to this asset class. The Board believes that risk can be managed through a combination of quantitative and qualitative constraints; including liquidity, vintage, manager, currency, industry, leverage and market value (see Section IX) and that a successful Private Equity program has the following strategy diversification: Buyout, Growth Equity, Special Situations, Energy, Secondary and Co-Investment (see Section V).

IV. STRATEGIC OBJECTIVE

The System has mandated investments in Private Equity Assets[1] as part of its strategic asset allocation to:

A. Increase the diversification of its assets.

B. Take advantage of the ability to accept illiquidity in exchange for an illiquidity premium.

C. Make investments that have less correlation to public markets.

D. Invest with Managers who have demonstrated the ability to or have the potential to outperform the 10-year average of the Russell 3000 Index (one quarter lag) plus a 300 basis point risk premium (net of fees and expenses) or Performance Objective returns as compared to similar investments.

E. Reduce the volatility and increase the risk-adjusted returns of the overall portfolio of the System.

[1] Private Equity Assets are non-traditional investments made with the objective of achieving returns that are greater than those earned in the traditional public equity and debt markets. Alternative asset class components may be broadly categorized as (1) non-marketable, illiquid assets, and (2) marketable, liquid securities managed in a nontraditional format. Special debt, private equity, (including venture capital) real-estate-related investments, oil and gas, as well as timber, are examples of non-marketable assets. Risk arbitrage, commodities and derivatives are examples of the more liquid alternative asset types.

The System also expects that commitments to and investments in Private Equity Assets will establish, maintain and continually improve the reputation of the System as an investor, and that the System will make both continuous use of and contributions to the best practices of investors in Alternative Investments. The Fund will seek investments in which the proposer demonstrates a commitment to standards of good conduct, including compliance with all Federal, State and local laws, including, but not limited to, labor, anti-discrimination, environmental, and health and safety laws, and will reject investments that would pose reputational risk to the Fund or bring public or regulatory scrutiny other than that which is required by law or regulation to consummate an investment transaction. The Fund will not entertain investments that have the potential of eliminating public-sector jobs. The Fund encourages the submission of proposals for review from proposers that demonstrate a strong commitment to diversity in their firms.

The Fund seeks to employ Emerging Managers[1]. Emerging Managers are asset managers the Board believes will add significant value to the Fund through implementation of investment strategies consistent with the Board's asset allocation and other policies, but which, because of size, length of track record, or other similar factors, have not been awarded contracts through the Board's manager selection process[2].

As part of Fire's continued commitment to drive asset class best practices and support long-term partnerships between Limited Partners and General Partners the Fund will strive to adhere to the Institutional Limited Partner Association's ("ILPA") guiding principles emphasizing alignment of interest, governance and transparency.

The operation of the Program is subject to the exclusive benefit rule and all other applicable laws, including requirements of prudence.

V. ASSET ALLOCATION

Asset allocation is a critical driver for the long-term success of the private equity program. Since it is not possible to rebalance quickly in private equity, pacing and manager selection have heightened importance as tools to influence allocation. Pursuant to a 2011 asset allocation study performed by the System's general consultant, New England Pension Consultants ("NEPC"), the Board has adopted an allocation to Private Equity of **7.0%** of the market value of the total assets of the System **plus** or **minus 2.0%**. Long-term asset allocation targets have been developed with the assistance of the System's Private Equity Consultant, StepStone, and the strategies are denoted below:

Strategy
Buyout
Growth Equity
Special Situations/Turnaround
Energy
Secondary
Co-Invest
Other

[1] Emerging Managers are sponsors targeting capital raises up to $750 million and investing through funds I – III. Emerging Managers include Minority & Women-Owned Business Enterprise ("MWBE")
[2] Per Fire's Core IPS dated July 25, 2007

VI. RESPONSIBILITIES AND DELEGATION

A. Role of Board of Trustees

The Board of Trustees (the "Board") is responsible for reviewing and approving Policies, including the IPS. In addition the Board shall:

- Review the Program at least annually and approve and adopt the Annual Private Equity Plan.
- Approve the retention of strategic consultants, advisors and other external resources, as needed.
- Oversee performance, risk and execution of the Program.
- Approve investment recommendations.
- Delegate investment approval authority as appropriate.
- Approve and/or ratify exceptions to the Annual Private Equity Plan as triggering events may arise.

B. Role of Comptroller's Office Staff

The duties of the Comptroller's Office Staff ("Staff") include, but are not limited to:

- Reviewing and recommending changes to the IPS, developing and implementing periodic reviews of the Program, which shall occur at least annually, and managing the operations of the Program.
- Working with the System's Consultants to develop and implement an Annual Private Equity Plan, identifying and evaluating private equity strategies, investment managers and investments appropriate for the Program, and making selection recommendations to the Board.
- As needed, identifying and evaluating strategic consultants and advisors and other external resources for the Program, and making selection recommendations to the Board.
- Overseeing the System's portfolio of Program investments, including management of consultants and advisors and other external resources engaged on the System's behalf in connection with the Program with the objective that the System obtains the maximum value from those relationships.
- Monitoring and reporting on the performance metrics as provided by the Managers with respect to the overall purpose and objectives of the Program; and monitoring and reporting on the performance of the consultants at least annually.
- Recommend the sale of LP interests, in the secondary market, to optimize the Program's performance.
- In a discretionary capacity, work with the Consultant to implement the Emerging Manager component of the Program including the selection of Managers, portfolio construction and as an Investment Committee member. The Investment Committee includes the Consultant, Head of Private Equity, Executive Director of Private Equity - Emerging Managers and the Chief Investment Officer. The

Board will be apprised of the progress of this aspect of the Program periodically.

C. Role of Private Equity Consultant

Fire retains a private equity consultant (the "PE Consultant") to assist in the implementation of its strategic allocation to the private equity asset class. The strategic allocation to the asset class is recommended to the Board by NEPC. The PE Consultant is a fiduciary and advises Staff and Fire on all aspects of its private equity investment program. The responsibilities of the PE Consultant(s) include, but are not limited to:

- Providing strategic advice:
  - o Providing advice to the Board and Staff with respect to the development and operation of the Program, including advice on industry developments and portfolio construction.
  - o Assisting the Board and Staff in developing the IPS and in periodic reviews of the IPS and the Program.

  Together with Staff, provide an annual and a longer-term Private Equity plan for the Program.

  - o Periodic assessments of industry best practices with regard to policies and procedures.
  - o Analysis of Fire' existing private equity portfolio.
  - o Periodic reports on the state of the private equity marketplace.
  - o Attending meetings of the Board and providing educational seminars for the Trustees.
  - o Such other strategic advice and services as Fire or Staff may reasonably require.
- New investment identification and evaluation, including:
  - o Assisting Staff in identifying, evaluating and recommending investment opportunities and terminations consistent with the IPS and believed to be appropriate for the Program, including conducting due diligence with respect to new investments, as requested.
  - o The manager's ability to comply with the Board's investment policies and restrictions.
- Periodic reports on current and anticipated investment opportunities.
- Assisting Staff with the implementation, negotiation and execution of new commitments and/or investments.
- Portfolio monitoring:

- Assisting Staff with the ongoing review of committed investments, including reports to the Board on significant manager developments, proposed amendments to fund documentation and investment performance.

- Update Board quarterly on any portfolio company opt-outs pertaining to the Board's investment policy.

- Periodic and real-time reports on developments at and performance of individual partnerships in the Fire portfolio.

D. Role of Custodian Bank/Alternatives Administrator

The Custodian Bank and/or Alternatives Administrator shall be responsible for reviewing and certifying all Program cash flow authorizations (such as capital calls and distributions).

VII. PERFORMANCE OBJECTIVE

The performance of the Program shall be measured against the following benchmark:

A. Opportunity Cost:

The expected long-term performance objective of the Private Equity program shall be measured against the 10-year average of the Russell 3000 Index (one quarter lag) plus a 300 basis point risk premium. The performance objective is net of fees and expenses. Use of the Russell 3000 Index reflects the opportunity cost of investing in Private Equity investments versus publicly traded common stocks. The 10-year average smoothes short-term volatility and is intended to cover at least one complete market cycle, consistent with the anticipated average term of the partnership investments. The index shall be modified to reflect the Program's actual cash flows.

Staff shall report regularly to the Board on performance of individual investments and of the Program as a whole in comparison to an appropriate sector based benchmark (e.g. Thompson One, etc.).

VIII. INVESTMENT OPERATIONS

A. General Approach

The Staff shall review and manage investments using a disciplined but opportunistic management strategy. Guided by the Annual Private Equity Plan (see below), Staff shall use a "top-down" approach to making assessments as to appropriate strategic weightings within the portfolio. Staff then shall seek to identify the most attractive investment opportunities available consistent with the Annual Private Equity Plan and with the goal to be diversified prudently across strategies, industries, partnerships and geography.

B. Annual Plan

Investments made under the Program shall be made in accordance with the Annual Private Equity Plan (the "Annual Plan"). Staff along with the Consultant shall present the Annual Plan to the Board, no later than 90 days after the previous calendar year end, for the Board's approval, which will provide guidance to the Staff and Consultant in the management, operations and investments of the Program. The Annual Plan shall include an elaboration of a target strategic allocation within the Private Equity asset class.

C. Pacing

The Annual Plan shall recommend commitment ranges to be made by the System within each strategy as well as a total target commitment for the System (the "Pacing Analysis") in order to achieve both the target strategic allocation and the overall allocation to the private equity asset class. The Pacing Analysis shall take into account the System's overall allocation to and investments in the Private Equity asset class, within each strategy, across industries and geography, and by vintage as well as the market environment and such other considerations as are appropriate. The Program shall strive to avoid inappropriate concentrations in strategies, industries, geographic areas, funds, managers or vintage years.

D. Investment Guidelines

1. Investment Types

This IPS authorizes commitments to private equity partnerships, fund of funds partnerships and separate accounts investing in private equity partnerships. These investments may be in any type of security throughout the capital structure. This IPS also allows for structures which may not conform precisely to the previous list but whose intent is to capture private equity exposure and returns while insulating the System from liability in excess of the amounts invested.

2. Co-Investment and Direct Secondaries

Investment rights may include opportunities for additional capital participation through co-investment or other side-by-side direct investment opportunities. Secondary investments include the purchase of LP interests, co-investments or other pooled investment vehicles.

3. Separate Managed Accounts

The Program may, from time to time, use funds of funds or Managers with discretionary mandates to accomplish investment strategies and activities.

E. Exceptions to the IPS

From time to time, the Program may require exceptions to this IPS. In the event that an exception is required, the following procedures shall be followed:

1. Non-Urgent[1] matters requiring an exception to this IPS will be addressed at the next scheduled Fire investment meeting. The Board shall be provided a detailed written summary and rationale warranting a potential exception to the IPS. Exceptions will only be granted with Board approval (vote, motion, etc.).

2. For urgent matters[2] (time-sensitive) requiring an exception to this IPS, the Staff will notify the Board, in writing or via electronic mail, as soon as practicable of the matter requiring the need for an exception to the IPS. A documented phone vote

[1] Non-Urgent matters are defined as those not requiring an affirmative decision prior to the next scheduled Fire investment meeting.
[2] Urgent matters are defined as those requiring an affirmative decision prior to the next scheduled Fire investment meeting.

granting the exception may be obtained and the Board will ratify the decision at the next scheduled monthly investment meeting.

IX. RISK MANAGEMENT

Private Equity does not lend itself to traditional quantitative measures of risk such as standard deviation and benchmark tracking error. Rather, risk is managed through a combination of quantitative and qualitative constraints. The following sections identify the most significant risks with private equity investments and the method of control. The Program will only consider investment structures that provide limited liability to the System.

A. Liquidity

Private equity investments are illiquid and typically have expected holding periods of 10-12 years. Investments are typically held until maturity and selling prior to maturity generally results in a discount to fair market value. Asset allocation exposure is controlled through the investment pacing described in the Annual Plan. The Board recognizes that lowering the private equity target allocation may result in forced sales and increased exposure to liquidity risk.

B. Vintage Risk

Vintage refers to the year of first capital draw and vintage risk refers to the variability of private equity commitments over time. The Annual Plan controls the short and long-term investment pacing that minimizes vintage risk while achieving targeted exposure.

C. Manager Risk

Manager risk is the impact that a general partner has on the selection of investments to put in the portfolio. It is usually manifested in two ways: the size of the Program's exposure to a particular partnership, and the number of general partners in the private equity portfolio. Partnership exposure is controlled through careful selection and by limiting the commitment size to a partnership. The maximum commitment to a partnership is limited to the lesser of **15%** of a fund-raise, or **$75** million. The **15%** limit does not apply to a fund of funds manager or a separate account.

The optimum number of general partners in the portfolio varies with time and is controlled by the Annual Plan.

Firm risk is the exposure to a private equity manager or general partner and is controlled by limiting the total exposure (defined as unfunded commitments plus net asset value) to pooled investment vehicles operated by a general partner and/or its affiliates. The Program's maximum total exposure to a general partner and its affiliates is limited to **15%** of the total exposure of the Private Equity Program.

D. Currency

The Private Equity program accepts the currency risks consistent with the geographic constraints. Private equity partnerships generally do not hedge currency risk and the Private Equity Program will not implement currency hedges.

E. Industry

Typically, private equity partnerships are permitted to invest in a wide variety of industries with limited controls. Industry risk is controlled primarily through appropriate diversification across classes and subclasses.

F. Leverage

General partners invest capital from private equity partnerships throughout the capital structure of firms. The capital markets control the maximum leverage available to the general partners and limited partners control leverage exposure through partnership selection and portfolio construction.

