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NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM

INVESTMENT MEETING

September 27, 2013

LOCATION:

Office of Buck Consultants
485 Lexington Avenue
New York, NY 10017

(Board Room of the Xerox Executive Briefing Center on the 22nd Floor)

INVESTMENT MEETING

SEPTEMBER 27, 2013

PUBLIC AGENDA

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I. <u>Performance Reviews</u> : (30 Minutes)	
• Quarterly Review/Annual Review – June 30, 2013 (To be distributed)	---
➤ ETI Quarterly Report – June 30, 2013	6
➤ Private Equity Quarterly Report – March 31, 2013	15
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PUBLIC AGENDA

I. Performance Reviews:

Quarterly Reports:

ETI Quarterly Report

Economically Targeted Investments Quarterly Report

Public/Private Apartment Rehabilitation Program (PPAR)

Lenders*	<u>CCD</u>		<u>CFSE</u>		<u>NCBCI</u>		<u>LIIF</u>		<u>All Lender Totals</u>	
	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units
Contractual Commitments	\$800,000	n/a	\$2,000,000	n/a	\$500,000	n/a	\$1,500,000	n/a	\$4,800,000	n/a
Current Market Value	\$323,002	n/a	\$128,894	n/a	\$83,903	n/a	\$174,672	n/a	\$710,471	n/a
<u>Commitments 2Q 13</u> <u>(included in total)</u>										
Bronx	\$0	0	\$0	0	\$0	0	\$9,800	20	\$9,800	20
Brooklyn	0	0	0	0	0	0	102,819	70	102,819	70
Manhattan	0	0	0	0	0	0	74,466	82	74,466	82
Queens	0	0	0	0	0	0	0	0	0	0
Staten Island	0	0	0	0	0	0	0	0	0	0
Total	\$0	0	\$0	0	\$0	0	\$187,085	172	\$187,085	172
<u>Delivered 2Q 13</u> <u>(included in total)</u>										
Bronx	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0
Brooklyn	0	0	0	0	0	0	0	0	0	0
Manhattan	34,980	49	41,341	30	13,680	19	0	0	90,001	98
Queens	0	0	0	0	0	0	0	0	0	0
Staten Island	0	0	0	0	0	0	0	0	0	0
Total	\$34,980	49	\$41,341	30	\$13,680	19	\$0	0	\$90,001	98
<u>Total Commitments</u>										
Bronx	\$252,740	376	\$0	0	\$0	0	\$95,800	117	\$348,540	493
Brooklyn	123,560	128	0	0	38,127	54	209,001	188	370,688	370
Manhattan	17,400	30	0	0	119,309	173	234,877	258	371,586	461
Queens	0	0	0	0	0	0	0	0	0	0
Staten Island	0	0	0	0	0	0	0	0	0	0
Total	\$393,700	534	\$0	0	\$157,436	227	\$539,677	563	\$1,090,813	1,324
<u>Historical Investments</u>										
Bronx	\$53,500	76	\$0	0	\$0	0	\$0	0	\$53,500	76
Brooklyn	81,116	124	0	0	0	0	108,209	174	189,325	298
Manhattan	133,258	253	161,181	197	84,124	103	76,380	70	454,942	623
Queens	40,000	54	0	0	0	0	0	0	40,000	54
Staten Island	0	0	0	0	0	0	0	0	0	0
Total	\$307,874	507	\$161,181	197	\$84,124	103	\$184,589	244	\$737,768	1,051

*Lenders :

Citibank Community
DevelopmentCarver Federal
Savings Bank

NCB Capital Impact

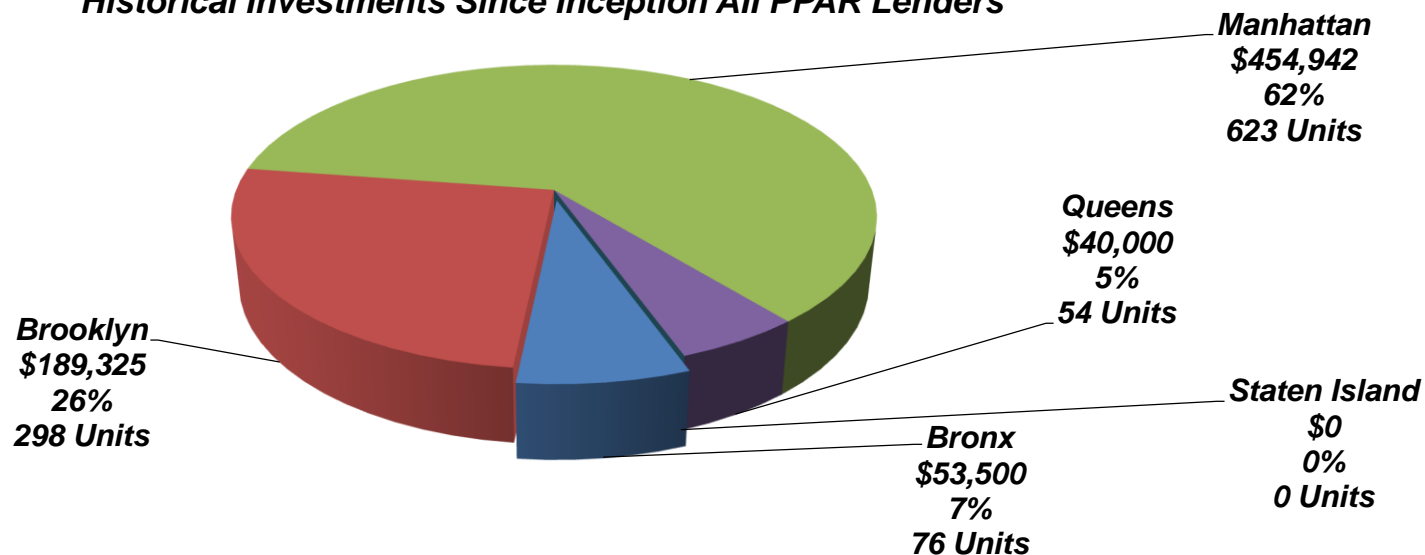
Low Income
Investment Fund

BERS

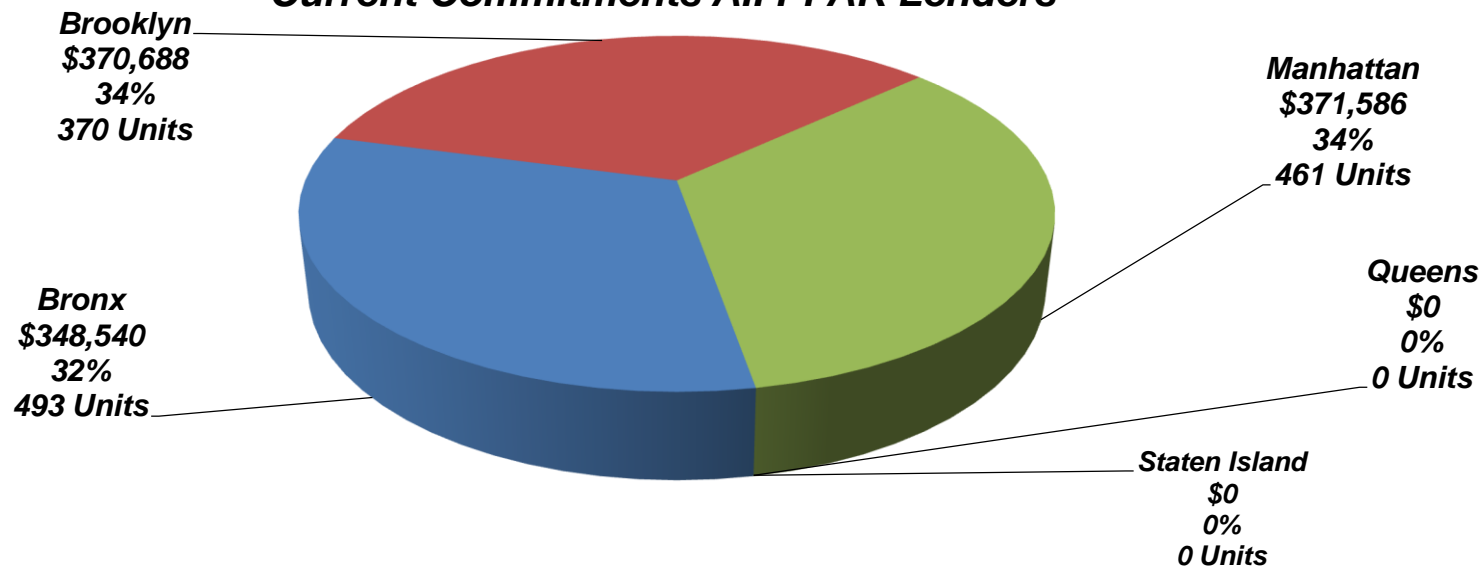
Economically Targeted Investments Quarterly Report

Public/Private Apartment Rehabilitation Program (PPAR)

Historical Investments Since Inception All PPAR Lenders



Current Commitments All PPAR Lenders



Economically Targeted Investments Quarterly Report

AFL-CIO Housing Investment Trust (HIT)

Market Value \$11.5 million*

NYC Community Investment Initiative (NYCCII)

NYCCII Phase II 2006-2012

Multifamily Investments Detail

<u>Borough</u>	<u>2 Q Investments</u>	<u>Investments Since Inception</u>	<u>2Q Housing Units</u>	<u>Housing Units Since Inception</u>
Bronx	\$0	\$52,827,900	0	802
Brooklyn	0	103,890,446	0	5,616
Manhattan	0	134,075,200	0	926
Queens	0	17,760,000	0	1,260
Staten Island	0	6,414,554	0	693
Total	\$0	\$314,968,100	0	9,297