G. Market Value
Market value refers to portfolio company market value.

X. INVESTMENT / EVALUATION CRITERIA

Staff shall develop and maintain selection guidelines for Private Equity investments to include the following minimum requirements:

- The principals shall demonstrate relevant experience and expertise in the strategy they propose to execute and the market in which they propose to operate.
- The principals shall demonstrate requisite skills and experience necessary to execute the proposed strategy, including evidence from similar prior accomplishments.
- The principals shall demonstrate an ability to cooperate and to work well together over the long term and to manage a stable organization.
- The principals shall dedicate a sufficient proportion of their time and effort to the proposed investment vehicle.
- The principals shall make a meaningful personal financial commitment to the proposed investment.
- The principals shall be individuals of high character and solid professional reputation.
- The proposed strategy and business plan shall be set forth in sufficient detail as to permit substantive and meaningful review of the investment opportunity, verification of the investment concept and evaluation of the appropriate risk factors.
- Fire will reject investments that would pose reputational risk to the Fund or bring public or regulatory scrutiny other than that which is required by law or regulation to consummate an investment transaction.
- Fire will not entertain proposals that have the potential of eliminating public-sector jobs.
- The proposed strategy and business plan shall provide reasonable assurance that the investment opportunity can produce the target return.
- The risk anticipated in the strategy and market is justified by and compensated for by the proposed investment, based on reasonable assumptions.

Primary emphasis will be on the quality and experience of the general partners, sponsors or managing members (collectively for ease of reference "general partners") and the staff of a proposed investment. Additional factors to be evaluated shall include:

- Fit within the Annual Plan and the System's portfolio.
- Strategy: its uniqueness, the General Partner's access to proprietary deal flow,

and the flexibility and likelihood of success of the firm's entry and exit strategy.

- Integrity and reputation of the General Partners, its employees and other investors.
- Depth and breadth of the General Partner's principals' and their employees' experience and expertise.
- Personnel turnover.
- Quality of overall partnership governance and management of the partnership including controls and reporting systems (including audited financials and reports to Limited Partners).
- Relationship with and reputation among existing investors (e.g., re-ups and declines).
- Relationship with existing portfolio companies, including terminated Managers.
- Relationship and reputation among banks and other sources of financing.
- Nature and quality of value-added involvement by General Partners.
- Demonstrated ability of General Partners and their employees.
- Past financial performance.
- Pre-existing commitments of General Partners (with particular emphasis on unrealized investments in previous funds).
- Alignment of employee interests with those of Principals.
- Alignment of General Partners interests with investors (General Partner investment relative to contemplated commitment, waterfall, treatment of transaction fees, clawbacks and lookbacks, operating budget, etc.).
- Appropriateness of terms and conditions.

<u>Glossary of Terms:</u>

Sectors:

Corporate Finance/Buyout: Funds seeking to make controlling and non-controlling investments in established companies which have the potential to achieve greater value through improved performance.

Growth Equity: Partnerships formed to invest and create value in emerging companies with high growth potential.

Special Situations: Partnerships that invest using a unique strategy. Examples include distressed and turnaround, industry focused and multi-stage partnerships.

Energy: Partnerships that generate long-term capital appreciation through privately negotiated equity and equity-related investments in energy and natural resources companies.

Secondaries: A private equity vehicle formed to purchase active partnership interests from an investor.

Co-Investment: A direct investment is a purchased interest of an operating company. A coinvestment is a direct investment made alongside a partnership.

Venture Capital: An investment strategy that provides start-up or growth capital to companies in the early stages of development. Venture investments generally involve a greater degree of risk, but have the potential for higher returns.

Fund-of-Funds: An investment vehicle which invests in other private equity partnerships.

Mezzanine: An investment strategy involving the purchase of subordinated debt. These securities exist between the senior debt and equity of a holding's capital structure. Subordinated debt carries a lower level of risk than pure equity structures because they generate current income and have a more senior position in the company's capital structure.

NEW YORK CITY FIRE DEPARTMENT PENSION FUND, SUBCHAPTER 2

REAL ASSETS INVESTMENT POLICY

Adopted: December 7, 2012

I. SCOPE

The Real Assets Investment Policy Statement (the "IPS") applies to the Real Assets Program within the New York City Fire Department Pension Fund, Subchapter 2 ("Fire" or the "System".)

II. PURPOSE

The IPS provides the broad strategic framework for managing the System's Real Asset investments. The design of the IPS ensures that Managers, advisors, consultants and other participants selected by the System adhere to the investment principles and guidelines of Fire. Additionally, the use of the IPS assures sufficient flexibility in managing investment risks and returns associated with the Real Assets Program (the "Program"). The initial portfolio of the Program will include a real estate program (the "Real Estate Program", an already established asset class) and an infrastructure program (the "Infrastructure Program"). Investment Policy Statements for these component asset classes are attached as Attachments A and B, respectively. Additional asset classes may be considered in the future and their inclusion will be predicated upon Board approval and amendment of this document (e.g. timber, agriculture and direct energy assets).

III. STRATEGIC OBJECTIVE

The System has mandated investments in Real Assets as part of its strategic asset allocation to:

A. Preserve investment capital;

B. Provide a hedge against inflation;

C. Provide diversification benefits due to the low correlation to other asset classes;

D. Reduce the volatility and provide superior risk adjusted returns; and

E. Take advantage of the ability to accept illiquidity in exchange for an illiquidity premium

The System also expects that commitments to and investments in Real Assets will establish, maintain and continually improve the reputation of Fire as an investor. The System will seek investments in which the manager demonstrates a commitment to standards of good conduct, including compliance with all Federal, State and local laws, including, but not limited to, labor, anti-discrimination, environmental, and health and safety laws, and the System will reject investments that would pose reputational risk to the Fund or bring public or regulatory scrutiny other than that which is required by law or regulation to consummate an investment transaction. The Fund will not entertain investments that have the potential of eliminating public-sector jobs. The System encourages the submission of proposals for review from managers that demonstrate a strong commitment to diversity in their firms.

The Board recognizes that in order to comply with the investment restrictions, Staff will negotiate an opt-out right in respect of the restrictions.

All Real Asset investments shall be subject to fiduciary standards. The operation of the Program is subject to the exclusive benefit rule and all other applicable laws, including requirements of prudence.

IV. ASSET ALLOCATION

The Program will be funded by an allocation of 5% (plus or minus 2%) of the System's assets. This allocation will be prudently diversified by asset class as well as within each component asset class.

V. RESPONSIBILITIES AND DELEGATION

A. Role of the Board of Trustees

The Board is responsible for reviewing and approving policies, including this IPS. In addition the Board shall:

- Review the Program at least annually and approve and adopt the Annual Real Assets Plan[1];
- Approve the retention and review performance of strategic consultants and advisors and other external resources, as needed;
- Oversee performance and risk and Staff's (as such term is defined below) implementation of the Program;
- Delegate investment approval authority as appropriate;
- Approve investments/terminations of investment strategies and managers; and/or delegation of manager retention/termination to Staff and/or consultant as deemed appropriate.

B. Role of the Comptroller's Office Staff

The duties of the Comptroller's Office staff (the "Staff") include, but are not limited to:

- Identifying, evaluating and recommending investment opportunities;
- Reviewing and recommending changes to the IPS and any other policies developed as part of the Program; developing and implementing periodic reviews of the Program, which shall occur at least annually; and managing the operations of the Program;
- Working with the System's consultants on identifying and evaluating Real Asset strategies, investment managers and investments appropriate for the Program, and on making selection recommendations to the Board;

[1] The Annual Real Assets Plan will be composed of the Annual Real Estate Plan, the Annual Infrastructure Plan and plans for any other component asset classes that may be added in the future.

- As needed, identifying and evaluating strategic consultants and advisors and other external resources for the Program, and making selection recommendations to the Board;

- Overseeing the System's portfolio of Program investments, including management of consultants and advisors and other external resources engaged on the System's behalf in connection with the Program with the objective that the Fund obtains the maximum value from those relationships;

- Monitoring and reporting on the performance metrics as provided by the Managers with respect to the overall purpose and objectives of the Program; and monitoring and reporting on the performance of the consultants at least annually.

- Recommending the sale of assets in the secondary market to optimize the Program's performance.

C. Role of the Real Asset Consultants

Fire retains consultants (the "Real Asset Consultants") to assist in the implementation of its strategic allocation to Real Assets. Fire may retain different consultants for each component asset class. The strategic allocation to the asset class is recommended to the Board by its General Consultant. The Real Asset Consultants are fiduciaries and advise Staff and Fire on all aspects of its Real Assets Program. The responsibilities of the Real Asset Consultants include, but are not limited to:

- Providing Strategic Advice:

  - Providing advice to the Board and Staff with respect to the development and operation of the Program, including advice on industry developments and portfolio construction.

  - Assisting the Board and Staff in developing the Real Assets Program IPS, as well as policy statements for component asset classes, and assist in conducting periodic reviews of the IPS and the Program.

  - Together with Staff, provide an annual and a longer term plan for the Program;

  - Periodic assessments of industry best practices with regard to policies and procedures;

  - Analysis of Fire's existing Real Assets Program;

  - Periodic reports on the state of the Real Asset marketplace;

  - Attending meetings of the Board and providing educational seminars for the Trustees;

  - Such other strategic advice and services as Fire or Staff may reasonably require;

- New investment identification and evaluation, including:

  - Assisting Staff in identifying, evaluating and recommending investment opportunities and terminations consistent with the IPS and believed to be appropriate for the Program, including conducting due diligence with respect to new investments, as requested;

  - The manager's ability to comply with the Board's investment policies and restrictions;

- Periodic reports on current and anticipated investment opportunities.

- Assisting Staff with the implementation, negotiation and execution of new commitments and/or investments;

- Portfolio monitoring:

  - Assisting Staff with the ongoing review of committed investments, including reports to the Board on significant manager developments, proposed amendments to fund documentation and investment performance;

  - Update Board quarterly on any portfolio company opt-outs pertaining to the Board's investment policy;

  - Periodic and real-time reports on developments at and performance of individual investments in the Fire portfolio.

D. Role of Custodian Bank/Alternatives Administrator

The Custodian Bank and/or Alternatives Administrator shall be responsible for reviewing and certifying all Program cash flow authorizations (such as capital calls and distributions).

VI. EXCEPTIONS TO THE IPS

From time to time, the Program may require exceptions to this IPS. In the event that an exception is required, the following procedures shall be followed:

Non-urgent[2] matters requiring an exception to this IPS will be addressed at the next scheduled Fire investment meeting. The Board shall be provided a detailed written summary and rationale warranting a potential exception to the IPS**.** Exceptions will only be granted with Board approval (vote, motion, etc.).

For urgent matters[3] (time-sensitive) requiring an exception to this IPS, the Staff will notify the Board, in writing or via electronic mail, as soon as practicable of the matter requiring the need for an exception to the IPS. A documented vote granting the exception may be obtained and the Board will ratify the decision at the next scheduled monthly investment meeting.

[2] Non-Urgent matters are defined as those not requiring an affirmative decision prior to the next scheduled Fire investment meeting.
[3] Urgent matters are defined as those requiring an affirmative decision by the Board prior to the next scheduled Fire investment meeting.

Attachment A

Real Estate Program

Real Estate Investment Policy

I. PURPOSE

This attachment to the Real Assets Investment Policy Statement sets forth the investment policy for the Real Estate Program (the "Real Estate Program").

The inclusion of Real Estate in the investment portfolio of the System will allow for global investments in an established asset class that has been shown to (i) provide attractive risk-adjusted returns over full market cycles on a stand-alone basis and (ii) further improve risk-adjusted returns in a broader portfolio by dampening volatility and serving as a hedge against inflation.

The Fund seeks to employ Emerging Managers.[4] Emerging Managers are asset Managers the Board believes will add significant value to the Fund through implementation of investment strategies consistent with the Board's asset allocation and other policies, but which, because of size, length of track record, or other similar factors, have not been awarded contracts through the Board's manager selection process.

II. INVESTMENT OPERATIONS

A. General Approach

The Staff shall review and manage investments using a disciplined management strategy. Guided by the Annual Real Estate Plan (defined below), Staff shall make assessments as to appropriate strategic weightings within the portfolio. Staff then shall seek to identify the most attractive investment opportunities available consistent with the Annual Real Estate Plan and with the goal to be diversified prudently across strategies, property types, vehicles, Managers and geography.

Portfolio construction will be guided by (i) broad allocation ranges for Core / Core Plus Real Estate investments and for Non-Core Real Estate investments (discussed below) and (ii) market opportunities and conditions.

B. Core / Core Plus Real Estate

The Core/Core Plus Real Estate Portfolio will be comprised of two sub-components.

- Core Real Estate Investments. Core Real Estate investments are of comparatively low risk. They consist of investments in operating and substantially leased properties

[4] Criteria for Emerging Managers are set forth in the Emerging Manager policies adopted by the Board on January 27, 2007. These criteria include, among others, total assets under management not exceeding $2 billion in aggregate, including non-institutional capital.

of institutionally quality, consist primarily of investments in traditional property types (office, industrial, retail and for-rent multifamily) and tend to use moderate leverage (generally below 40%). The Core Real Estate portion of the portfolio will generally track the NCREIF ODCE index fairly closely. (This is the index that underlies the System's benchmark for real estate.) Leverage in the Core Real Estate portfolio may be increased as a way to pair low risk assets with a higher risk capital structure, subject to the overall leverage limits discussed below.

- <u>Core Plus Real Estate Investments</u>. Core Plus Real Estate investments offer the opportunity to enhance returns by (i) alleviating an identifiable deficiency (in an asset's capital structure, in an asset's physical structure, in an asset's operation, etc.) or (ii) benefitting from market inefficiency. These investments may use slightly more leverage than Core Real Estate investments to improve returns.

C. Non-Core Real Estate

Non-Core Real Estate investments offer the opportunity to further enhance returns by investing in assets with greater deficiencies (such as substantial vacancy, the need for substantial renovation, etc.), by accepting different types of risks (such as development risk, redevelopment risk, repositioning, etc.), by focusing more on non-traditional property types that may have greater operating risks (such as hotels), by accepting greater capital market risk (for example, by acquiring assets with complex capital structures that may be difficult to unwind) and by seeking areas of greater market inefficiency.

D. Discretion

- Staff, in a discretionary capacity, will work with the Consultant to implement the Core / Core Plus Real Estate component of the Real Estate Program, including the selection of Managers and portfolio construction, with appropriate updates to the Board; and

- Staff, in a discretionary capacity, will work with the Consultant to implement investments in follow-on funds or other vehicles where the investment commitment is limited to the higher of $20 million or the commitment amount in the predecessor vehicle, with appropriate updates to the Board.

E. Investment Classification

The System recognizes that, although specific categories of investments are delineated in this IPS for purposes of monitoring and controlling risk, the universe of investment opportunities is better characterized by a spectrum of risk and return. To facilitate the efficient classification of investments, any investment with a targeted net return below 10% will be classified by default as Core / Core Plus Real Estate, and any investment with a targeted net return of 10% or greater will be classified by default as Non-Core Real Estate. Internal rates of return will be used for closed-end vehicles, and time-weighted returns will be used for open-end vehicles.

These defaults may be altered for individual investments based on subjective judgments. Each investment will be classified at the time that the commitment is made, and may be reclassified by Staff and the Consultant, with disclosure to the Board, if the profile of the investment changes, or if market conditions change.

Investments classified as "value-add" by industry organizations such as NCREIF may, depending on the circumstances, fall into either the Core / Core Plus Real Estate Portfolio or the Non-Core Real Estate Portfolio.

F. Allocation Ranges

Core / Core Plus Real Estate:	no less than 40%
Non-Core Real Estate:	no less than 40%

Actual weightings may deviate from these limits while the Real Estate Portfolio is undergoing a repositioning.

G. Annual Real Estate Plan

Investments made under the Real Estate Program shall be made in accordance with the Annual Real Estate Plan contained within the Annual Real Assets Plan. Staff along with the Consultant shall present the Annual Real Assets Plan to the Board each fiscal year or each calendar year for the Board's approval, which will provide guidance to the Staff and Consultant in the management, operations and investments of the Program. The Annual Real Assets Plan shall include an elaboration of a target strategic allocation and tactical within the asset class. An Annual Real Assets Plan approved by the Board may supersede the guidelines and limitations included in this IPS**.**

H. Pacing

The Annual Real Estate Plan shall recommend commitment ranges to be made by the System within each strategy as well as a total target commitment for the System (the "Pacing Analysis") in order to achieve both the target strategic allocation and the overall allocation to the asset class. The Pacing Analysis shall take into account (i) the System's overall allocation to the asset class and each strategy, (ii) the market environment, (iii) the goal of diversifying by strategy, property-type, geography, vintage, Manager and fund and (iv) other appropriate considerations.

I. Investment Guidelines

1. Investment Types

This IPS authorizes commitments to real estate funds (open-ended and closed-ended), separate accounts, co-investments, joint ventures and direct investments. These investments may be in any type of security throughout the capital structure (including equity, preferred equity and debt).

For purposes of this IPS, "real estate" includes, but is not limited to: (i) private equity real estate investments (including interests owned through joint ventures and commingled funds), (ii) private debt investments secured by first liens (i.e., mortgages or deeds of trust) on real property and other debt investments (e.g., mezzanine and participating debt), and (iii) private interests in real estate owning and/or operating entities (e.g., real estate operating companies- or "REOCs" or limited partnerships). The Portfolio shall consist of private and equity/debt real estate investments made through separate account and direct investment vehicles or commingled fund vehicles.

Investments in real estate investment trusts ("REITs") and other public market investments will be managed outside of the Portfolio. Incidental exposure to REITs and public real estate operating companies (for example take-private transactions or public exits of private investments) will not constitute a violation of this IPS.

2. Co-Investment and Direct Secondaries

Investment rights may include opportunities for additional capital participation through co-investment or other side-by-side direct investment opportunities. Secondary investments include the purchase of LP interests, co-investments or other pooled investment vehicles.

J. Economically Targeted Investment Policy

The Real Estate Program will be executed in a manner that complies with any Economically Targeted Investment Policy maintained by the System.

III. RISK MANAGEMENT

Consultant and Staff shall monitor compliance with risk management policies quarterly through the performance measurement process. Real Estate does not lend itself to traditional quantitative measures of risk such as standard deviation and benchmark tracking error. Rather, risk is managed through a combination of quantitative and qualitative constraints. The following sections identify the most significant risks with Real Estate investments and the method of control. The Real Estate Program will only consider investment structures that provide limited liability to the System.

A. Asset Type Diversification

The Real Estate Program will seek diversification by property type and strategy. The Real Estate Program will target weightings to each of the primary property types as follows:

Property Type	Policy Range
Multifamily	Up to 40%
Industrial	Up to 35%
Office	Up to 45%
Retail	Up to 35%
Hotel	Up to 25%
Other	Up to 20%

These bands may be revised over time as the ODCE benchmark weightings shift. Debt investments may be classified by Staff as falling into one of the traditional property types based on the composition of the underlying collateral.

B. Location Diversification

The Real Estate Program is intended to be diversified globally, with a disproportionate weighting toward the United States due to (i) the absence of currency risk and associated costs, (ii) the absence of withholding taxes, (iii) high transparency, (iv) a well-developed system of property rights and a well-developed legal system and (v) a deep and liquid market. The Real Estate Program will target exposure to investments outside the United States no greater than 25% of the total market value.

C. Single Investment Size

The System does not want the failure of a single investment to have a material impact on the performance of the Real Estate Program. In order to mitigate this risk, the maximum commitment to a single investment is limited to no more than 15% of the Portfolio. It is anticipated that this limit will be approached rarely, if ever. This limit will not apply to a separate account.

D. Investment Position

Fire does not want to invest with Managers that have significant enterprise or platform risk unless the System is adequately compensated for that risk. Accordingly, the maximum commitment to a single fund by the five New York City systems is limited to no more than 15% of a single fund-raise determined at the time of initial investment unless either (i) the System receives adequate benefits to offset the associated risk (such as preferred fees and/or enhanced representation as a non-control investor) or (ii) it is determined that the Manager's platform is viable and effective even without the System's commitment.

E. Manager

To avoid having excessive exposure to any individual Manager and/or its affiliated entities, the System will limit a single Manager to managing no more than 15% of the total Real Estate Program allocation.

F. Leverage

Real Estate Program-level leverage will be targeted not to exceed 65% under normal market conditions. In the event that market conditions cause this limit to be exceeded, the pipeline of targeted investments taken as a whole should be designed to bring the Real Estate Program back into compliance in a reasonable timeframe; however, individual investments with varying levels of leverage may still be pursued. The use of leverage by Managers will be monitored by the Staff and the Consultant on a quarterly basis to mitigate risks. In addition to total leverage, Staff and the Consultant will take into consideration factors such as recourse and cross-collateralization, term, interest rate risk, and the potential for covenant breaches and technical defaults.

G. Currency

The Real Estate Program accepts currency risks consistent with the geographic constraints. Currency risk, and the cost of hedging, will be taken into consideration as part of a proposed investment's overall risk/reward profile.

IV. INVESTMENT/EVALUATION CRITERIA

Staff and Consultant will conduct prudent and thorough due diligence upon Real Estate Investment Managers and Investments. Minimum requirements for selection of Investment

Managers and Investments shall be:

- The principals must demonstrate relevant experience and expertise in the strategy they propose to execute and the market in which they propose to operate.
- The principals must demonstrate requisite skills and experience necessary to execute the proposed strategy, including evidence from similar prior accomplishments.
- The principals must demonstrate an ability to cooperate and to work well together over the long term and to manage a stable organization.
- The principals must dedicate a sufficient proportion of their time and effort to the proposed investment vehicle.
- The principals must make a meaningful personal financial commitment to the proposed investment.
- The principals must be individuals of high character and solid professional reputation.
- The proposed strategy and business plan must set forth sufficient detail to permit substantive and meaningful review of the investment opportunity, verification of the investment concept and evaluation of the appropriate risk factors.
- The proposed strategy and business plan must provide reasonable assurance that the investment opportunity can produce the target return.
- The risk anticipated in the strategy and market must be justified by and compensated for by the proposed investment, based on reasonable assumptions.

Primary emphasis will be on the quality and experience of the Manager and of its affiliates and staff. Additional factors to be evaluated include:

- Fit within the Annual Real Estate Plan and the System's portfolio.
- Strategy: its uniqueness, the Manager's access to proprietary deal flow, and the flexibility and likelihood of success of the firm's entry and exit strategy (in the case of closed-ended funds).
- Integrity and reputation of the Manager, its employees and other investors.
- Depth and breadth of the Manager's principals and their employees' experience and expertise.
- Personnel turnover.
- Quality of overall governance and management, including controls and reporting systems (including audited financials and reports to investors).

- Relationship with and reputation among existing investors (*e.g.*, re-ups and declines).
- Relationship with existing and former operating partners (if applicable), property management companies (if applicable) and other third parties in the industry.
- Relationship and reputation among banks and other sources of financing.
- Nature and quality of value-added involvement by Managers.
- Demonstrated ability of a Manager's principals and employees.
- Past financial performance.
- Pre-existing commitments of the Manager and its principals and employees.
- Alignment of employee interests with those of Principals.
- Alignment of Managers interests with investors (Manager investment relative to contemplated commitment, waterfall, treatment of transaction fees, clawbacks and lookbacks, operating budget, etc.).
- Appropriateness of terms and conditions.

V. PERFORMANCE OBJECTIVE

The objective of the Real Estate Program is to provide stable long-term net returns that meet or exceed the Real Estate Program Benchmark while assuming suitable risk.

The Real Estate Program Benchmark equals the NCREIF Fund Index – Open-End Diversified Core Equity ("ODCE") net of fees plus 100 basis points over full market cycles.

Performance over shorter time periods will also be measured to assess progress relative to the benchmark. Because the Real Estate Program is designed to have a higher risk/return profile than the benchmark, these shorter-term, interim measurements will likely deviate from the ODCE plus 100 basis points (both positively and negatively) at different points in the market cycle.

A secondary benchmark may be developed utilizing other indices and methodologies to provide additional context. This includes the use of (i) other private fund indices to evaluate time-weighted returns and to perform attribution analysis, (ii) non-core private fund indices for vintage year IRR rankings of individual closed-end funds, (iii) public market equivalents, period IRRs and other techniques determined to be appropriate by Staff or the Consultant and (iv) correlations and other similar metrics to assess diversification and inflation hedging benefits.

For convenience, trailing ten-year periods will often be used as a proxy for full market cycles. However, when the result is materially affected by the presence of a market inflection point, more precise measurements (such number of quarters from peak / number quarters from trough) may be employed to determine market cycles.

Attachment B

Infrastructure Program

Infrastructure Investment Policy

I. PURPOSE

This attachment to the Real Assets Program Investment Policy Statement sets forth investment policy for the Infrastructure Program.

The inclusion of Infrastructure in the System's Total Plan will allow for global investments in facilities or assets which provide core essential services critical to the operation and development of economies. Typically infrastructure investments have high barriers to entry due to significant capital expenditure requirements, exclusive long term contracts or regulatory requirements. Infrastructure investments are comprised of long useful-life assets with high tangible value and relatively low value erosion over time.

The Fund seeks to employ Emerging Managers.[5] Emerging Managers are asset Managers the Board believes will add significant value to the Fund through implementation of investment strategies consistent with the Board's asset allocation and other policies, but which, because of size, length of track record, or other similar factors, have not been awarded contracts through the Board's manager selection process.[6] All investments by Emerging Managers shall be subject to fiduciary standards.

II. INVESTMENT OPERATIONS

A. General Approach

The Staff shall review and manage investments using a disciplined management strategy. Guided by the Annual Infrastructure Plan, Staff shall make assessments as to appropriate strategic weightings within the portfolio. Staff then shall seek to identify the most attractive investment opportunities available consistent with the Annual Infrastructure Plan and with the goal to be diversified prudently across strategies, industries, partnerships and geography.

The Program will seek to invest in opportunities in a variety of infrastructure sectors, including but not limited to, transportation, energy, power, utilities, water, wastewater, communications and social infrastructure. Both Core and Non-Core Infrastructure Investments, as explained more fully below, will be pursued.

Core Infrastructure Investments include the lower risk strategies that acquire assets that operate in an environment of limited competition as a result of natural monopolies,

[5] Emerging Managers are sponsors targeting capital raises up to $750 million and investing through funds I – III. Emerging Managers include Minority & Women-Owned Business Enterprise ("MWBE")

[6] Per Fire's Core IPS dated July 25, 2007

government regulation or concessions, and generate a reliable income stream. Core Infrastructure Investments are expected to provide predictable, long-term, inflation-linked cash flows with minimal volatility. These types of assets are part of core and value-added infrastructure strategies. These investments are in quality assets that benefit from high barriers to entry and inelastic demand for the product or service being provided. These investments are expected to comprise a majority of the infrastructure portfolio, or 60-100%.

Non-Core Infrastructure Investments seek to capture superior risk-adjusted returns caused by market imbalances. These types of investments are part of opportunistic strategies and will have higher risk driven by the following factors: competition, growth, construction, development, technology, and commodity pricing. Correspondingly, these investments will have higher expected returns than the Core Infrastructure Investments. The Infrastructure Program will target a range of 0-40% for these types of investments.

Portfolio construction will be driven by (i) broad allocation ranges to Core and Non-Core Infrastructure Investments and (ii) market opportunities and conditions. Core Infrastructure Investments will represent a majority of the Infrastructure Program. The remaining allocation will be available for Non-Core investment opportunities that emerge over the market cycle. Non-Core Infrastructure opportunities include but are not limited to investing in Greenfield projects.