Grand Total NYCCII Phase II \$314,968,100

NYCCII Phase I 2002 - 2005

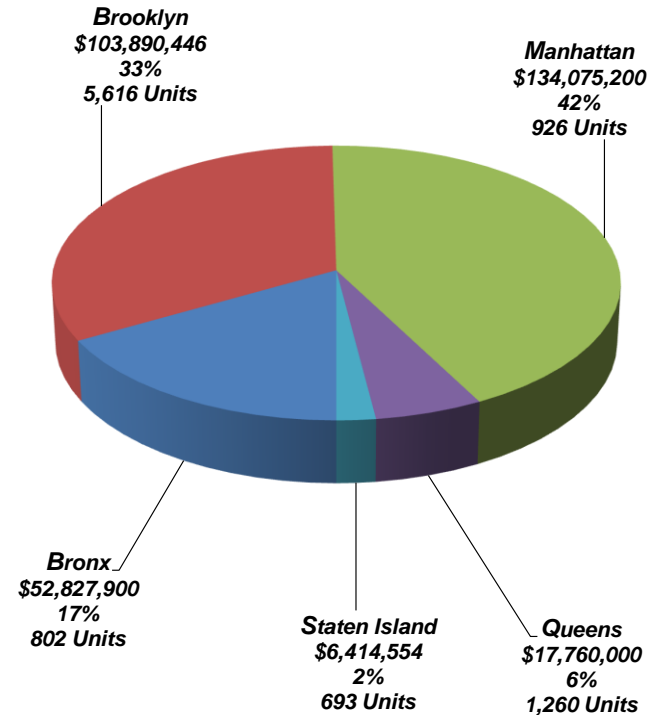
	<u>Dollars</u>	<u>Units</u>	<u>Member Loans</u>	<u>Total All NYC PF's</u>
Multifamily Investments	\$249,123,500	12,337	n/a	n/a
HIT Home Investments	348,300,563	n/a	n/a	446
Total NYCCII Phase I	\$597,424,063	12,337	0	446

NYCCII Phases I & II

	<u>Dollars</u>	<u>Units</u>	<u>Member Loans</u>	<u>Total All NYC PF's</u>
Multifamily Investments	\$564,091,600	21,634	n/a	n/a
HIT Home Investments	2,899,899,500	n/a	12	446
Grand Total NYCCII Phases I & II	\$3,463,991,100	30,931	12	446

*Interest is reinvested

HIT Multifamily Investments Phase II



BERS Economically Targeted Investments Quarterly Report

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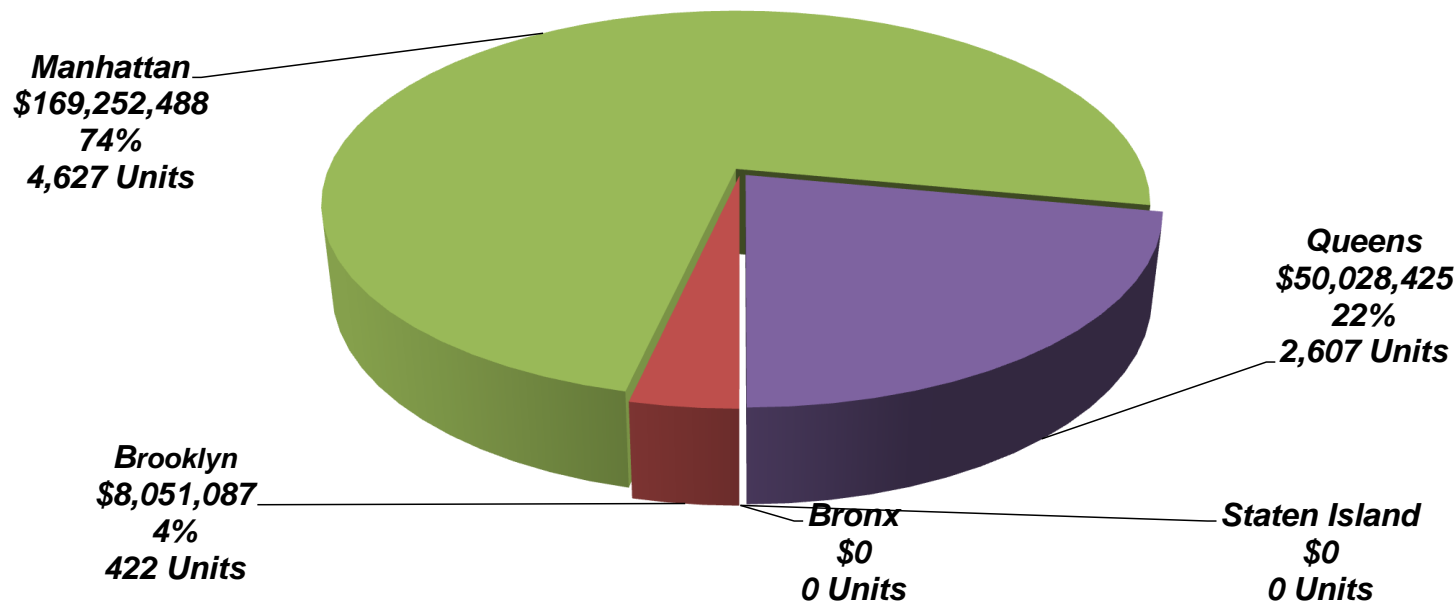
AFL-CIO Housing Investment Trust (HIT)
NYC Workforce Housing Initiative 2009-2014

Investments Through 06/30/2013

Workforce Investments Detail

<u>Borough</u>	<u>2 Q Investments</u>	<u>Investments Since Inception</u>	<u>2Q Housing Units</u>	<u>Housing Units Since Inception</u>
Bronx	\$0	\$0	0	0
Brooklyn	0	8,051,087	0	422
Manhattan	0	169,252,488	0	4,627
Queens	0	50,028,425	0	2,607
Staten Island	0	0	0	0
Total	\$0	\$227,332,000	0	7,656

HIT Workforce Housing Initiative



BERS Economically Targeted Investments Quarterly Report

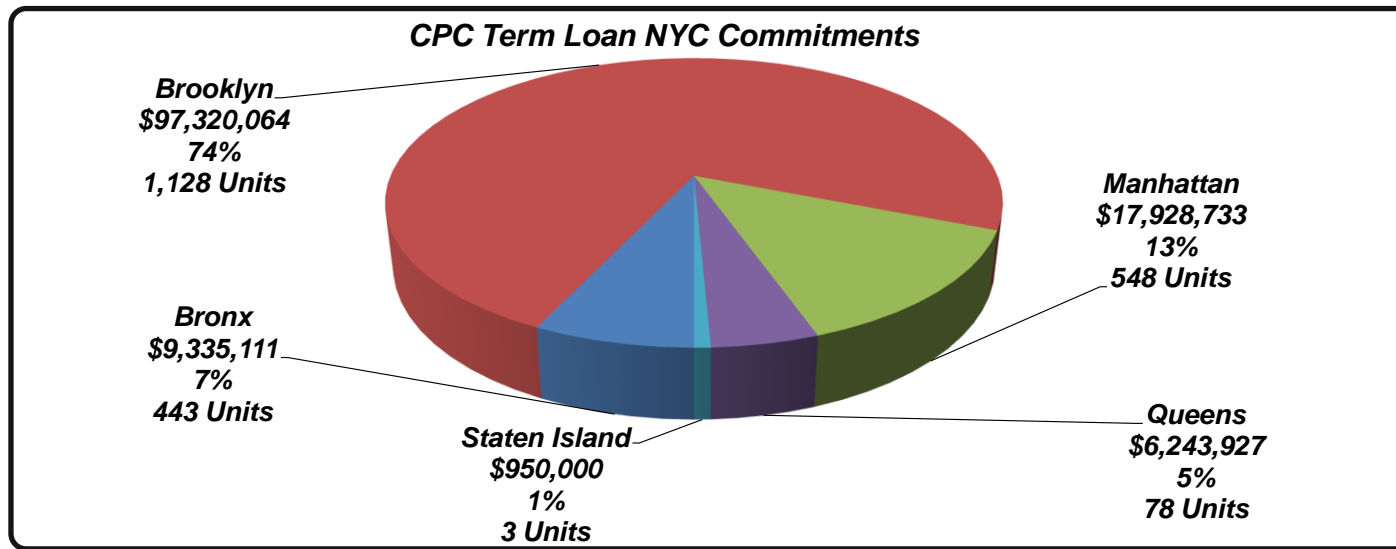
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CPC Term Loan	
Commitments All Lenders as of 1Q	\$175,483,667
2Q Paydown	-\$43,705,832
<u>Commitments All Lenders as of 2Q</u>	<u>\$131,777,835</u>

BERS Commitment Share/Market Value* as of 1Q 2013	\$806,831
2Q Paydown	-\$149,720
<u>BERS Commitment Share/Market Value* as of 2Q 2013</u>	<u>\$657,111</u>

	# Loans		\$ Committed (MM)		# Res. Units		# Comm. Units	
	1Q	2Q	1Q	2Q	1Q	2Q	1Q	2Q
Bronx	17	12	\$19.1	\$9.3	823	443	23	21
Brooklyn	38	33	127.2	97.3	1,274	1,128	33	29
Manhattan	30	24	22.0	17.9	636	548	28	20
Queens	4	4	6.2	6.2	78	78	3	3
Staten Island	1	1	1.0	1.0	3	3	0	0
Grand Total NYC	90	74	\$175.5	\$131.8	2,814	2,200	87	73
Other NY State	32	27	\$89.7	\$58.7	980	909	19	16

*Equals the amount drawn down. Interest is paid monthly.