B. Allocation Ranges

Core Infrastructure Investments:	60 - 100%
Non-Core Infrastructure Investments:	0 - 40%

Actual percentages may differ substantially from these targets during the initial years of the Program.

C. Annual Infrastructure Plan

Investments made under the Program shall be made in accordance with the Annual Infrastructure Plan contained within the Annual Real Assets Plan. Staff along with the Real Asset Consultants shall present the Annual Real Assets Plan to the Board each fiscal year or each calendar year for the Board’s approval, which will provide guidance to the Staff and Real Asset Consultants in the management, operations and investments of the Program. The Annual Infrastructure Plan shall include an elaboration of a target Core Infrastructure Investment allocation within the Real Asset class.

D. Pacing

The Annual Infrastructure Plan shall recommend commitment ranges to be made by the System within each strategy as well as a total target commitment for the System (the “Pacing Analysis”) in order to achieve both the target Infrastructure allocation and the overall allocation to the Real Asset class. The Pacing Analysis shall take into account the System’s overall allocation to and investments in the Infrastructure asset class, within each strategy, across investment type and geography, and by vintage as well as the market environment and such other considerations as are appropriate. The Program shall strive to avoid inappropriate concentrations in strategies, investment type, geographic areas, funds, managers or vintage years.

E. Investment Guidelines

This IPS authorizes commitments to infrastructure funds (open-ended and close-ended), separate accounts, co-investments, joint ventures and direct investments. These investments may be in any type of security throughout the capital structure.

III. RISK MANAGEMENT

Infrastructure does not lend itself to traditional quantitative measures of risk such as standard deviation and benchmark tracking error. Rather, risk is managed through a combination of quantitative and qualitative constraints. The following sections identify the most significant risks with infrastructure investments and the method of control. The Program will only consider investment structures that provide limited liability to the System(s).

A. Asset Type Diversification

The Infrastructure Program will seek diversification by asset type, revenue drivers, and geography in an effort to mitigate portfolio volatility. The portfolio may include a variety of assets including but not limited to electricity transmission, pipelines, airports, toll roads, communication towers and electric generators, windmills etc. to vary the sources of revenue to the portfolio.

B. Location Diversification

The Infrastructure Program is intended to be diversified globally.

C. Single Investment Size

The System does not want the failure of a single investment to have a significant or material impact on the performance of the Infrastructure Program. In order to mitigate this risk, the maximum commitment to a single investment is limited to no more than 15% of a single fund-raise. This limit will not apply to a separate account.

D. General Partner

To avoid having excessive exposure to any individual General Partner and/or its affiliated entities, the System will limit a single General Partner to managing no more than 10% of the total Real Assets Program allocation when fully invested.

E. Leverage

The average leverage of all investments in Infrastructure Program will be no higher than 65%. The Board acknowledges that the utilization of leverage varies widely in infrastructure investments, and typically investments with lower risk utilize higher leverage. The use of leverage by General Partners will be monitored by the Staff and

Consultant on a quarterly basis to mitigate risks.

F. Currency

The Infrastructure Program accepts the currency risks consistent with the geographic constraints. Infrastructure partnerships generally do not hedge currency risk and the Infrastructure Program will not generally require currency hedges.

IV. INVESTMENT/EVALUATION CRITERIA

Staff and Consultant will conduct prudent and thorough due diligence upon Infrastructure Investment Managers/Investments. Minimum requirements for selection of Investment Managers/Investments shall be:

- The principals shall demonstrate relevant experience and expertise in the strategy they propose to execute and the market in which they propose to operate.
- The principals shall demonstrate requisite skills and experience necessary to execute the proposed strategy, including evidence from similar prior accomplishments.
- The principals shall demonstrate an ability to cooperate and to work well together over the long term and to manage a stable organization.
- The principals shall dedicate a sufficient proportion of their time and effort to the proposed investment vehicle.
- The principals shall make a meaningful personal financial commitment to the proposed investment.
- The principals shall be individuals of high character and solid professional reputation.
- The proposed strategy and business plan shall be set forth in sufficient detail as to permit substantive and meaningful review of the investment opportunity, verification of the investment concept and evaluation of the appropriate risk factors.
- The proposed strategy and business plan shall provide reasonable assurance that the investment opportunity can produce the target return.
- The risk anticipated in the strategy and market is justified by and compensated for by the proposed investment, based on reasonable assumptions.

Primary emphasis will be on the quality and experience of the general partners, sponsors or managing members (collectively, “General Partner”) and the staff of a proposed investment. Additional factors to be evaluated shall include:

- Fit within the Annual Infrastructure Plan and the System’s portfolio.

- Strategy: its uniqueness, the General Partner's access to proprietary deal flow, and the flexibility and likelihood of success of the firm's entry and exit strategy (in the case of close-ended funds).
- Integrity and reputation of the General Partner, its employees and other investors.
- Depth and breadth of the General Partner's principals' and employees' experience and expertise.
- Personnel turnover.
- Quality of overall partnership governance and management of the partnership including controls and reporting systems (including audited financials and reports to Limited Partners).
- Relationship with and reputation among existing investors (e.g., re-ups and declines).
- Relationship with existing portfolio companies, including terminated Managers.
- Relationship and reputation among banks and other sources of financing.
- Nature and quality of value-added involvement by General Partner.
- Demonstrated ability of General Partner and its employees.
- Past financial performance.
- Pre-existing commitments of General Partner.
- Alignment of employee interests with those of Principals.
- Alignment of General Partner interests with investors (General Partner investment relative to contemplated commitment, waterfall, treatment of transaction fees, clawbacks and lookbacks, operating budget, etc.).
- Appropriateness of terms and conditions.

V. PERFORMANCE OBJECTIVE

The objective of the program is to provide stable long-term returns that meet or exceed the Program Benchmark while assuming suitable risk.

The performance benchmark for the Infrastructure Portfolio is to meet or exceed the Consumer Price Index ("CPI") plus 4% net of fees over a rolling 5-year period.

The Infrastructure Portfolio is expected to generate a total return, net of investment management fees, of at least 6.5%.

Glossary of Terms:

Annual Infrastructure Plan: The infrastructure component of the Annual Real Assets Plan.

Annual Real Assets Plan: See *Section IV.*

Annual Real Estate Plan: The real estate component of the Annual Real Assets Plan.

Brownfield Investments: Assets that have been previously constructed and that have an operating history.

Closed-ended Fund: A fund with a fixed number of units (shares). All fund capital is usually contributed on the same date and non-withdrawable until the fund's expiration date. Shares may be traded among investors on a secondary basis.

Co-Investments: A minority investment, made directly into an operating company, alongside a general partner or other infrastructure investor(s).

Core Infrastructure Investments: See *Attachment C. Section II. A.*

Core Plus Real Estate Investments: See *Attachment A. Section II. B.*

Core Real Estate Investments: See *Attachment A. Section II. B.*

The Board: The Board of Trustees of the New York City Fire Department Pension Fund, Subchapter 2.

Direct Investments: Investments that represent direct ownership interests in assets or companies as opposed to through a fund vehicle.

General Consultant: The consultant retained by the Board to advise on the composition of its entire investment portfolio.

General Partner: The active manager of an investment vehicle.

Greenfield Investments: Assets in development and lacking an operating history.

Infrastructure Program: The infrastructure component of the Real Assets Program.

Joint Ventures: An agreement whereby the parties agree to develop, for a fixed time, a new entity and new assets by contributing equity. All parties exercise control over the enterprise.

Managers: A person or organization that makes investments in portfolios of securities on behalf of Fire, in accordance with the investment objectives and parameters defined by the System.

Non-Core Infrastructure Investments: See *Attachment A. Section II. A.*

Non-Core Real Estate Investments: See *Attachment B. Section II. C*

OECD countries: Countries that belong to the Organization for Economic Co-operation and Development.

Open-ended Fund: An investment fund which can issue and redeem shares at any time. Shares in the fund are typically purchased directly from the fund itself.

Opportunistic Investments: Assets that are either 1) core but in development in OECD countries, 2) assets in OECD countries that are only semi-monopolistic or are subject to larger degrees of user-demand and competition, or 3) assets in non-OECD countries and developing markets.

Program: The Real Assets Program.

Real Assets: See *Section II.*

Real Asset Consultant: One or more consulting firms retained by the Comptroller's office to assist in the construction and monitoring of the Real Assets Program.

Real Assets Investment Policy Statement: This Investment Policy Statement, or "IPS".

Real Assets Program: The investment program of Fire in Real Assets, or the "Program".

Real Estate Program: The real estate component of the Real Assets Program.

Staff: See *Section IV. B.*

Value-Added Investments: Assets in the early stages of operation or with potential for add-on development in Core-like assets in OECD countries.

New York City Fire Department Pension Fund, Subchapter Two

Economically Targeted Investment Policy

Proposed: September 13, 2005
Adopted: September 13, 2005
Revised: November 11, 2008

Purpose of Economically Targeted Investments Policy

The purpose of this Policy is to establish the parameters by which the New York City Fire Department Pension Fund, Subchapter Two ("Fire," or the "System") may invest through its Economically Targeted Investments ("ETI") Program (the "Program"). ETIs are investments in a variety of asset classes that generate rates of return commensurate with the overall risk, liquidity, security and structure of comparable non-targeted investments while providing collateral economic benefits (benefits that enhance quality of life and promote economic development and activity) to the targeted areas. ETIs address capital gaps, thereby promoting the quality of life, growth and economic development in the targeted areas. For the purpose of this Policy, targeted areas are defined as the five boroughs of New York City.

This Policy, as of its adoption date, supersedes the Economically Targeted Investment Policy as adopted on October 5, 2004.

Objectives of Economically Targeted Investments

The System has mandated investments in Economically Targeted Investments:

- to achieve competitive returns commensurate with the risk, liquidity and structure of the investment;
- to provide collateral economic benefits for the Targeted Areas;
- to address market inefficiencies in the Targeted Areas, and in particular capital gaps that affect the low-, moderate- and middle-income neighborhoods and populations of the Targeted Areas;
- to promote economic development and attract additional investment in the Targeted Areas;
- to increase the diversification of its assets; and
- to reduce the volatility of the overall portfolio of the System.

The System also expects that commitments to and investments in ETIs will establish, maintain and continually improve the reputation of the System as an investor. The System will make both continuous use of and contributions to the best practices of investors in ETIs, including rigorously applying the standard of valuing the achievement of risk-adjusted, market rates of return above the achievement of any collateral results. Fire will seek investments in which the proposer demonstrates a commitment to standards of good conduct, including compliance with all Federal, State and local laws, including, but not limited to, labor, anti-discrimination, environmental, and health and safety laws, and any of the stated policies of Fire and will seek to avoid investment programs that at the time commitment to the investment or investment program is made by the Trustees, the Trustees reasonably believe would likely (i) embarrass the Investor or (ii) generate public or regulatory scrutiny greater than that which is required by law or regulation to consummate the investment. Fire encourages the submission of proposals for review from proposers that demonstrate a strong commitment to diversity in their firms.

The operation of the Program is subject to the exclusive benefit rule and all other applicable laws, including requirements of prudence and will be operated in accordance with Department of Labor Interpretive Bulletin 94-1, 29 CFR Part 2509.

Asset Allocation

ETIs may cross a variety of asset classes. The System will seek to achieve a target allocation of 2% of assets to ETIs where practical and consistent with the standards in this and other policies. The Trustees acknowledge that in order to achieve the 2 percent target allocation, BAM staff may need to commit assets in excess of the 2 percent with respect to certain forward-rate commitment programs. Actual investments in ETI's shall not exceed 2 percent without Board authorization.

Responsibilities and Delegation

Role of Board of Trustees

The Board shall approve this Policy no less than biennially. In addition, the Board shall:

- Approve a Plan at least annually;
- Oversee performance;
- Approve investments;
- Delegate investment approval authority as appropriate; and
- Approve the retention of consultants and advisors ("Consultants"), outside legal counsel and other external resources as necessary.

Role of the Comptroller's Office Staff

The duties of the Economically Targeted Investment Staff of the Comptroller's Office (the "Staff") include, but are not limited to:

- Implementing and managing the operations of the program consistent with this policy and the direction of the Trustees;
- Developing and proposing a Plan for the Board's consideration, modification and adoption;
- Implementing the Plan as approved by the Trustees;
- Preparing new investment initiatives for the consideration of the Trustees;
- Evaluating and recommending investment programs and opportunities to the Trustees; and
- Monitoring and reporting to the Board on the performance of the program.

The duties of the Comptroller's Office legal staff (the "Legal Staff") are to assist the Staff in implementing the Trustees directives, including, but not limited to:

- Reviewing this Policy and any other policies developed as part of the Program;
- Participating in procurement of Consultants and other necessary experts; and
- Implementing trustee directions regarding the retention of outside legal counsel and other Consultants, performing legal work and providing legal advice in the ordinary course on the development and implementation of the program, managing and working with retained outside counsel, and ensuring statutory and regulatory compliance of investments.

Performance Benchmarking

The performance of each investment shall be measured against an appropriate benchmark, to be identified initially in conjunction with the making of the investment and to be modified from time to time to provide a suitable measurement of performance relative to investments with similar levels of risk, liquidity, security and structure. The collateral economic benefits shall be quantified to the extent possible and measured alongside the anticipated goal of the investment.

Staff shall report regularly to the Board on the performance of ETIs.

Investment Operations

General Approach

The Staff shall review and manage investments guided by the Plan, this policy statement and, in addition, the policy statement governing investments in the asset class to which an investment under consideration belongs. Staff shall seek to identify the most attractive investment opportunities available consistent with the above and with the investment objectives articulated in the Plan. All targeted investments shall be consistent with sound fiduciary standards (i.e. standards of prudence).

The Plan

Staff shall from time to time present to the Board for its approval a Plan which shall provide guidance to the Staff in the management, operations and investments of the Program.

Investment Parameters

Only those ETI investments that comparable favorably in terms of risk, liquidity, security and structure to similar non-ETI investments will be considered. Collateral economic benefits may not be factored when calculating risk or return. Only after an investment is determined to be financially sound may it be considered for the collateral economic benefits potentially offered.

Although the Targeted Areas are the five boroughs of New York City, ETIs may also provide benefits to additional areas outside of New York City.

Prohibited Investments

Investments that provide concessionary rates of return, that place social benefit concerns above the risk-adjusted return to the System or that violate any policy of the System are not permitted.

Investment Limits

Commitment Size: The System will not consider any investment programs (which may consist of one or more similar investments) which are expected to result in the investment across all of the New York City Retirement Systems (Fire; the New York City Employees' Retirement System; the New York City Police Pension Fund, Subchapter 2; the Teachers' Retirement System of the City of New York; and the Board of Education Retirement System [collectively, the "Systems"]) of less than $20 million in the aggregate over three years. Neither shall it consider individual investments across the Systems of less than $10 million unless such investments are made in the context of an investment program which is anticipated to result in the investment by the Systems of $20 million in the aggregate over three years.

Concentration: ETIs are, by definition, geographically concentrated. In order to mitigate this concentration risk, staff shall use a variety of tools, including but not limited to, guarantees, co-investors, and experienced managers.

Equity Investment Vehicles

The only equity structures that the System will consider will be those which provide limited liability to the System.

Minimum Requirements

The following shall be the minimum requirements for all ETI investments:

- All proposed investments must offer market rates of return on a risk-adjusted basis, with returns comparable to similar (non-ETI) products with similar risks, structures, liquidity and conditions;

- Investments must fill a capital gap or reach a sector of the market that is not efficiently served by the market;
- Investments must provide collateral economic benefits to the Targeted Areas;
- The proposing organization and/or the principals of a firm providing an investment must have three years' verifiable experience in and adequate staff for the type of investment proposed, and must provide a verifiable track record of relevant investment performance which demonstrates an ability to generate risk-adjusted returns with the product being proposed or a product substantially similar to the one being proposed; and
- The proposing organization and/or the principals must have demonstrated an ability to cooperate and to work well together with governmental and non-governmental financial entities as applicable and to manage a stable organization.

Evaluation Criteria

Proposed investments will be evaluated according to the following factors:

- The fit within the Plan and the System's portfolio;
- The clarity of the proposed investment or program and its parameters and goals;
- The extent to which the proposer demonstrates that the proposed investment or program will produce the anticipated risk-adjusted return and collateral benefits;
- The quality, reputation and experience of the investment managers and their ability to implement a proposed program or investment;
- The quality of controls and reporting systems (including audited financials, risk management systems and reports to investors); and
- The appropriateness of terms and conditions.

Investment management

Staff and Consultants shall be responsible for monitoring the performance of investments.

March 30, 2011

Hedge Fund Program Investment Policy Statement

Purpose and Objectives

The Hedge Fund Program (the "Program") will invest in active strategies whose return and risk profiles are expected to differ meaningfully from traditional investment strategies. The goal of the Program is to produce an overall Fund return that has a low correlation to that of the global public equity markets (and is between that of public equities and fixed income) over a full market cycle (typically 5-7 years), and that, when combined in a portfolio, will offer higher returns than traditional fixed income markets and lower volatility than the global public equity markets. The Program will invest in a disciplined manner within established risk and diversification guidelines of the sub-asset class and total Fund allocation. The Program is intended to pursue hedge fund investments by allocating both to funds of funds and directly to hedge funds.

Investing in hedge fund of funds is designed to provide efficient exposure to diversified pools of hedge fund managers and a foundation for direct hedge fund investments. Expected benefits of hedge fund of fund investments include, but are not limited to:

- mitigation of transparency risk, fraud risk and illiquidity risk through active oversight by the fund of funds manager(s) through investment in a separate account
- more nimble and tactical allocation of capital
- significant administrative, technology, risk-management and back-office support and staff training as Staff resources are added
- early introduction of a diversified hedge fund portfolio
- complimenting the market research, manager due diligence and trustee education services provided by a dedicated hedge fund consultant and BAM staff
- over time potentially, access to niche strategies, geographic diversification especially in emerging markets and emerging managers where fund of funds offer specialized research and due diligence capabilities

The operation of the Program is subject to the exclusive benefit rule and all other applicable laws, including requirements of prudence.

Asset Allocation

The Program will be initially funded by an allocation of up to 1% of System assets to a fund of funds strategy. It is anticipated that the initial Program allocation will increase as part of the System's overall asset allocation review and will include direct hedge fund investments, with a long-term goal of having most of the allocation invested via direct hedge fund investments (this will be reviewed as part of the annual Tactical Plan). This will enable NYC to reduce fund of funds fees and improve communication directly with hedge fund managers given scale investments by NYC.

Responsibilities and Delegation

Role of Board of Trustees

The Board shall:

- approve the Hedge fund Program Investment Policy Statement (the "IPS") and any changes to the IPS;
- review the Program at least annually and approve and adopt the Annual Tactical Investment Plan (the "Tactical Plan");
- approve the retention and review performance of strategic consultants and advisors and other external resources, as needed;
- oversee performance and risk and BAM's implementation of the Program;
- approve investments/terminations of investment strategies and managers; and/or delegation of manager retention/termination to Staff and/or consultant as deemed appropriate.

Roles of the Comptroller's Office Staff

The duties of the Comptroller's Office Staff ("Staff") include, but are not limited to:

- reviewing and recommending changes to the IPS, developing and implementing periodic reviews of the Program, which shall occur at least annually, and managing the operations of the Program;
- working with the System's consultants on identifying and evaluating hedge fund strategies, investment managers and investments appropriate for the Program, and on making selection recommendations to the Board;
- as needed, identifying and evaluating strategic consultants and advisors and other external resources for the Program, and making selection recommendations to the Board;
- overseeing the Fund's portfolio of Program investments, including management of consultants and advisors and other external resources engaged on the System's behalf in connection with the Program with the objective that the Fund obtains the maximum value from those relationships;
- highlighting to the Board any material exceptions to the Minimum Requirements for investments and managers as set forth in the IPS
- monitoring and reporting on performance and risk metrics as provided by the managers with respect to the overall purpose and objectives of the program; and
- monitoring and reporting on the performance of the consultants at least annually.

Role of the Consultants
The duties of the Fund's consultants include, but are not limited to:

- providing advice to the Board and Staff with respect to the development and operation of the Program, including advice on industry developments and portfolio construction, with the goal of an overall Program risk/return profile deemed appropriate by the Board, Staff and the Consultant and monitoring capital markets for investment strategies and investment opportunities;
- assisting the Board and Staff in developing the IPS and in periodic reviews of the IPS and the Program;
- together with BAM, provide an annual Tactical Plan for the Program
- assisting Staff in identifying, evaluating and recommending investment opportunities and terminations consistent with the IPS and believed to be appropriate for the Program, including conducting due diligence with respect to new investments, as requested;
- assisting Staff with the implementation, negotiation and execution of new investments;
- assisting Staff with the ongoing review of committed investments, including reports to the Board on significant manager developments, proposed amendments to fund documentation and investment performance, and periodic and timely review of the risk of the Systems' investment portfolios (although it is recognized that the ability to provide any such review is limited with respect to hedge funds due to the nature of the underlying hedge fund investments);
- fulfilling such other purposes as the Board, and BAM staff may approve and consultant may agree to.

Role of the Investment Managers
The duties of the Investment Managers the Fund allocates to include, but are not limited to:

Hedge Fund Managers:

- selecting and trading underlying investments, selecting service providers and trading counterparties, and otherwise fulfilling their roles as investment manager of their respective hedge funds consistent with this IPS, offering documents and legal documentation; and
- providing ongoing reporting to the Systems, Staff and Consultant as applicable, and adhering to their funds' respective offering documents; and responding to reasonable ad hoc requests from the Board or Staff relevant to the fund.

Fund of Fund Managers:

- acting as fiduciaries, and with discretion, in selecting and terminating strategies and underlying hedge funds for investment allocations consistent with this IPS, legal documentation, monitoring hedge funds allocated to, rebalancing strategies and hedge funds allocated to; and
- providing ongoing reporting to the Systems, Staff and Consultant as applicable on the performance and composition of the funds of funds, maintaining share class specific accounting of the fund of funds to check custodian and/or administrator valuations of fund of funds; and responding to reasonable ad hoc requests from the Board or Staff relevant to the fund of funds.

Role of the General Consultants
The duties of the Fund's General Consultants include, but are not limited to:

- Advising the Board and Staff on how the Program fits into the Systems' overall asset allocation and risk/return objectives.
- Also, providing ad-hoc advice or knowledge of specific hedge funds.

Benchmarking

The annualized performance objective for the Program is to exceed the 1yr Treasury Bill yield plus 4% over a full market cycle (typically 5-7 years)
and the secondary objective is to exceed the HFRI Fund of Funds Composite Index plus 1%, in both cases maintaining low correlation and volatility compared with global public equity markets.

For each strategy of the Program, Staff, in consultation with the consultant, will recommend an appropriate benchmark that reflects the risk profile and return objectives of the strategy and investment.

Investment Operations

A. General Approach

The Program will permit the Board to consider hedge fund strategies on a proactive basis subject to a framework of guidelines, due diligence standards, and procedures for monitoring and reporting. The Program's overall objective is to outperform the broad markets within established risk guidelines through established measures of volatility, illiquidity, concentration and organizational risks.

It is expected that the hedge fund investments included in the Program, whether accessed directly or via funds of funds, may have one or more of the following risk characteristics:

- Illiquidity of investment vehicle (e.g., limited partnership or commingled fund vehicles are commonly used and are often private placements with limited opportunity to withdraw)
- Illiquidity of assets held by the investment vehicles
- Lack of transparency
- Leverage
- Sector concentration
- Geographical concentration
- Security concentration
- Derivatives exposures
- Non-traditional trading techniques (most strategies involve shorting)
- Shorter track records
- Performance based fees
- Counterparty risks (counterparties to the hedge funds)
- Operational risks
- Fraud risks
- Tax/Regulatory risks
- Strategy (may generate negative returns)
- Organizational risks

Most of these characteristics present strategy and investment specific risks, which should be assumed only if the due diligence effort has confirmed the expectation of reasonable levels of excess returns and/or diversification benefit.

Individual hedge fund investments within the Program may be non-diversified, meaning that the investment manager of a particular hedge fund may concentrate its assets. However, it is expected that the Board will seek to diversify the Program by seeking to stratify investments by:

1. Hedge fund sectors
2. Hedge fund strategies
3. Geographic focus
4. Underlying asset types focus
5. Adherence to asset allocation and rebalancing policies

Hedge fund investments are not 100% liquid. Each hedge fund is subject to varying lock-up arrangements each of which is delineated with fund documents. The Program is expected to have moderate liquidity with a range of investments from more liquid to longer lockup, illiquid structures.

B. Hedge Fund Sectors & Strategies

All hedge fund sectors and strategies are eligible for inclusion in the Program. For purposes of definition and analysis, hedge funds can generally be categorized as follows:

Sector	Strategy
Equity Long/Short	Industry Focus
	Regional Focus
	Multi-Strategy
	Private Equity
	Other
Event Driven	Equity Focus
	Debt Focus
	Emerging Markets Value
	Private/Distressed Credit
	Multi-Strategy
	Other
Relative Value	Fixed Income
	Quantitative Strategies
	Convertible Arbitrage
	Multi-Strategy
	Other
Tactical Trading	Global Macro
	Emerging Markets Macro
	Commodities Trading Advisors
	Multi-Strategy
	Other

C. Annual Review

Staff with assistance of the hedge fund consultant shall present to the Board an annual review of the Program, including the overall allocation to and investments within the Program and recommended changes to the IPS as appropriate. The System's general investment consultant will participate in reviewing how the System's allocation to hedge funds fits into the System's overall asset allocation.

D. Investment Guidelines

1. Sector Weightings

Sector Constraints	Min	Max
Equity Long/Short	0%	45%
Event Driven	0%	70%
Relative Value	0%	45%
Tactical Trading	0%	55%

Sector weightings shall be computed on a "look through" basis with respect to the funds of funds. Staff, with the assistance of the consultant, will assign a Sector designation to each hedge fund investment regardless if accessed on a direct basis or indirectly via a fund of funds investment. Annual Tactical Plans may include narrower annual sector weighting objectives as appropriate. Over time, it is expected that the Program will be diversified across sectors and strategies.

De minimis investments within funds of funds (e.g. allocations to sub portfolios in a fund of funds, or less than 2% positions in a fund of funds) as well as holdbacks, liquidating trusts, and small positions owned on a direct or fund of funds basis, may be disregarded for purposes of computing sector weightings.

2. Position Sizing for Direct Hedge Fund Investments

When the Program is substantially completed, the goal is to have a diversified portfolio that includes direct hedge fund investments. As a percentage of the overall hedge fund program, individual hedge funds will generally be limited in size to a:

12%	Maximum allocation to any one management firm
10%	Maximum allocation to any single direct investment vehicle

So that the Program can be built up in an efficient manner, there will be an appropriate grace period from the above constraints from the time of the first direct hedge fund investment following adoption of this IPS.

3. Direct Hedge Fund Manager Selection

Staff, in consultation with the consultant, will identify potential hedge fund sectors and strategies for the Board's consideration, and then identify and evaluate investment managers and/or investments that focus on such sectors and strategies.

In evaluating managers and investments, Staff in consultation with the consultant shall set and share with the Board criteria for the selection of investment managers and investments as well as criteria set forth in this IPS under Minimum Requirements, taking into account deviations appropriate to the unique characteristics of direct hedge fund investments.

Staff may, but is not required to, issue a request for qualifications or request for proposals to help identify new strategies and investments. It is recognized that the nature of hedge fund investments may not lend themselves to an RFP process.