BERS Economically Targeted Investments Quarterly Report

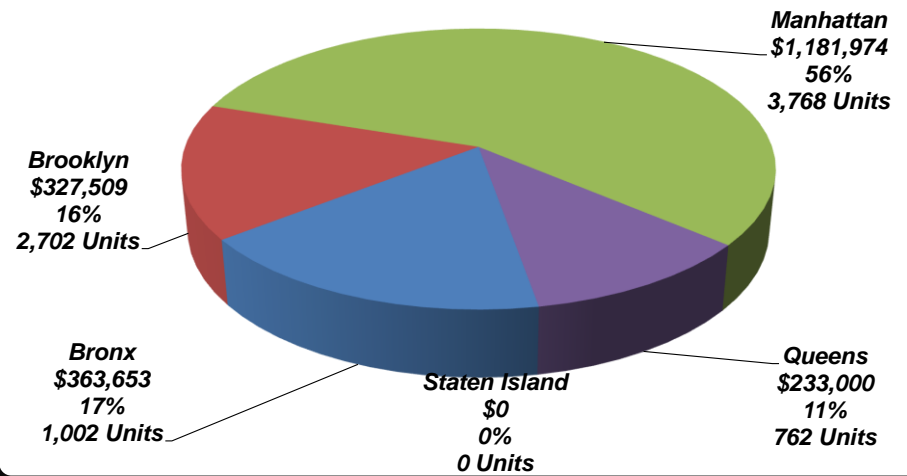
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ACCESS CAPITAL STRATEGIES (Since Inception 2/1/07)

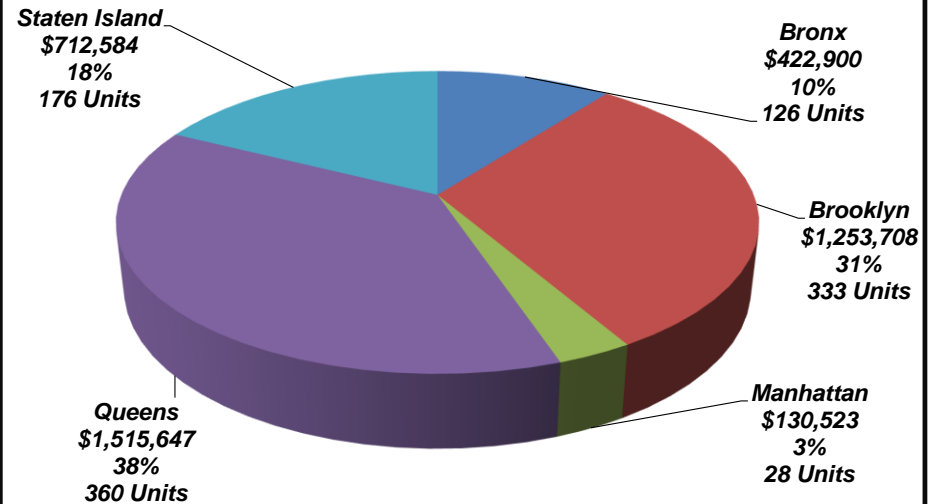
\$7.0 million Allocated (2% of total account)
Market Value \$2.7 million

<u>Multifamily Investments Detail</u>	2Q \$ Invested (MMs)	Total	2Q Total Units	Total
Bronx	\$0.0	\$0.4	494	1,002
Brooklyn	0.1	0.3	2,298	2,702
Manhattan	0.0	1.2	953	3,768
Queens	0.0	0.2	0	762
Staten Island	0.0	0.0	0	0
Total BERS Multifamily Investments	\$0.1	\$2.1	3,745	8,234
MultifamilyTotal All Systems	\$5.2	\$105.3	3,745	8,234
<u>Single Family Investments Detail</u>	2Q \$ Invested (MMs)	Total	2Q Total Units	Total
Bronx	0.0	\$0.4	10	126
Brooklyn	0.1	1.3	29	333
Manhattan	0.0	0.1	0	28
Queens	0.1	1.5	24	360
Staten Island	0.0	0.7	11	176
Total BERS Single Family Investments	\$0.3	\$4.0	74	1,023
Single Family Total All Systems	\$14.5	\$201.8	74	1,023
<u>Other Investments Detail</u>	2Q \$ Invested (MMs)	Total	2Q # of Loans	Total
Bronx	\$0.0	\$0.1	0	1
Brooklyn	0.0	\$0.1	0	8
Manhattan	0.0	0.5	0	5
Queens	0.0	0.1	0	3
Staten Island	0.0	0.0	0	0
Total BERS Other Investments	\$0.0	\$0.18	0	0
Other InvestmentsTotal All Systems	\$0.0	\$9.04	0	17
Grand Total BERS	\$0.4	\$6.3		
Grand Total All Systems	\$19.6	\$316.1		

Access Multifamily Investments Since Inception BERS



Access Single Family Investment Since Inception BERS



Economically Targeted Investments Quarterly Report

Emmes ETI Real Estate Fund 833-847 Flatbush Avenue, Brooklyn, NY

On June 26, 2013, the Emmes ETI Real Estate Fund made its inaugural acquisition, purchasing 833-847 Flatbush Avenue in Brooklyn for \$17.5 million (BERS portion \$1.1 million). The property is currently 91% leased to a diverse tenant roster which includes a bank, fitness gym and convenience store. The Fund will be investing additional capital to make roof and exterior façade repairs. This investment is expected to preserve jobs and to create jobs through construction and the leasing up of remaining vacant space and is expected to further catalyze investment and development along the Flatbush Avenue retail corridor.



Key Statistics:

- 32,703 square foot retail center
- Purchase Price: \$17.5 million
- 8 Commercial Units
- 91% Leased
- Anchor Tenants: Carver Bank,
- 7- Eleven, Blink Fitness
- Preserves 22 Jobs

BERS Economically Targeted Investments Quarterly Report

	Assets (\$MM)	Trailing 3 Months	6/30/2013 6/30/2013	Trailing 1 Year	Trailing* 3 Years	Trailing* 5 Years	Trailing* 10 Years	Trailing* 15 Years	Since Inception	Data Start Date
BERS										
CCD-PPAR	0.32	2.48	10.30	10.30	9.22	10.04	****	****	9.15	11/30/06
LIIF-PPAR	0.17	2.09	8.12	8.12	4.77	****	****	****	6.19	07/31/09
CFSB-PPAR	0.13	0.31	5.55	5.55	6.83	7.81	****	****	7.24	09/30/06
NCBCI -PPAR	0.08	2.48	10.42	10.42	7.36	****	****	****	7.59	07/31/09
CITIGROUP GNMA +65 BPs per annum		-2.39	-1.53	-1.53	3.47	5.63	5.44	6.17	6.56	
CCD-PPAR	+/-	4.87	11.83	11.83	5.75	4.41	****	****	****	
LIIF-PPAR	+/-	4.48	9.65	9.65	1.30	****	****	****	****	
CFSB-PPAR	+/-	2.70	7.09	7.09	3.36	2.18	****	****	****	
NCBCI -PPAR	+/-	4.87	11.95	11.95	3.89	****	****	****	****	
CPC - TERM LOAN	0.66	0.60	2.45	2.45	2.29	2.46	****	****	3.31	02/28/07
30 Day Libor + 200 bps with a Floor 250 bps per annum		0.05	0.21	0.21	0.24	0.47	2.30	3.00	****	
	+/-	0.55	2.24	2.24	2.06	1.99	****	****	****	
AFL-CIO HOUSING INV TRUST	11.47	-2.48	-1.06	-1.06	3.53	5.20	****	****	5.01	11/30/06
BARCLAYS CAPITAL US AGGREGATE BOND INDEX		-2.32	-0.69	-0.69	3.51	5.19	4.52	5.52	****	
	+/-	(0.16)	(0.37)	(0.37)	0.03	0.02	****	****	****	
ACCESS - RBC	2.72	-2.13	-0.51	-0.51	3.17	6.11	****	****	5.66	02/28/07
Access/RBC: 60% MI 30 yrs Mortgage Index (MF30)		-1.75	-0.90	-0.90	2.55	4.53	****	****	****	02/28/07
plus 40% U.S. Treasury 1-10 Yr index (G502)	+/-	(0.38)	0.39	0.39	0.62	1.58	****	****	****	
TOTAL BERS ETI (w/o cash)**	15.50	-2.08	-0.39	-0.39	3.53	5.42	3.83	4.92	7.30	11/30/84
BOARD OF ED CUSTOM ETI BENCHMARK (no cash)		-2.09	-0.60	-0.60	3.20	4.81	****	****	****	
	+/-	0.00	0.21	0.21	0.32	0.61	****	****	****	

* Historical returns prior to April 2004 provided by Citigroup.