4. Fund of Funds Manager Selection

Staff, in consultation with the relevant consultant, will identify, perform due diligence on, and recommend to the Board for investment those Fund of Funds firms deemed best suited to handle the System's investment mandate. Criteria under consideration shall generally include i) the depth of experience of the firm and its investment team, ii) the firm's investment research process, operational due diligence and risk management capabilities, iii) performance and risks taken to achieve performance, iv) fees, v) the firm's capacity to handle the size of the investment mandate, vi) alignment of interests with the System's vii) capabilities related to BAM staff training, access to managers and knowledge sharing and vii) other criteria set forth in this IPS under Minimum Requirements. (In consultation with BAM, the fund of funds managers will be responsible for selection of underlying hedge funds in their funds of funds. The Staff will be notified of additions and terminations of hedge funds in the fund of funds portfolio.)

5. *Investment Structure*

Investments may be differently structured depending on the characteristics of a particular hedge fund opportunity. Permissible structures include (without limitation) commingled structures such as limited partnerships, limited liability companies, common or collective funds and similar structures, non-commingled structures (sole investor fund), direct investments and separate accounts under management by an investment manager engaged by the Board.

The following considerations will generally apply with respect to investment structure:

- Both individual hedge funds and funds of funds are expected to be included in the Program, although the Board contemplates that any initial allocation to hedge funds will be through a fund of funds structure.

- Investments shall generally be structured so as to limit the Fund's liability to the amount invested.

- All legal structures shall provide for documentation (*e.g.*, an offering memorandum, partnership agreement, or other documentation, as applicable).

6. *Minimum Requirements* - The following shall be the minimum requirements to be considered for all investments of the Program (direct hedge funds and funds of funds):

    - Every investment presented to the Board must have a rationale for inclusion in the Portfolio.

    - The investment manager or other principals shall demonstrate relevant skill, experience and expertise in the strategy they propose to execute and the principal markets in which they propose to operate.

    - The proposed investment shall be set forth in sufficient detail so as to permit substantive and meaningful review of the investment opportunity, verification of the investment concept and evaluation of the appropriate risk factors.

    - The risk anticipated in the strategy and market is justified by and compensated for by the potential gains of the proposed investment.

- In the case of fund of funds managers, SEC registration is required; in the case of direct hedge fund managers, SEC registration is strongly preferred.

- The direct hedge fund investment managers, or their vehicles' service providers, shall provide annual financial statements for the investment vehicles that comply with geographically appropriate accounting standards (*e.g.*, U.S. GAAP, International Financial Reporting Standards). Financial statements provided for commingled structures, such as limited partnerships and LLC, must be audited by a reputable auditing firm.

- The fund of funds investment managers, or their vehicles' service providers, shall provide annual financial statements for the fund of funds that comply with U.S. GAAP. Financial statements provided for commingled structures, such as limited partnerships and LLC, must be audited by a reputable auditing firm.

- Monthly and quarterly investment updates are expected from the fund of funds managers or other principals with respect to each underlying hedge fund investment. Financial statements for each underlying hedge fund investment shall be made available to staff and must be audited by a reputable auditing firm.

- For direct hedge funds, there must be reasonable controls over the valuation of the investment, which may include an annual audit, a valuation committee, use of third party administrators or other third parties to value assets, or other consistent and written procedures and controls. There will be a strong preference for hedge funds with independent fund administrators.

- For funds of funds, there must be reasonable controls over the valuation of the investments held by the fund of funds, which may include an annual audit, a valuation committee, use of third party administrators or other third parties to value assets, or other procedures and controls.

- All hedge fund investments, whether accessed on a direct basis or via a fund of funds, must have reasonable and defined polices for exit. If exit is limited (*e.g.*, in the case of commingled vehicles), there must be a redemption mechanism and timetable for exit upon submission of a redemption request.

7. *Additional Guidelines*

- *Authorized Use of Derivatives* – The Fund shall not be the direct counterparty to any derivatives. In the case of fund of funds investments, the fund of funds investment manager shall thoroughly vet any implementation of such derivatives strategies at the underlying fund level.

- *Use of Leverage* - There will be no leverage applied at the overall Program level, and leverage will only be utilized within individual, direct hedge funds or underlying funds in a fund of funds portfolios. In the case of fund of funds investments, if appropriate for such investments structured as limited partnerships, special purpose vehicles or similar vehicles only (and not for any investment held directly by the System), the fund of funds manager may use leverage within a fund of funds vehicle for up to 10% of the fund of funds vehicle's assets only for purposes of funding new hedge fund investments in advance of anticipated redemption proceeds.

- *Proxies* - Generally, investment managers will vote proxies in accordance with the manager's policies for the strategy. However, in the event the System enters into a separate account relationship and if appropriate to the strategy, securities held in a separate account may be voted by the Comptroller's Office in accordance with the Fund's proxy voting policy.

- *Conflicts of Interest* - Investments shall be reviewed by Staff and the consultant for potential conflicts of interest. Managers must either agree to comply with the Ethics and Compliance Policy of the Fund or have documented policies and procedures to address conflicts that are deemed satisfactory by Staff and the consultant. Managers shall be required to agree in a side letter or similar document to implement such policies and procedures.

- *Transparency* - Staff and the consultant will evaluate the transparency available for each direct hedge fund investment opportunity considered for the Program. For this purpose, transparency may mean manager reporting of risk exposures, asset types, holdings-level detail or other relevant information. In the case of a fund of funds, use of an independent third-party aggregator to collect and report such data directly to Staff may be appropriate.

- *Custody* – Staff, with the assistance of consultant, will evaluate arrangements for the custody of hedge fund investments, whether accessed on a direct basis or via a fund of funds, including whether custody of assets should be maintained with an independent, recognized institutional custodian bank or other recognized financial institution. Unless otherwise approved by the Board, the custodian(s) of the direct hedge fund investments and the custodians of the fund of funds investments will provide a report of all hedge fund investments and transactions to Staff on a monthly basis.

- Investment opportunities where a comparative analysis can be performed will be preferred.

- Unless otherwise stated above, fund of funds investment managers shall be responsible for implementing, wherever appropriate, these additional guidelines for their respective fund of funds mandate. In the event compliance is not possible given an underlying investment strategy, the fund of funds manager, shall document to the Staff, the consultant, and, if appropriate, the Board, the supporting rationale for such investment despite such non-compliance.

8. *Due Diligence Process*

- Staff, with assistance from the consultant, shall vet each opportunity that will be presented to the Board.

- Since each investment will offer different risks than traditional investments, Staff may use existing or specialized consultants and advisors or other external resources to assist with due diligence.

- Staff and/or consultant shall perform on-site due diligence for investment managers being considered by the Board.

- Staff and/or consultant shall analyze and provide a written summary recommendation for each hedge fund investment that includes (as applicable):
    i. Investment strategy
    ii. Investment team and structure
    iii. Risk management process
    iv. Operations and infrastructure
    v. Review of PPM
    vi. ADV Review (if SEC registered investment manager)
    vii. Financial statement review

The recommendation should include a rationale for the selection. The report should also address issues, if any, resulting from Staff's review of matters addressed by the Additional Guidelines above.

- The Program's fund of funds investment managers shall be responsible for due diligence on and monitoring of the underlying hedge fund investments in their respective funds of funds.

- Staff will recommend investments and commitments consistent with limitations on the Program.

9. *Monitoring and Reporting*

- All direct hedge fund and fund of funds investments in the Program shall be monitored by the Staff and the consultant on an ongoing basis.

- The following factors should be considered during the monitoring process, among others, as appropriate:
    i. Performance and volatility in comparison to a relevant benchmark
    ii. Stability or changes in key personnel, investment strategy or assets under management
    iii. Risk management
    iv. Legal or regulatory issues including pending actions or investigations brought by regulators or third parties
    v. Adherence to stated investment strategies (i.e. style drift)
    vi. Adequacy of reporting information and disclosures
    vii. Responsiveness to investor inquiries

- The Program's direct hedge fund investment aggregate risk exposures should be monitored on a quarterly basis, although it should be recognized that the ability to provide any such monitoring is materially limited due to the nature of the underlying hedge fund investments and the limited reporting by the investment managers of commingled vehicles to their investors.

- Staff and consultant will design and provide the Board with a report package for the Program based on characteristics of each strategy and the investments within the Program.

- A performance review and Program attribution analysis will be conducted at least quarterly with monthly performance snapshots, or as stated in the original written recommendation presented to the Board.

- The performance review should incorporate return, volatility and market value for direct hedge fund and each fund of funds investment and be segmented by an appropriate classification.

- Staff and/or the consultant should conduct quarterly reviews and at least annual on-site due diligence, for each direct hedge fund investment manager. Staff should conduct regular monitoring and at least annual on-site due diligence of each fund of funds advisor.

- For fund of funds investments, the fund of funds investment manager shall implement a process of monitoring and reporting regarding its underlying hedge funds that is at least as frequent and detailed as required above for Staff and the consultant. The fund of funds manager shall present to Staff an annual review of its monitoring and reporting requirements.

- Staff shall place investments on the watch list in accordance with the Board's standard investment policy procedures.

Appendix A

Glossary of Terms

Sectors:

Equity Long/Short – A hedge fund strategy which generally involves the purchase as well as the short sale of equity and equity derivative securities. Equity Long/Short hedge fund managers generally seek to control risk through diversification and varying net exposure to the market.

Event Driven - A hedge fund strategy which generally involves taking significant positions in companies with opportunities based on certain events. Events can include Initial Public Offerings, mergers, credit improvements, write down announcements, bankruptcies, reorganizations, or accounting backdating announcements.

Relative Value - A hedge fund strategy which generally takes advantage of the relative pricing between related securities or assets; these typically include fixed income, derivatives, equity or real estate securities.

Tactical Trading – A hedge fund strategy generally involving long and short positions in various fixed income, equity, currency and commodity markets and instruments.

Sector Strategies:

Equity Long/Short Strategies

Industry Focus – A sub-strategy of Equity Long/Short in which the fund manager typically attempts to identify investments within a specific industry. The most common industry focuses for Industry Focus hedge funds are Healthcare, Technology, Financial, Consumer, Energy and Infrastructure.

Regional Focus – A sub-strategy of Equity Long/Short in which the fund manager typically attempts to identify investments within a particular geographic region. The manager may focus on a particular country, or may invest in a more broadly defined region such as “Asian Emerging Markets” or “Western European Countries.”

Multi-Strategy – A sub-strategy of Equity Long/Short in which the fund manager employs a variety of different strategies. Frequently, the Equity Long/Short managers that we define as “Multi-Strategy” employ multiple Portfolio Managers, each of whom focuses on a distinct strategy, with capital allocations to their portfolios adjusted by an overall Chief Investment Officer.

Other - A range of sub-strategies of Equity Long/Short that do not fit neatly into other sub-strategy definitions.

Event Driven Strategies

Equity Focus – A sub-strategy of Event Driven that includes a range of equity investment strategies such as activism, passive valuation-based investments or catalyst-driven investments.

Debt Focus – A sub-strategy of Event Driven in which the fund manager invests primarily long, but usually also short in credit which it believes to be under (or overvalued). This sub-strategy typically refers to investments in performing credit.

Emerging Markets Value – A sub-strategy of Event Driven in which the fund manager invests in a range of asset classes, including currency, debt, equity and rates in countries commonly characterized as emerging markets.

Private/Distressed Credit – A sub-strategy of Event Driven in which the fund manager generally seeks to isolate investment opportunities in credit arising from companies in bankruptcy, threatened with bankruptcy or of whom the market has a generally negative perception.

Multi-Strategy – A sub-strategy of Event Driven in which the fund manager typically shifts exposures between the various Event Driven strategies.

Other - A range of sub-strategies of Event Driven that do not fit neatly into other sub-strategy definitions.

Relative Value Strategies

Fixed Income – A sub-strategy of Relative Value in which the fund manager generally seeks to profit from the eventual correction of a perceived price discrepancy between fixed income instruments. Some managers will also attempt to profit from trade structuring that generates positive carry over the duration of the trade. Assets traded include cash instruments (e.g. government bonds, mortgage-backed securities, etc.) and various derivatives (bond futures and options, swaps, etc.).

Quantitative Strategies – A sub-strategy of Relative Value that contains Equity Market Neutral and Statistical Arbitrage styles of investing, in which the fund manager generally seeks primarily to identify and trade on mis-priced or mis-valued equities using quantitative models while remaining broadly neutral to overall equity market moves. The models may use fundamental and other non-price primary inputs (e.g. Equity Market

Neutral factor models), or predominantly price inputs, basing their perception of mis-pricing on statistical rather than fundamental criteria (Statistical Arbitrage).

Convertible Arbitrage – Convertible arbitrage refers to multiple approaches to trading convertible bonds within a hedge fund structure. Traditionally, convertible arbitrage primarily involved attempting to profit from equity volatility by taking advantage of the relationship between equity price and convertible bond price that exists due to the bond's embedded call option by typically buying the convertible bond and shorting the underlying stock. More recently, convertible arbitrage managers have attempted to diversify their approaches by including credit and event-driven positions, implemented using convertible bonds.

Multi-Strategy – Hedge funds that primarily trade multiple Relative Value oriented strategies are classified as "Multi-Strategy."

Other - A range of sub-strategies of Relative Value that do not fit neatly into other sub-strategy definitions (e.g. insurance and re-insurance risk).

Tactical Trading Strategies

Global Macro - Global Macro funds make thematic, directional, high level investments across asset classes driven by analysis of macroeconomic, political, regulatory, and market factors. Portfolios are typically concentrated in a few, high-conviction themes and trades are implemented using relatively liquid instruments (e.g., sovereign bonds, equity indices, foreign currency forward contracts, commodity futures, etc.).

Emerging Markets Macro - A sub-strategy of Tactical Trading in which the fund manager primarily invests in a range of asset classes, including currency, debt, equity and rates in countries commonly characterized as emerging markets. This sub-strategy focuses on liquid securities, typically actively trades positions and relies on a combination of technical and fundamental analysis to make investment decisions.