**Time periods greater than one year are annualized. Returns are net of fees and exclude Erasmus and Emmes.

Private Equity Quarterly Report



MARCH 31, 2013

ALTERNATIVE INVESTMENT REPORT

NYC Board of Education Retirement System

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www.hamiltonlane.com | P 610.934.2222 | F 610.617.9853

NYC Board of Education Retirement System

First Quarter 2013 Report

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Section 1:

Market Update

NYC Board of Education Retirement System

First Quarter 2013 Report

The Private Equity Market

Introduction

Global macroeconomic trends from 2012 appear to persist into the beginning of 2013. In the United States there is evidence of sustained and steady growth from leading economic indicators as of April 2013. Inventories of manufactured durable goods, new orders for manufactured durable goods, and nondefense new orders for capital goods were all up in April. Consumer and business confidence is still tentative; however, with potential recovery in the housing and labor markets, we believe there is reason for stable economic growth to continue into the second quarter. The Eurozone still faces an uncertain economic future with recent events in the southern regions raising questions about whether the crisis is actually nearing its end. Previously believed positive indicators, such as exports, GDP, unemployment, interest rates, and the current balance, are fading in this region.

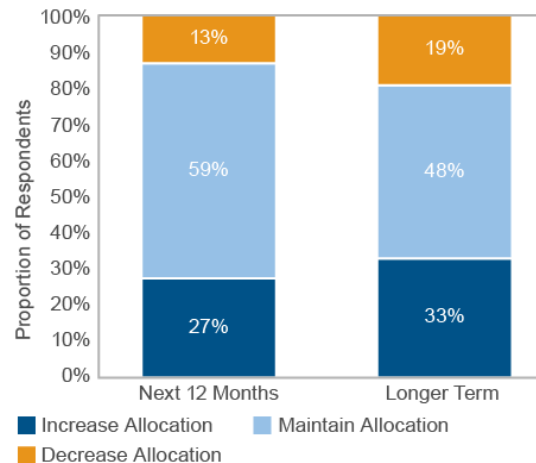
Looking back at the beginning of 2012, private equity was forecasted to be on a positive trajectory, due to strong deal flow and capital investment during the preceding two years. Nevertheless, due to political, regulatory, and macroeconomic factors, 2012 deal flow and capital investment activity reversed course and averaged an overall downtrend at year-end. 2013 appears to look slightly more optimistic for private equity, as investor appetite for the asset class has remained strong going into the second quarter of 2013. Fundraising will be competitive as a greater number of general partners vie for commitments from limited partners. These LPs are narrowing their scope of investment-worthy GPs to the upper echelon of performing managers. Secondary deals are expected to be on the rise, as limited partners are anxious to realize older investments and utilize secondary buyouts as an exit path.

The first quarter of 2013 saw the two largest deals announced since the 2000-2007 era with the \$24.4 billion Silver Lake-backed privatization of Dell Inc. and the \$28.0 billion Berkshire Hathaway and 3G Capital-backed buyout of H.J. Heinz Company. Despite this promising sign of growth in the first quarter, major regional economic factors will play a crucial role in how private equity investors will strategically allocate their investments this upcoming year. Growth has been stable through the first quarter of 2013 and is on course to continue into the second quarter.

Consistent Allocations

With volatility across asset classes persisting into 2013, investors continue to search for above average returns to strengthen portfolio performance. In December 2012, a Preqin investor survey shows that nearly 86% of LPs intend to maintain or increase their allocation to private equity in 2013. In order to expand the breadth of their private equity allocations, LPs are looking to invest in new strategies and geographies in 2013. Half of LPs surveyed would consider a first-time fund or those managed by spin-off teams.

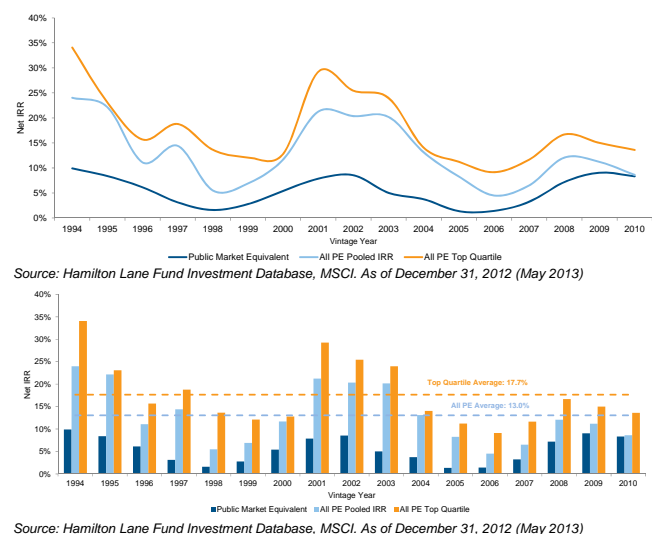
Chart 1: Investors' Intentions for Their Private Equity Allocations



Private Equity Performance

Over the 15 year time horizon, private equity returns still outperform the public markets as measured by the MSCI World in all vintage year comparisons. This outperformance ranges from 27 to 1,518 basis points over that time frame. Top quartile funds achieved an even greater spread over the public markets, ranging from 527 to 2,416 basis points. Although the IRR performance has been relatively variable over the short-term, private equity has consistently outperformed the public indices over the ten year time horizon.

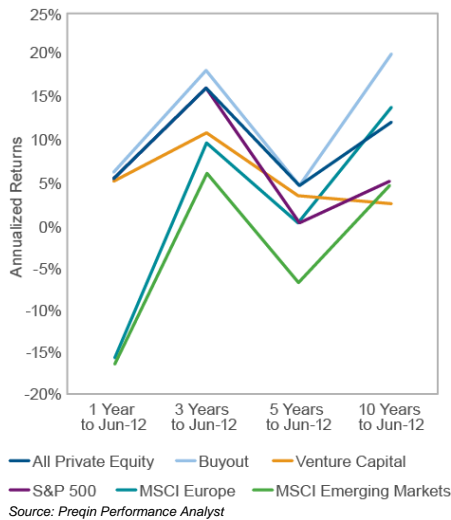
Chart 2: Fund Outperformance of Public Markets



NYC Board of Education Retirement System

First Quarter 2013 Report

Chart 3: All PE Horizon IRRs versus Public Indices



Flat-line in Deal Activity

2012 was a flat year for private equity as regional economic outlooks heavily influenced deal activity, exits, and fund raising. The United States is on its way to stable deal terms for those looking to close in 2013. The first quarter saw the announced deal value in North America reach an aggregate of \$71 billion, driven by the two largest deals which together totaled \$52.4 billion. The Eurozone environment appears to be more challenging, as the growth potential is still being heavily questioned. Sponsor-to-sponsor transactions may provide the only significant level of deal activity in this region. Europe experienced a 64% quarter-over-quarter decline in value of announced buyout deals during the first quarter. The rest of the world, especially Asia and Latin America, will be largely dependent on the outlook of their economy to attract potential investors and secure deals. Investor appetite in countries such as Brazil and China has increased; however, macroeconomic factors such as China's subdued GDP growth and Brazil's slowing economy have kept the number of deals executed from reaching its full potential. India also proves to be a difficult region to penetrate as structural barriers, such as very few exit options for investors, have kept PE investors at bay.

Chart 4: Aggregate Value of Announced PE backed Buyout Deals by Region

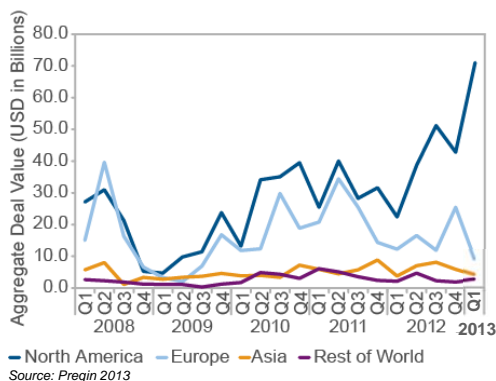
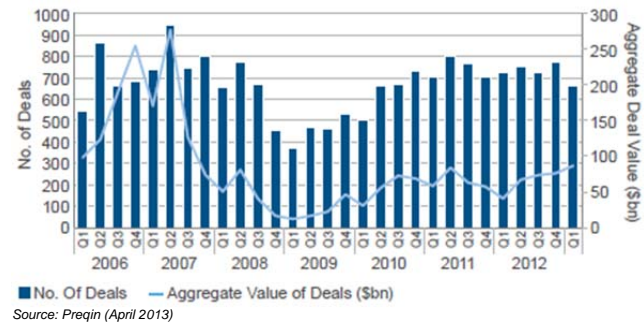


Chart 5: Number and Aggregate Value of Private Equity-Backed Buyout Deals Globally

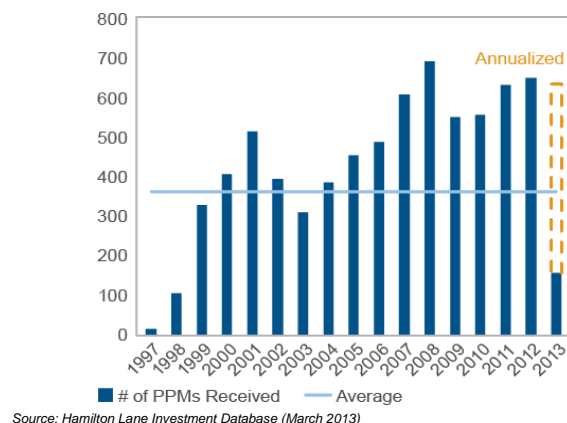


At the close of the first quarter of 2013, 665 private-equity backed buyout deals, valued at an aggregate of \$87 billion, were announced globally. This aggregate value represents the highest quarterly amount since the third quarter of 2007. Regardless, the first quarter's buyout aggregate deal value was heavily influenced by the two largest deals announced during the quarter, \$24.4 billion Silver Lake-backed privatization of Dell Inc. and the \$28.0 billion Berkshire Hathaway and 3G Capital-backed buyout of H.J. Heinz Company. Excluding the two largest deals, deal value was actually similar to that seen in 1Q09. Despite the increase in deal value, there was a decrease in the number of PE-backed buyout deals in the first quarter of 2013. 665 buyout deals were announced globally, a decline from 770 in the fourth quarter of 2012.