Commodity Trading Advisors (CTAs) typically trade futures and forwards on bonds, interest rates, commodities, currencies, and equities based on systematic, typically trend-following, models.

Multi-Strategy - Hedge funds that trade multiple Tactical Trading oriented strategies are classified as "Multi-Strategy."

Other - A range of sub-strategies of Relative Value that do not fit neatly into other sub-strategy definitions.

NYC Fire Department Pension Fund
June 22, 2011

Opportunistic Fixed Income: Investment Program Policy Statement

Purpose and Objectives

The Opportunistic Fixed Income Program (the "Program") will invest in sectors and actively-managed strategies of the Fixed Income market, as defined herein, whose sources of return and risk profiles are expected to differ meaningfully from the Fund's Core + 5, Enhanced Yield and U.S. TIPS programs (the Fund's "traditional fixed income strategies") over market cycles. It is anticipated that these sectors and/or strategies will offer higher returns than traditional fixed income strategies, exploit return opportunities that offer diversification to the total Fund, and exhibit volatility (measured by standard deviation of returns) that is meaningfully higher than traditional fixed income and could be similar to global public equity markets. In addition, the correlation of the Program to public equities in normal times is expected to be moderate, although in crisis periods can be quite high.

The Program will invest in sectors and strategies that because of credit rating, illiquidity, concentration, relatively short track record, underlying asset or liability, and/or other unique characteristics, would not typically be included in the Fund's traditional fixed income portfolios. The Program will enable the Fund to take advantage of changing opportunities in fixed income markets, particularly in markets where providers of liquidity may demand commensurate return premiums. As a result, the Program is intended to provide greater flexibility to pursue these investments in an opportunistic and disciplined manner, within a due diligence framework and established risk guidelines of the fixed income and total fund allocations. Although traditional fixed income offers liquidity, lower volatility, and diversification to equities, it also has several drawbacks and limitations, including low potential returns in periods of low and rising interest rates and exposure to negative corporate event risk, among others. Opportunistic fixed income strategies are designed to overcome many of these deficiencies by offering higher potential returns, offering risk premia for specialized knowledge, aligning interests between borrowers and lenders more effectively, and tapping unique manager skills to access markets ignored by traditional managers.

From inception of the Program investments were limited to niche strategies structured as funds. The Program will be expanded to develop core/satellite relationships to better exploit opportunistic strategies. This will be implemented through core separate account as well as satellite relationships funded either as separate accounts or as investments in commingled funds. These investments will provide the opportunity to develop and invest in niche fixed income strategies that may arise in the future.

The operation of the Program is subject to the exclusive benefit rule and all other applicable laws, including requirements of prudence.

Asset Allocation

The Program, first approved by the Board in 2008, has been funded with an initial allocation of approximately 1% of System assets. The allocation of the Program is 0%-5% of the total Fund. It is envisaged that as specific market opportunities evolve or market conditions change, the allocation to the Program will be modified correspondingly.

Responsibilities and Delegation

Role of Board of Trustees

The Board shall:

- approve the Fixed Income Opportunistic Program Investment Policy Statement ("IPS") and any changes to the IPS;
- review the Program at least annually and approve and adopt the Annual Tactical Investment Plan (the "Tactical Plan"), or more often as requested by Staff as opportunities arise;
- approve the retention, and review performance, of strategic consultants and advisors and other external resources, as needed;
- oversee performance and risk and Staff's implementation of the Program;
- approve investments/terminations of investment strategies and managers, and/or delegation of manager retention/termination to Staff and/or consultant as deemed appropriate, and
- approve benchmark for each investment.

Roles of the Comptroller's Office Staff

The duties of the Comptroller's Office Staff ("Staff") include, but are not limited to:

- reviewing and recommending changes to the IPS, developing and implementing periodic reviews of the Program, which shall occur at least annually, and managing the operations of the Program;
- working with the System's consultants on identifying and evaluating opportunistic sectors and strategies, investment managers, and investment vehicles or structures appropriate for the particular managers and for the Program, and on making selection recommendations to the Board;
- as needed, identifying and evaluating strategic consultants and advisors and other external resources for the Program, and making selection recommendations to the Board;
- overseeing the Fund's portfolio of Program investments, including management of consultants and advisors and other external resources engaged on the System's behalf in connection with the Program with the objective that the Fund obtains the maximum value from those relationships;
- monitoring and reporting on performance and risk metrics as provided by the managers, custodians, and/or other valuation service providers with respect to the overall purpose and objectives of the Program;
- monitoring and reporting on the performance of the consultants;
- working with the System's consultants on ongoing advice on increasing or decreasing the amount invested in the Program;
- performing other work as necessary to implement this IPS;

- verifying all investments, guidelines, and documents are consistent with this IPS, and noting any exceptions for approval by the Board, and
- reviewing and monitoring Program to determine effect on overall basket clause.

Role of the Consultants

The duties of the Fund's consultants include, but are not limited to:

- providing advice to the Board and Staff with respect to the development and operation of the Program, including advice on industry developments and portfolio construction, with the goal of an overall Program risk/return profile deemed appropriate by the Board, Staff and the consultants, and monitoring capital markets for investment strategies and investment opportunities;
- assisting the Board and Staff in periodic reviews of the IPS and the Program, and making recommendations to the Board concerning the Program strategy, tactics and policy changes;
- working together with Staff to provide the Board with a Tactical Plan for the Program;
- assisting Staff in identifying, evaluating, and recommending investment opportunities and terminations consistent with the IPS and believed to be appropriate for the Program, including conducting due diligence with respect to new investments, as requested;
- assisting Staff with the implementation, negotiation and execution of new investments;
- advising the Board and Staff on how the Program fits into the System's overall asset allocation and risk/return objectives;
- providing ad-hoc advice or knowledge of specific investment managers, sectors, strategies, and investment structures;
- working with Staff on ongoing advice on increasing or decreasing the amount invested in the Program;
- assisting Staff with the ongoing monitoring of committed investments, including reports to the Board on significant manager developments, proposed amendments to fund documentation and investment performance, and periodic and timely review of the risk of the System's investment portfolios. The general consultant will be responsible for overseeing the entire Opportunistic Fixed Income program, and
- fulfilling such other purposes as the Board, and Staff, may approve.

Role of the Investment Managers

The duties of the investment managers the Fund allocates to include, but are not limited to:

- selecting and trading underlying investments, selecting service providers and trading counterparties, and otherwise fulfilling their roles as investment managers of their respective funds consistent with offering documents, investment guidelines, termsheets, and other legal documentation;
- providing ongoing reporting to the System, Staff, and consultants as applicable, and responding to reasonable ad hoc requests from the Board or Staff relevant to the fund;
- highlighting portfolio risks on a timely and proactive basis, and
- meeting with the Boards, Staff, and consultants as needed to explain the market and portfolio investments, given their high level of discretion.

Benchmarking

The Program is expected to achieve enhanced returns versus traditional fixed income benchmarks over a multi-year cycle. The primary performance objective for the Program is to earn a 10% absolute net return. The Board recognizes that benchmarking this portfolio is difficult given the potentially idiosyncratic nature of the investments, diverse opportunity set, and the lack of a comparable manager universe. Recognizing these limitations, the portfolio's net returns will also be reviewed against a secondary benchmark: the JP Morgan Global High Yield Index plus 3%, net of all fees and expenses, over a full market cycle (typically 5 – 7 years).

For each strategy and investment of the Program, Staff, in consultation with the appropriate consultant, will recommend an appropriate benchmark that reflects the risk profile and return objectives of the strategy and investment. Considerations will include liquidity (or the lack thereof), leverage, default risk, sector concentration, and security concentration.

Investment Operations

A. General Approach

The Program will permit the Board to consider unique fixed income sectors and strategies on a proactive basis subject to a framework of guidelines, due diligence standards, and procedures for monitoring and reporting. The Program's overall objective is to outperform the broad fixed income markets within established risk guidelines determined by Board and Staff through established measures of volatility, illiquidity, concentration and organizational risks.

It is expected that the opportunistic investments included in the Program may have one or more of the following characteristics:

- Illiquidity of individual securities and investment vehicles (e.g., securities are often private placements with no active secondary market, and limited partnership vehicles or commingled fund structures with limited opportunities for withdrawal are commonly used)
- Private market direct loans or private securities
- Low credit quality / higher-than-average default risk
- Investments in non-dollar denominated securities
- Sector concentration (e.g., distressed mortgage and real estate lending)
- Security concentration
- Complex securities that may be difficult to price and evaluate
- Some strategies may involve short selling and/or use of derivatives
- Shorter track records (implicit in opportunistic investing is the willingness to invest with newer strategies and firms)
- Performance-based fees

Most of these characteristics present strategy-, sector-, and security-specific risks, which can be assumed only if the due diligence effort has confirmed the expectation of reasonable levels of excess returns and/or diversification benefits at the Program level, in keeping with the return/risk profile of this IPS.

Potential investments to be considered for the Program may have "cross-over" characteristics with other asset classes. For example, investments in distressed debt securities may lead to a private equity position via a capital restructuring process. It is intended that such assets with "cross-over" characteristics will be considered part of this Program allocation, though Staff may propose a change in classification for Board approval.

Strategies within the Program may be non-diversified, meaning that the managers of such strategies may structure an undiversified portfolio of assets of a certain type, sector, or geographic location based on an assessment of relative value or opportunity for outperformance. To mitigate risk of potentially non-diversified strategies, the maximum initial allocation to each manager within the Program should not exceed 0.5% of the total Fund's assets at the time of investment. The maximum allocation over the life of the investment will not be greater than 1.0% of the total Fund's assets, subject to Staff review and subsequent Board approval. Staff will approach the Board if Staff determines that an increase in allocation over 1.0% is necessary. Diversification of the Program will be provided through a bottom-up approach by aggregating and consolidating each manager's respective termsheet/investment guidelines. In addition, the Program will be diversified in terms of:

1. Economic sectors
2. Geographic location
3. Manager/ General Partner
4. Investment strategies
5. Securities

The Program is not expected to provide a source of liquidity for the Fund, and accordingly, investments may be illiquid.

B. Opportunistic Fixed Income Sectors and Investment Strategies

Sectors and strategies eligible for the Program may include, among other assets:

Sectors:

- Bank loans
- Private mortgage loans
- Real estate debt
- Direct corporate/high-yield loans
- Asset-backed lending/securities, including Asset-backed securities (ABS), Commercial mortgage-backed securities (CMBS), Residential mortgage-backed securities (RMBS), and leases, among others
- Structured notes
- Global bonds, including emerging market debt
- Post-reorganization / restructured equities (stand-alone public equities will be excluded from consideration unless authorized by the Board)

Strategies:

- Distressed debt (including corporate loans, real estate loans, and structured finance)
- Mezzanine financing

C. Annual Review

Staff, with assistance of the consultant(s), shall present to the Board an annual review of the Program, including the overall allocation to and investments within the Program and recommended changes to the IPS, as appropriate, and how the System's allocation to opportunistic fixed income fits into the System's overall asset allocation. The report will include an assessment of market conditions and valuation within each subsector of the market.

D. Investment Implementation

1. Sectors and Strategies
In the Tactical Plan, Staff, in consultation with the consultant(s), will identify advisability of the current allocation to the Program, as well as potential opportunistic strategies and investments for the Board's consideration. The Tactical Plan will include an assessment of market conditions and valuation within each subsector of the market, an analysis of where capital should be re-deployed in the Program at the sector, strategy and manager levels, and what the target allocation to the Program as a percentage of total Fund assets should be.

2. *Manager Selection*
Staff and consultants will identify investment managers and/or investments that focus on sectors or strategies identified in the Tactical Plan. Evaluation criteria shall generally include: i) the depth of experience of the firm and its investment team, ii) the firm's investment research process, operational due diligence and risk management capabilities, iii) performance and risks taken to achieve performance, iv) fees, v) the firm's capacity to handle the size of the investment mandate, vi) alignment of interests with the System's vii) capabilities related to Staff training and access to managers and knowledge sharing and viii) other criteria set forth in this IPS under Minimum Requirements, taking into account deviations appropriate to the unique characteristics of particular opportunistic strategies. Staff and consultants shall set and share with the Board the criteria for the selection of each investment manager or redeployment of capital.

Staff may, but is not required to, issue a request for qualifications ("RFQ") or request for proposals ("RFP") to help identify new strategies and investments. It is recognized that the nature of opportunistic investments may not lend themselves to an RFP process.

3. Investment Structure
Investments may be differently structured, depending on the characteristics of particular opportunistic strategies. Permissible structures include (without limitation): separate accounts under management by an investment manager engaged by the Board; commingled structures such as limited partnerships, limited liability companies, common or collective funds, and similar structures; secondary partnership investments; co-investments, and direct investments.

The following considerations will generally apply with respect to legal structure:

- Strategies involving derivatives (including, but not limited to, futures, options, swaps, and forward agreements), leverage, short selling, shall generally be structured as a limited partnership or limited liability arrangement. In no event shall the System be a direct party or counterparty to any such investment. Furthermore, any such investment must generally be structured so as to limit the Fund's liability to the amount invested.
- All legal structures shall provide for documentation (*e.g.*, an investment management agreement, offering memorandum, or other documentation) of specific, written investment guidelines that outline investment philosophy and approach, representative portfolio characteristics, permissible and restricted procedures, strategies, securities, and an appropriate performance benchmark commensurate with targeted investment return, risk, and illiquidity.
- Evaluation of the suitability of any commingled structure may take into account factors such as: legal structure and domicile of the investment vehicle, arrangements for custody of assets, the laws and regulations of the domicile and countries where investments are made, whether or not the manager or other principals are registered with the SEC or other appropriate regulatory authorities, characteristics of other investors, roles and characteristics of material third parties (*e.g.*, administrators, prime brokers, vendors and counterparties), and fees and expenses resulting from the use of the particular commingled structure.