Private Equity Fundraising

Hamilton Lane received 158 private placement memorandums during the first quarter of 2013. This volume was on par with the 12-year average but the annualized projected PPMs received for 2013 is slightly below the 654 PPMs received in 2012.

Chart 6: PPMs Received by Hamilton Lane



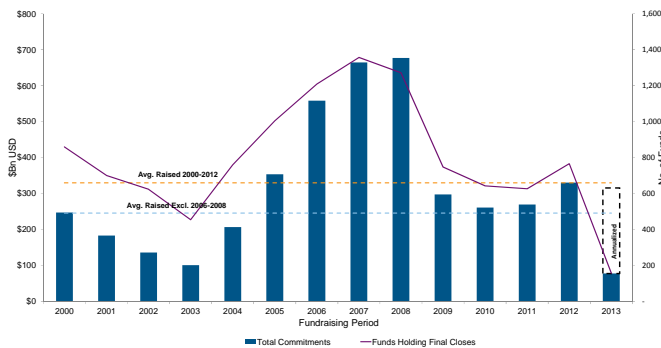
The difficult fundraising environment from 2012 appears to be continuing into 2013. At the onset of 2013, there were 1,912 funds that were seeking \$797 billion in commitments worldwide. Although dry powder in general is decreasing, 2007 and 2008 funds will need to deploy capital in the near future. 130 private equity funds were closed in 1Q13, raising an aggregate of \$67.2

NYC Board of Education Retirement System

First Quarter 2013 Report

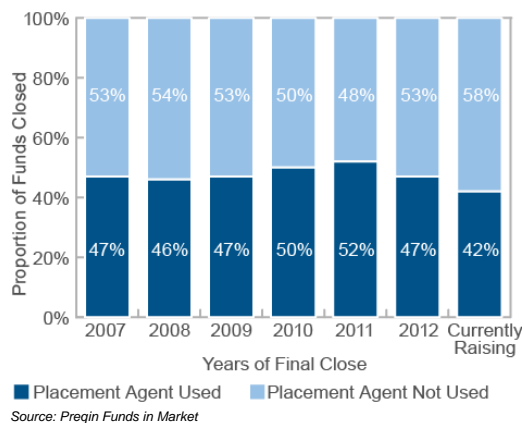
billion. Only six percent of the total capital raised by funds closed in 1Q13 was by first-time fund managers. Funds that closed in the first quarter of 2013 took an average of 18.2 months to hold a final close, which is 0.5 months longer than it took funds to hold a final close in 2012 and two months longer than 2011. The average size of these funds was \$537 million, which is line with the average fund size seen in 2Q09. There appears to be a crowded but flat fundraising environment which indicates investors are strategically investing in previously successful general partners.

Chart 7: Global PE Fundraising by Final Close



Ninety-two percent of first-time fund managers fundraising at the start of 2013 utilized placement agents. Nevertheless the aggregate number of managers using placement agents is down from 2012 but in line with the first quarter of last year.

Chart 9: Proportion of Funds Using Placement Agents

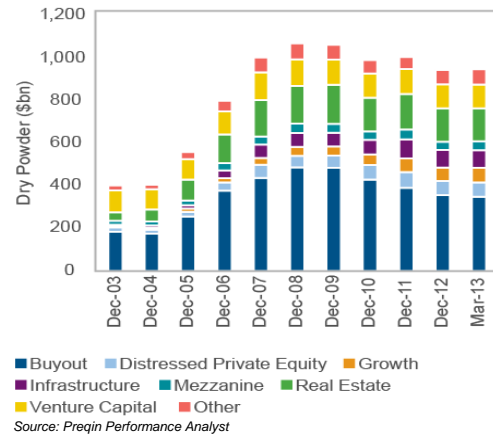


The Old Overhang Issue

As alluded to in the prior quarter, the amount of dry powder as a percentage of assets under management (AUM), defined as the sum of dry powder (private capital overhang) plus the unrealized value of the entire private equity industry, has decreased since June 2012. As of December 31, 2012, dry powder estimates show that \$946 billion of capital is available to fund managers to invest. Dry powder for buyout funds has been decreasing over the past five years from 44% of total dry powder in December 2007 to 38% in December 2012. Dry powder for all other

strategies has remained relatively consistent over the same time period.

Chart 10: Private Equity Dry Powder by Fund Type



Debt Markets

The 2014 maturity wall is now much more manageable, with 97% of the 2013 and 85% of the 2014 U.S. and Europe maturities eliminated since the end of 2010. The recent surge in demand for PE debt with few or no covenants is a major shift. Meanwhile, new collateralized loan obligation (CLO) issuances have been revived. Quarterly high yield issuance volume surpassed \$90 billion, for the fifth consecutive year.

Chart 14: High Yield Issuance

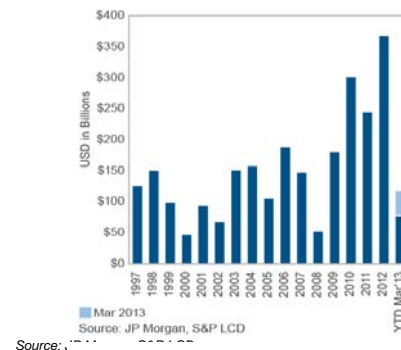
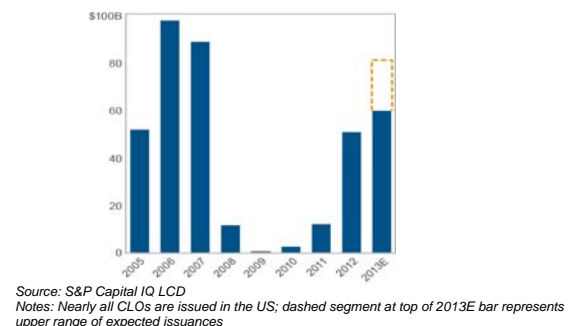


Chart 15: U.S./Europe Maturities



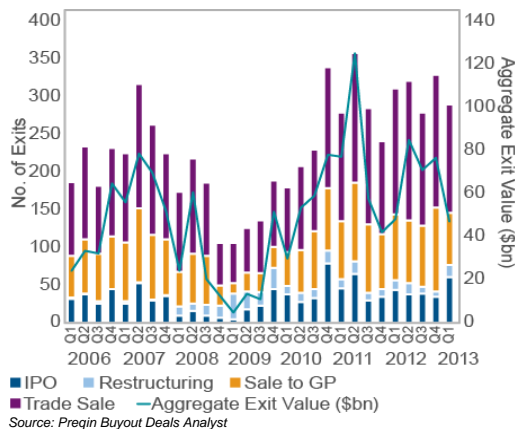
NYC Board of Education Retirement System

First Quarter 2013 Report

Road Blocks to Exits

Despite the increasing IPO exit activity in the first quarter of 2013, exits continued to be congested. During 2012, 1,192 exits were announced globally, valued at \$275 billion. This is a slight increase from the prior year, when 1,145 exits were achieved; however, the overall value of the exits in 2012 was 11% lower than exits in 2011, when \$310 billion in exits was achieved.

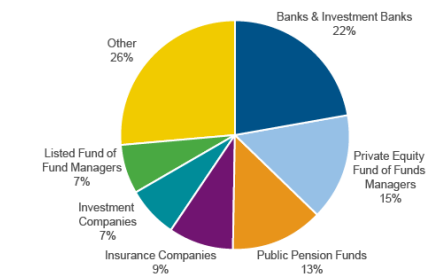
Chart 11: Aggregate Value of Private Equity-Backed Exits by Type



The North American region proved the most popular region for private equity buyout-backed exits for 2012, representing 52% of the total number of exits and 54% of the aggregate value of exits globally. Looking ahead to the coming year, 2013 is poised to have a full pipeline of exits, with two-thirds of investments made during 2006-2007 having yet been exited.

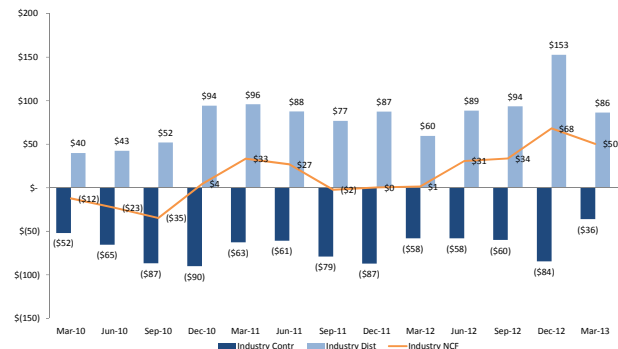
Secondary sales are also being seen as a viable means of exit in the coming years. However, investors are conducting their due diligence and will only invest with managers with a proven track record. Banks and investment banks represented 22% of secondary market sellers, as the need to hold more liquid assets becomes a necessity under looming regulations, such as the Volcker Rule and Basel III. Private equity fund of funds managers and listed fund of funds accounted for 22% of LPs selling on the secondary market in 2012, a decrease compared to the 29% seen in 2011.

Chart 12: Break-down of Secondary Market Sellers during 2012 by Firm Type



Hamilton Lane's Fund Investment Database suggests that industry-wide quarterly distributions were down significantly from the prior quarter, but on par with the 3-year average of \$81 billion. The spike in distributions during the fourth quarter of 2012 was in response to uncertainty of the fiscal policy in the United States set to be enacted in 2013. Nevertheless, this liquidity might have a positive impact on fundraising and may motivate future reinvestments.

Chart 8: Industry Net Cash Flow- All PE Funds

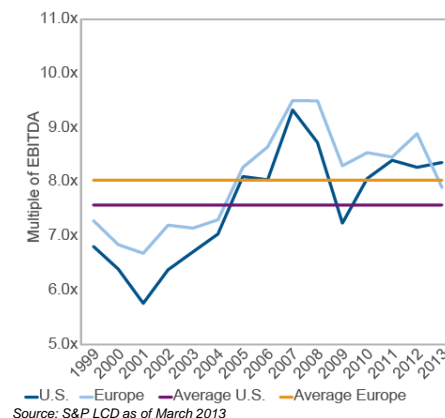


*Fund level cash flow data in the Hamilton Lane Fund Investment Database grouped by vintage year and then multiplied by the ratio of total PE commitments by vintage year per Preqin over total fund size represented in Hamilton Lane's data to generate a proxy for the PE universe. Some totals may change slightly from quarter to quarter as the data points in the Hamilton Lane Fund Investment Database increase.

GP Sentiment

General partners still see the potential of a comeback in 2013, with slow and steady recovery in particular industries, such as manufacturing and technology, and the potential for regional growth in Asia and Latin America. In a BDO survey, a majority of fund managers remain steadfast to their primary investment strategies. Only 11% of respondents said they have asked LPs to allow a change in investment strategies. 22% of larger fund managers, those who have \$1 billion in AUM, considered a revaluation of their investment strategies in 2012. Despite the competitive landscape, private equity managers and corporates have significant dry powder available to deploy. Deals are being fully priced in the United States but European pricing is down.

Chart 13: Average Purchase Price Multiples of All LBOs



NYC Board of Education Retirement System

First Quarter 2013 Report

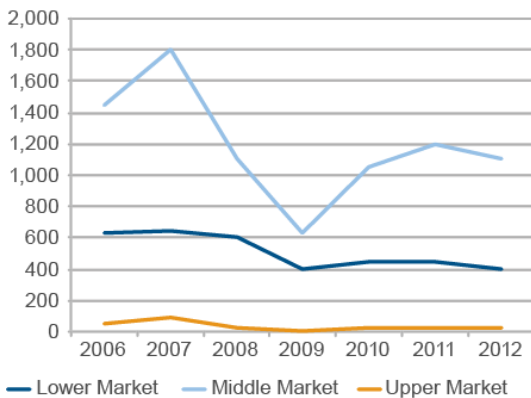
Strategy Spotlight: SMID

The middle-market has been an attractive investment prospect for potential investors, due to the opportunity for value creation, the diversification possibilities, return profiles, and strategic investment strategies that allow for turnaround and restructuring. The middle market is defined as U.S.-based companies acquired through buyout transactions between \$25 million and \$1 billion. Deal activity for this segment was down to 624 deals aggregating \$88 billion in 2009. Since then, activity has been up for the past three years, averaging 1,104 deals and \$242 billion in aggregate deal flow annually. 2012 deal flow somewhat declined in the first three quarters but due to looming changes in expected tax rates in 2013, fourth quarter activity was up and accounted for over 30% of deal volume for the year.

Fundraising Trends

The number of middle market funds that closed has risen for two consecutive years; however, this is still below the height of the fundraising market seen in the 2006-2008 era. The resurgence of larger funds has added to the total number of funds closed as well as the total capital raised. Lower middle market (\$25-\$100 million) deal count surpassed core middle market (\$100-\$500 million) deal count in 2012 for the first time since 2009. In total, lower middle market deals accounted for approximately 45-50% of the total middle market deals made in 2012. Middle market deals continue to represent a majority of all buyout deals, at a record high of 71.4%. Lower market and upper market activity has not been as volatile during the downturn.

Chart 1: Total PE Deal Flow by Market



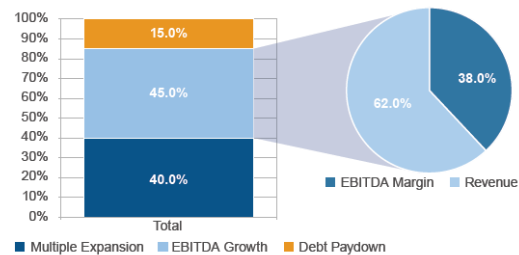
Exits

Exits have been consistent for the past three years; however, secondary buyouts as a means of exiting have been increasing steadily while other avenues have not. As a percentage of exits, secondary buyouts were the most popular method for deals under \$25 million in enterprise value.

The Opportunity

There are many reasons investors are deploying increased amounts of capital to the SMID strategy. One reason is that SMID funds operate globally and cut across a wide range of strategies, including buyout, growth equity, structured equity, buy-and-build, turnaround, mezzanine, and credit (control and non-control). There is also a greater potential to capture “low hanging fruit” that is more abundant in smaller, less professionalized companies. The opportunity to drive value through both multiple and EBITDA expansion/growth is the most popular method of achieving this value creation. Additionally, smaller companies have historically been purchased at lower multiples, creating an opportunity for the GP to exit at a full multiple relative to more established companies in the industry.

Chart 2: Value Creation Opportunity

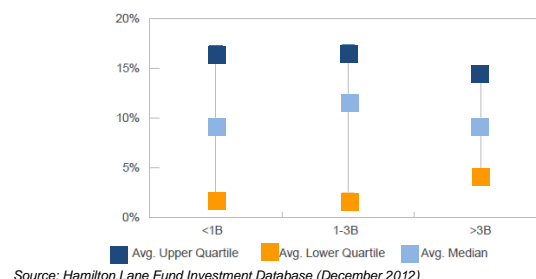


Investor Appetite for SMID

In a Preqin survey of investors taken in 2013, SMID by far is the most sought after segment to put capital to work; however, LPs require experience, and recently have shown more of an unwillingness to invest in a first time fund. Despite the demand for experience, the total number of funds under \$1 billion as a percentage of total fund deals has been decreased since 2010; LPs see that SMID investments offer a wide array of benefits.

Smaller funds have shown to outperform over time, generating average top quartile higher than that of >\$3 billion funds. The median is higher for \$1-\$3 billion but <\$1 billion has a higher upper quartile average.

Chart 3: Buyout Average Quartiles by Size (Vintage 1998-2008)

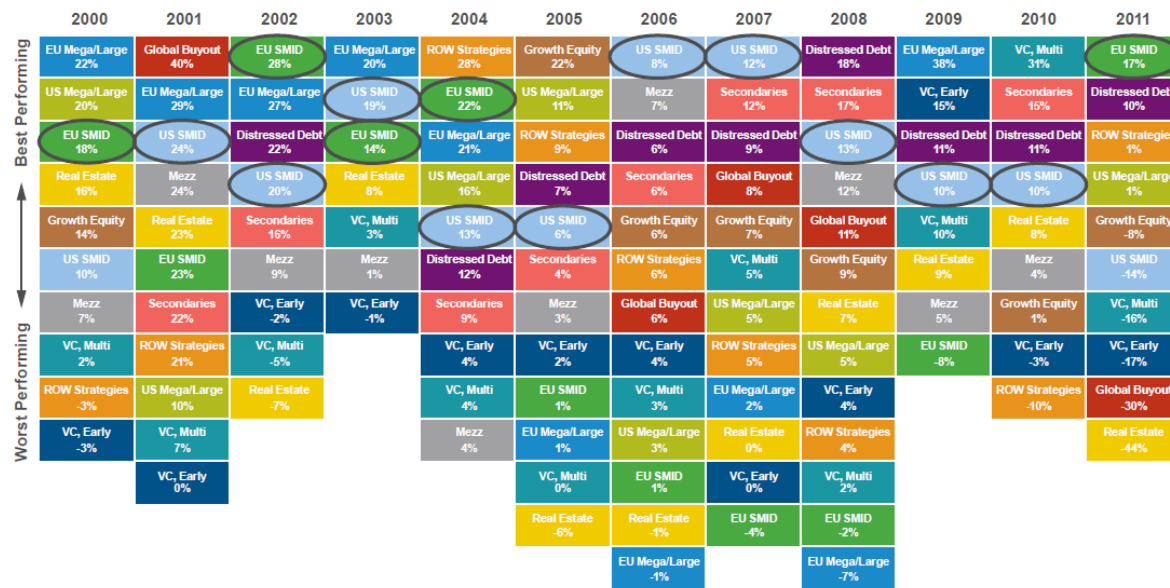


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There is greater potential of value creation for SMID funds through multiple expansion and EBITDA growth, allowing SMID funds to maintain consistent performance in various economic cycles. Over the past 12 vintage years, U.S. and European SMID are among the top five performing strategies in Private Equity.

Chart 4: Sector Performance by Vintage Year



* Due to small sample size, certain strategies are not represented.

Source: Hamilton Lane Fund Investment Database (fund performance as of March 2012) & Thomas Reuters (August 2012)

Certain performance information is provided from the Hamilton Lane Fund Investment Database. Performance data is calculated and displayed by strategy, geography, vintage or a combination of these. The Hamilton Lane Fund Investment Database contains performance data for funds monitored by Hamilton Lane on behalf of its clients, which includes both discretionary commitments, non-discretionary commitments, and commitments monitored for fund administration purposes. Unless otherwise noted, data included in performance charts and tables includes all funds in the system with performance data available for the designated strategy, geography, and vintage. Special fund vehicles where a single limited partner has an ownership interest greater than 52% of the total fund size are excluded.