4. Minimum Requirements

The following shall be the minimum requirements for all investments of the Program:

- Every investment presented to the Board must have an economic and valuation-based rationale for inclusion in the Portfolio;
- Investments, strategies, and managers must be projected to add value to the total Program from a risk and/or return perspective;
- The investment manager or other principals shall demonstrate relevant skill, experience, and expertise in the strategy they propose to execute and the market in which they propose to operate;
- The manager's proposed strategy and business plan shall be set forth in sufficient detail as to permit substantive and meaningful review of the investment opportunity, verification of the investment concept, and evaluation of the appropriate risk factors;
- The Manager's proposed strategy and business plan shall provide reasonable assurance that the investment opportunity can produce the target risk and return profile;
- The risk anticipated in the strategy and market is justified by and compensated for by the potential gains of the proposed investment, based on reasonable assumptions;
- The investment manager's registration as an investment adviser with the SEC or applicable local regulatory body (e.g. the Financial Services Authority in the UK) is strongly preferred;

- The investment manager or other principals shall provide financial statements that comply with geographically appropriate accounting standards (*e.g.*, U.S. GAAP, International Financial Reporting Standards) and any other financial reports and other information required by Staff to assess and account for performance, fees, expenses, invested capital, and any other items affecting the investment. Monthly and quarterly investment updates are expected from investment managers or other principals with respect to each investment. Financial statements provided for commingled structures, such as limited partnerships and LLCs, must be audited by a reputable auditing firm;
- There must be reasonable controls over the valuation of the investment, which may include annual audit, a valuation committee, use of third party administrators or other third parties to value assets, or other procedures and controls. Staff shall assess the valuation methodology for the investment in light of the investment's liquidity profile and receive reports of, or have the right to request, supporting information regarding the valuation of assets within the investment, and
- All investments must have reasonable and well-defined policies for exit. If exit is limited (*e.g.*, in the case of limited partnerships), there must be a mechanism and timetable for exit. Liquidity should be appropriate given the underlying assets of the portfolio.

5. *Investment Guidelines and Prohibited Investments*
   - *Investment Sizing* – The maximum allocation to an individual manager will be reviewed with the Board and monitored by Staff as appropriate;
   - *Authorized Use of Derivatives* – One or more strategies may provide for the use of derivatives to assist in the efficient management of risk, asset allocation and market exposures, through the use of tools such as futures, options, swap agreements, or forward agreements. Derivatives used for the purpose of speculation shall be limited. Currency strategies using derivatives other than for hedging purposes are not permitted. The implementation of the derivatives strategies shall be thoroughly vetted by Staff and the consultants. Investments involving derivatives (including but not limited to futures, options, swaps, and forward agreements, other than for currency hedging) generally shall be structured as a limited partnership or limited liability arrangement. In no event shall the System be a direct party or counterparty to any such investment;
   - *Use of Leverage* – Leverage may be used in the implementation of specific strategies within the Program. In such instances, Staff and the consultants will consider the role that leverage plays in achieving the goals of the strategy and the risks that are associated with the use of leverage. There will be no leverage applied at the Program level. Managers will be allowed a maximum of 1X leverage for senior loans, defined as capital provided to a borrower or firm that is senior to equity and other lenders. Other types of financial leverage will not be permitted. Economic leverage will exist through the use of derivatives where a margin of deposit is required before trades can be executed. Please see Exhibit A below for a glossary of economic and financial leverage;
   - *Proxies* - Generally, investment managers will vote proxies in accordance with the managers' policies for the strategy. However, in the event the System enters

into a separate account relationship and if appropriate to the strategy, securities held in a separate account may be voted by the Comptroller's Office in accordance with the Fund's proxy voting policy;

- *Prohibited Investments* – Certain of the Board's investment policies prohibit certain investments, including investments that are likely to cause job losses in the public sector or those that are likely to pose reputational risk to the System. In the course of the due diligence process, and where appropriate to the strategy or investment, Staff will apprise potential managers of the types of prohibited investments and will require agreements to provide opt-out rights and/or satisfactory side letter language with respect to any investment that is prohibited;
- *Conflicts of Interest* - Investments shall be reviewed by Staff and the consultants for potential conflicts of interest. Managers must either agree to comply with the Ethics and Compliance Policy of the Fund or have documented policies and procedures to address conflicts that are deemed satisfactory by Staff and the consultants. Managers shall be required to agree in a side letter or similar document to implement such policies and procedures;
- *Transparency* - Staff and the consultants will evaluate the transparency available for each investment opportunity considered for the Program, establish manager reporting requirements and provide the reporting requirements to the manager. For this purpose, transparency may mean holdings-level detail, reporting of investment transactions and cash flows, or other relevant measures, and
- *Custody* – Staff and the consultants will evaluate arrangements for the custody of assets, including whether custody should be maintained with an independent, recognized institutional custodian bank or other recognized financial institution. Unless otherwise approved by the Board, the custodian will provide a report of all assets and transactions to Staff and the consultants on a quarterly basis (monthly where available). Staff and the consultants will review the reports to ensure compliance with guidelines and the stated investment process.

6. *Due Diligence Process*
   - Staff with the assistance of the consultant(s) will vet each opportunity presented to the Board;
   - Financial and investment data should be collected not only from the manager of the prospective investment or from databases or commercial services that rely upon managers for their data, but also directly from sources independent of the manager, such as third-party custodians, independent auditors, and entities in which or with which the manager invests;
   - Staff and/or consultants, where appropriate, will perform on-site due diligence for investment managers being considered by the Board;
   - Staff and/or consultants will provide written analysis and a recommendation for each investment that include a ranking process for the following categories:
     i. Organizational structure and stability
     ii. Qualifications and experience of people
     iii. Investment philosophy
     iv. Investment strategy and process
     v. Risk management and measurement

vi. Operations and infrastructure
vii. Role of the Investment in the Program
viii. Fit with IPS, Tactical Plan and existing Program
ix. Fees and expenses
x. Key investment or contractual terms
xi. Satisfaction of minimum requirements

The report will include comparable opportunities and a rationale for the recommendation. The report will also address issues, if any, resulting from due diligence review of matters addressed by the Additional Guidelines and Prohibited Investments above. A detailed analysis on the benchmark chosen and a rationale for its appropriateness will be included, and

- Staff will make investments and commitments consistent with limitations on the Program.

7. *Monitoring and Reporting*
   - All investments and managers in the Program will be monitored and reviewed on an ongoing basis by Staff and consultants. Investments will have stated dates for review, at least quarterly with a monthly performance snapshot, and re-evaluation, as appropriately stated in the original written recommendation presented to the Board;
   - Staff and consultants will design and provide the Board with a report package for the Program based on characteristics of each strategy and investment within the Program at least annually;
   - A performance review will be conducted at least quarterly. There is recognition that some opportunities will have a reporting lag. This lag should not be more than 3 months;
   - The quarterly performance review should incorporate return, risk, and market value for each investment and be segmented by an appropriate classification;
   - The quarterly performance review will include an assessment of the valuations and whether valuations have been conducted in accordance with the valuation methodology;
   - Staff and/or the consultants should conduct regular monitoring and at least an annual meeting with each investment manager;
   - Staff will present an annual performance review to the Board that shall report on the Fund's overall allocation to, and investments within, the Program, and will review the underlying economic and credit-market conditions. The annual report will include relevant risk and return measures including short and long term performance, program diversification exposures and overlap. The metrics used will be analyzed over quarterly, 1, 3, 5 and 10 years, calendar years and over rolling 3 year periods – as the program develops, and in consideration that securities may be held at cost until realization of returns;
   - The annual review will also include rationale for maintaining, adding or reducing assets to the Program;
   - The following factors may be considered during the monitoring process, among others as appropriate:

i. Risk exposures, performance, and volatility in comparison to the assigned benchmark;
ii. Changes in market opportunities;
iii. Liquidity;
iv. Fees and expenses incurred in connection with the investment;
v. Stability or changes in organization, ownership, key personnel, investment philosophy, strategy, process or assets under management;
vi. Risk management;
vii. On-going fit with the IPS and the Program;
viii. Legal or regulatory issues including pending actions or investigations brought by regulators or third parties;
ix. Good standing with regulatory bodies and other investors;
x. Adherence to stated investment objectives and strategies (i.e. style drift);
xi. Transparency with respect to fees and conflicts of interest;
xii. Adequacy of reporting information and disclosures, and
xiii. Responsiveness to investor inquiries.

- Staff shall place investments on the watch list in accordance with the System's standard investment policy procedures.

Exhibit A: Glossary

Asset-backed security ("ABS"): A financial security backed by a loan, lease or receivables against assets, e.g. credit card debt, auto loans, royalties, and student loans. (Source: Investopedia, URL http://www.investopedia.com/terms/a/asset-backedsecurity.asp)

Distressed debt (security): A financial instrument in a company or security that is near or is currently going through bankruptcy. Distressed securities can include common and preferred shares, bank debt, trade claims, and corporate bonds. (Source: Investopedia, URL http://www.investopedia.com/terms/d/distressedsecurities.asp)

Economic Leverage: For the purposes of this memorandum, "economic leverage" indicates the leverage due to off-balance sheet items such as derivatives, which are typically unfunded products. The protection buyer's periodic premium on the derivative is for a notional exposure far greater than the premium paid. Hence the buyer is leveraged from an economic perspective. (Source: EDHEC-Risk Institute, URL http://www.edhec-risk.com/latest_news/featured_analysis/RISKArticle.2008-10-10.2612?newsletter=yes)

Financial Leverage: For the purposes of this memorandum, "financial leverage" relates only to the visible leverage. This is the leverage which shows on the balance sheet as debt or borrowed money. The assets are greater than the equity capital base of the company due to these borrowed money liabilities. Hence the borrower is leveraged from a financial perspective. (Source: EDHEC-Risk Institute, URL http://www.edhec-risk.com/latest_news/featured_analysis/RISKArticle.2008-10-10.2612?newsletter=yes)

Forward (rate) agreements: An over-the-counter contract between parties that determines the rate of interest, or the currency exchange rate, to be paid or received on an obligation beginning at a future start date. The contract will determine the rates to be used along with the termination date and notional value. On this type of agreement, it is only the differential that is paid on the notional amount of the contract. This contract is also known as a "future rate agreement". (Source: Investopedia, URL http://www.investopedia.com/terms/f/fra.asp)

Futures: A financial contract obligating the buyer to purchase an asset (or the seller to sell an asset), such as a physical commodity or a financial instrument, at a predetermined future date and price. Futures contracts detail the quality and quantity of the underlying asset and are standardized to facilitate trading on an exchange. Some futures contracts may call for physical delivery of the asset, while others are settled in cash. Futures can be used either to hedge or to speculate on the price movement of the underlying asset. For example, a producer of corn could use futures to lock in a certain price and reduce risk (hedge). On the other hand, anybody could speculate on the price movement of corn by going long or short using futures. (Source: Investopedia, URL http://www.investopedia.com/terms/f/futures.asp)

Mezzanine Financing: A hybrid of debt and equity financing that is typically used to finance the expansion of existing companies. Mezzanine financing is basically debt capital that gives the lender the rights to convert to an ownership or equity interest in the company if the loan is not paid back in time and in full. It is typically subordinate to debt provided by senior lenders such as banks and venture capital companies. Mezzanine financing is advantageous because it is treated like equity on a company's balance sheet and may make it easier to obtain standard bank financing. (Source: Investopedia, URL http://www.investopedia.com/university/options/option.asp)

Options: An option is a contract that gives the buyer the right, but not the obligation, to buy or sell an underlying asset at a specific price on or before a certain date. An option, just like a stock or bond, is a security. It is also a binding contract with strictly defined terms and properties. The primary difference between options and futures is that options give the holder the right to buy or sell the underlying asset at expiration, while the holder of a futures contract is obligated to fulfill the terms of the contract. (Source: Investopedia, URL http://www.investopedia.com/university/options/option.asp)

Standard Deviation: A measure of the dispersion of a set of data from its mean or average. The more spread apart the data, the higher the deviation. In finance, standard deviation is applied to the annual rate of return of an investment to measure the investment's volatility. Approximately 2/3 of the returns would occur within plus or minus one standard deviation from the average return. Standard deviation is used by investors as a gauge for the amount of expected volatility by providing a statistical measurement on historical volatility. (Sources: BAM, Investopedia, URL: http://www.investopedia.com/terms/s/standarddeviation.asp)

Structured finance: A service that generally involves highly complex financial transactions offered by many large financial institutions for companies with unique financing needs. These financing needs usually do not match conventional financial products such as a loan. Structured finance has become a major segment in the financial industry since the mid-1980s. ABS, collateralized debt obligations (CDOs), and synthetic financial instruments are examples of structured finance assets. (Source: Investopedia, URL http://www.investopedia.com/terms/s/structuredfinance.asp)

Structured note: A debt obligation that also contains an embedded derivative component with characteristics that adjust the security's risk/return profile. The return performance of a structured note will track that of the underlying debt obligation and the derivative embedded within it. A structured note is a hybrid security that attempts to change its profile by including additional modifying structures. A simple example would be a five-year bond tied together with an option contract. This structure would work to potentially increase the bond's returns. (Source: Investopedia, URL http://www.investopedia.com/terms/s/structurednote.asp)

Swaps: Traditionally, the exchange of one security for another to change the maturity (bonds), quality of issues (stocks or bonds), or because investment objectives have changed. Recently, swaps have grown to include currency swaps and interest rate swaps. If firms in separate countries have comparative advantages on interest rates, then a swap could benefit both firms. For example, one firm may have a lower fixed interest rate, while another has access to a lower floating interest rate. These firms could swap to take advantage of the lower rates. (Source: Investopedia, URL http://www.investopedia.com/terms/s/swap.asp)