Section 2:

Portfolio Update

NYC Board of Education Retirement System

First Quarter 2013 Report

Portfolio Snapshot

Hamilton Lane was engaged by the NYC Board of Education Retirement System (“BERS”) in November 2012 to provide alternative investment fund administration services in accordance with the investment objectives of the BERS Private Equity portfolio (the “Portfolio”). This report represents the review by Hamilton Lane of the BERS’s Portfolio and is based on information made available to Hamilton Lane by the general partners sponsoring each of the partnership investments in the Portfolio as of March 31, 2013, with highlights through June 30, 2013.

Private Equity Allocation: BERS has a target allocation of 6.0% to Private Equity. As of March 31, 2013, Private Equity constituted 3.2% of BERS plan.

Performance: As of March 31, 2013, the Portfolio consists of 10 partnerships and 6 underlying fund managers. The Portfolio has generated a since inception internal rate of return (“IRR”) of 6.37% and a total value multiple of 1.22x.

Portfolio Summary			
\$ millions	12/31/2012	3/31/2013	Change
Active Partnerships	8	10	2
Active GP Relationships	5	6	1
Capital Committed ⁽¹⁾	\$208.2	\$233.2	\$25.0
Unfunded Commitment	\$103.5	\$123.4	\$19.9
Capital Contributed	\$105.8	\$111.2	\$5.4
Capital Distributed	\$21.0	\$26.1	\$5.1
Market Value	\$106.6	\$109.8	\$3.2
Total Value Multiple	1.21x	1.22x	0.01x
Since Inception IRR	6.05%	6.37%	32bps
Avg. Age of Active Commitments	4.1 years	4.0 years	(0.1) years

⁽¹⁾The “change” in capital committed from the prior quarter reflects additional commitments made during the quarter.

Portfolio Exposures: The Corporate Finance/Buyout strategy represents 42% of the Portfolio’s total exposure, Venture Capital represents 16%, Distressed/Turnaround represents 14%, Growth Equity accounts for 12%, Secondary represents 8%, Other represents 4%, and Co-Investment represents 4%. Strategic exposure takes into account the strategies for each of the underlying partnerships in the funds-of-funds within the BERS Portfolio.

NYC Board of Education Retirement System

First Quarter 2013 Report

Portfolio Overview

Commitments

The table below highlights the funds that closed during the first quarter of 2013.

YTD Commitments - 2013			
Closing Date	Partnership	Investment Strategy	Commitment Amount
1/31/2013	Landmark Equity Partners XV, L.P.	Secondaries	\$19.0
1/31/2013	Landmark Equity Partners XV, L.P. - Side Car	Co-Invest	\$6.0
Total			\$25.0

The two new investments, totaling \$25.0 million are detailed below:

Landmark Equity Partners XV, L.P. & Side Car (\$19.0/\$6.0 million) The fund will target the entire spectrum of available secondary transactions, from the customary acquisition of individual private equity fund interests, to more complex portfolio transactions.

Subsequent Events

The Portfolio completed additional investments totaling \$46.0 million following the quarter end March 31, 2013, detailed below:

Subsequent Closings			
Investment	Investment Strategy	Commitment (\$ in Millions)	Closing Date
Apollo Investment Fund VIII, L.P.	Corporate Finance/Buyout - Mega	\$20.0	6/28/2013
CVC Capital Partners VI, L.P.	Corporate Finance/Buyout - Mega	\$26.0	6/28/2013
		\$46.0	

Apollo Investment Fund VIII, L.P. (\$20.0 million) the fund will seek investments in mid- and large-cap companies, focusing on distressed investments, corporate carve-outs and opportunistic buyouts.

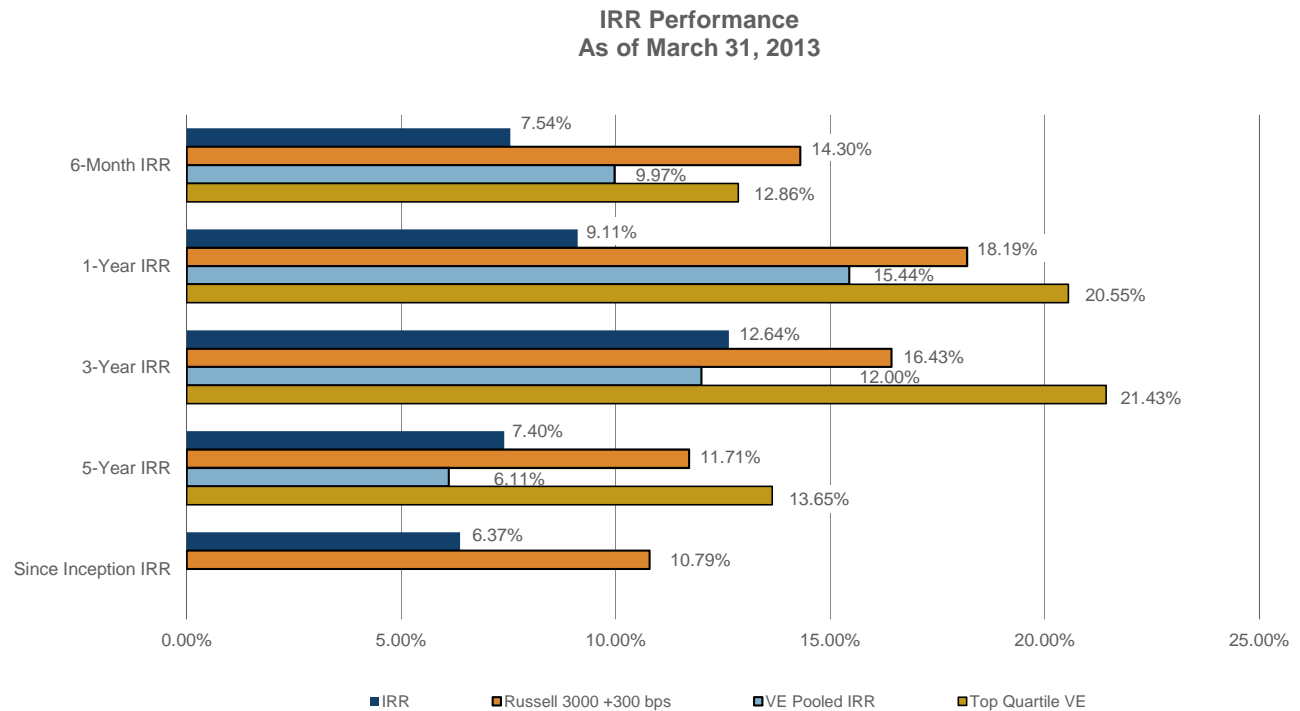
CVC Capital Partners VI, L.P. (\$26.0/~~20.0~~ million) the fund predominantly targets businesses headquartered in Europe with global streams of revenue.

NYC Board of Education Retirement System

First Quarter 2013 Report

Portfolio Performance Summary

The chart below is a graphical depiction of the IRR performance of the Portfolio with respect to 6-Month, 1-, 3-, 5-Year, and Since Inception time periods. The Portfolio is benchmarked against the VE Pooled IRR, and Top Quartile VE, as well as the Russell 3000 plus 300bps.



Note: The Since Inception IRR is not benchmarked against VE as there is no time horizon available that is comparable to the March 3, 2006 inception date of BERS Portfolio. The Russell 3000 Total return index incorporates the Long Nickels methodology where the assumption is that the capital is being invested and withdrawn from the index on the days the capital was called and distributed from the underlying fund managers. This calculation includes a 3.0% premium.

- As private equity is a long term asset class, the most significant time horizon is the since inception time period. Performance on a since inception basis for the first quarter of 2013 increased 32 basis points from the prior quarter, with the Portfolio generating an IRR of 6.37%.
 - Relative to the benchmark, the since inception IRR is underperforming the Russell 3000 plus 300bps by 442 basis points.
- Performance on a one-year basis for the first quarter 2013 decreased 21 basis points from the fourth quarter 2012, with the Portfolio generating an IRR of 9.11%.
 - Relative to the benchmarks, the one-year IRR is underperforming the VE Pooled IRR by 633 basis points, the Top Quartile VE by 1,144 basis points, and the Russell 3000 plus 300bps by 908 basis points.
 - Underperformance to the public benchmark can be attributed to the rally in the public markets during the year 2012 which carried over into the first quarter of 2013.

NYC Board of Education Retirement System

First Quarter 2013 Report

The table below details quarterly performance of the Portfolio for the year ending March 31, 2013.

Portfolio Summary					
in \$ millions	Quarter Ending				Year Ending
	6/30/2012	9/30/2012	12/31/2012	3/31/2013	3/31/2013
Beginning Market Value	\$93.6	\$97.1	\$99.1	\$106.6	\$93.6
Paid-in Capital	8.7	7.3	6.7	5.4	28.1
Distributions	(5.6)	(6.0)	(3.9)	(5.1)	(20.6)
Net Value Change	0.4	0.7	4.7	2.9	8.7
Ending Market Value	\$97.1	\$99.1	\$106.6	\$109.8	\$109.8
Unfunded Commitments	\$80.2	\$73.0	\$103.5	\$123.4	\$123.4
Total Exposure	\$177.3	\$172.1	\$210.1	\$233.2	\$233.2
Point to Point IRR	0.51%	0.80%	4.66%	2.76%	9.11%
Since Inception IRR	5.32%	5.18%	6.05%	6.37%	6.37%

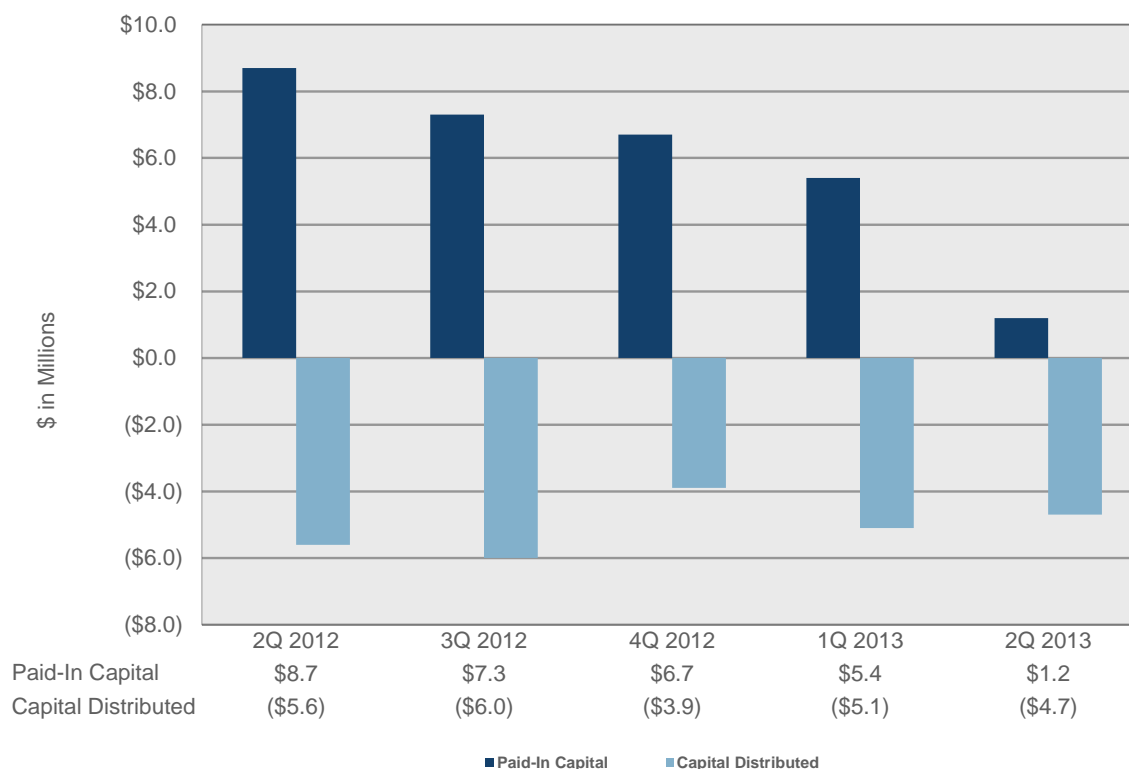
- Over the past twelve months, the Portfolio has generated an IRR of 9.11% and has experienced a total of \$8.7 million in net value appreciation.

NYC Board of Education Retirement System

First Quarter 2013 Report

Cash Flow Drivers

The chart below highlights the cash flows of the Portfolio over the past five quarters ended March 31, 2013.



- Contribution activity continued to decrease during the first quarter of 2013, with contributions totaling \$5.4 million. Distribution activity increased significantly during the first quarter of 2013, with distributions totaling \$5.1 million.
 - Platinum Equity Capital Partners III, L.P. called the most capital during the first quarter of 2013, calling \$4.4 million for initial investments in SMW, DMS Health Technologies, Falcon Lodging, Harvest Meat Company, Neovia Logistics, and BWAY.
 - SMW is a global supplier of chassis and brake components and assemblies for passenger cars and light trucks.
 - DMS Health Technologies provides mobile, interim and fixed-site diagnostic imaging solutions to hospitals, clinics and other medical providers.
 - Falcon Lodging comprises the assets and operating businesses of six underperforming hotels in Minnesota, Florida, Texas and North Carolina.

NYC Board of Education Retirement System

First Quarter 2013 Report

- Harvest Meat Company is a food distribution business based in San Diego that delivers a range of packaged meat products to retailers and foodservice customers.
 - Neovia Logistics is a third-party logistics provider focused on service parts logistics for automotive, industrial, mining and aerospace & defense industries.
 - BWAY is a North American manufacturer of rigid metal, plastic and hybrid containers.
- Mesirow Financial Private Equity Partnership Fund III, L.P. distributed the most capital during the first quarter of 2013, distributing \$1.7 million in proceeds from underlying investments.
- Contribution activity decreased significantly during the second quarter of 2013, with contributions totaling \$1.2 million. Distribution activity also decreased during the second quarter of 2013, with distributions totaling \$4.7 million.
 - Mesirow Financial Private Equity Partnership Fund V, LP called the most capital during the second quarter of 2013, calling \$1.4 million to fund underlying investment obligations.
 - Mesirow Financial Private Equity Partnership Fund III, L.P. distributed the most capital during the second quarter of 2013, distributing \$2.9 million in proceeds from underlying investments.

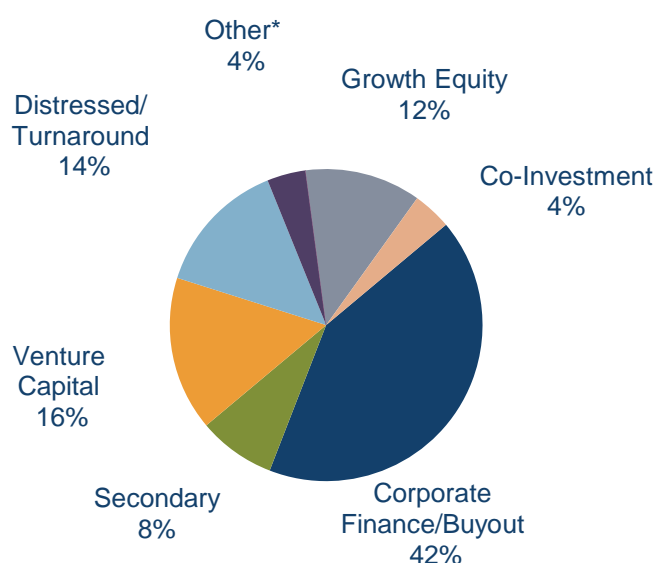
NYC Board of Education Retirement System

First Quarter 2013 Report

Portfolio Exposures

The pie chart below represents the strategic diversification of the Portfolio as of March 31, 2013. Strategy is measured by total exposure, which is the sum of the market value and the unfunded commitments and provides a snapshot of the Portfolio's future diversification. Strategic exposure takes into account the strategies for each underlying partnership in the funds-of-funds within the BERS Portfolio.

**Strategic Diversification
by Total Exposure
As of March 31, 2013**



**Strategic exposure to 'Other' consists of underlying partnerships for which investment strategies are not disclosed in the quarter end financial statements.*

- The Portfolio is focused in the Corporate Finance/Buyout strategy, with 42% of the total exposure attributable to this strategy.

NYC Board of Education Retirement System

First Quarter 2013 Report

Private Equity Company Exposure

The table below identifies the top ten partnership holdings held by funds-of-funds in the BERS Portfolio, as measured by exposed market value as of March 31, 2013. As noted in the second column, the values of partnerships held by several funds-of-funds have been aggregated.

Top 10 Partnership Holdings by Exposed Market Value March 31, 2013			
Partnership Name	Funds-of-Funds	Exposed Valuation (\$ Millions)	% of Total Portfolio
GenNx360 Capital Partners	New York Fairview Private Equity Fund, L.P.	\$3.6	3.4%
MC Venture Partners VI, L.P.	Mesirow Financial Private Equity Partnership Fund III, L.P.	3.2	3.0%
DCM V, L.P.	Mesirow Financial Private Equity Partnership Fund III, L.P.	2.9	2.7%
Encore Consumer Capital Fund	New York Fairview Private Equity Fund, L.P.	2.6	2.5%
TSG5, L.P.	Mesirow Financial Private Equity Partnership Fund III, L.P. Mesirow Financial Private Equity Partnership Fund IV, L.P.	2.6	2.4%
Sun Capital Partners V, L.P.	Mesirow Financial Private Equity Partnership Fund III, L.P. Mesirow Financial Private Equity Partnership Fund IV, L.P.	2.6	2.4%
Vicente Capital Partners Growth Equity Fund, L.P.	New York Fairview Private Equity Fund, L.P.	2.6	2.4%
Providence Equity Partners VI, L.P.	Mesirow Financial Private Equity Partnership Fund III, L.P. Mesirow Financial Private Equity Partnership Fund IV, L.P.	2.5	2.3%
New Enterprise Associates 13, L.P.	Mesirow Financial Private Equity Partnership Fund IV, L.P. Mesirow Financial Private Equity Partnership Fund V, L.P.	2.4	2.2%
The Resolute Fund II, L.P.	Mesirow Financial Private Equity Partnership Fund III, L.P. Mesirow Financial Private Equity Partnership Fund IV, L.P.	2.4	2.2%
Total		\$27.4	25.5%

- As of March 31, 2013, the top ten partnership holdings represent 25.5% of the total Portfolio's market value, or \$27.4 million of market value.
- Five of the ten top partnerships are held in multiple funds-of-funds within the portfolio.
- GenNx360 Capital Partners, a 2008 vintage Small Buyout partnership, is the Portfolio's largest exposure and is held through the New York Fairview Private Equity Fund, L.P. fund-of-funds.

Section 3:

Portfolio Assessment

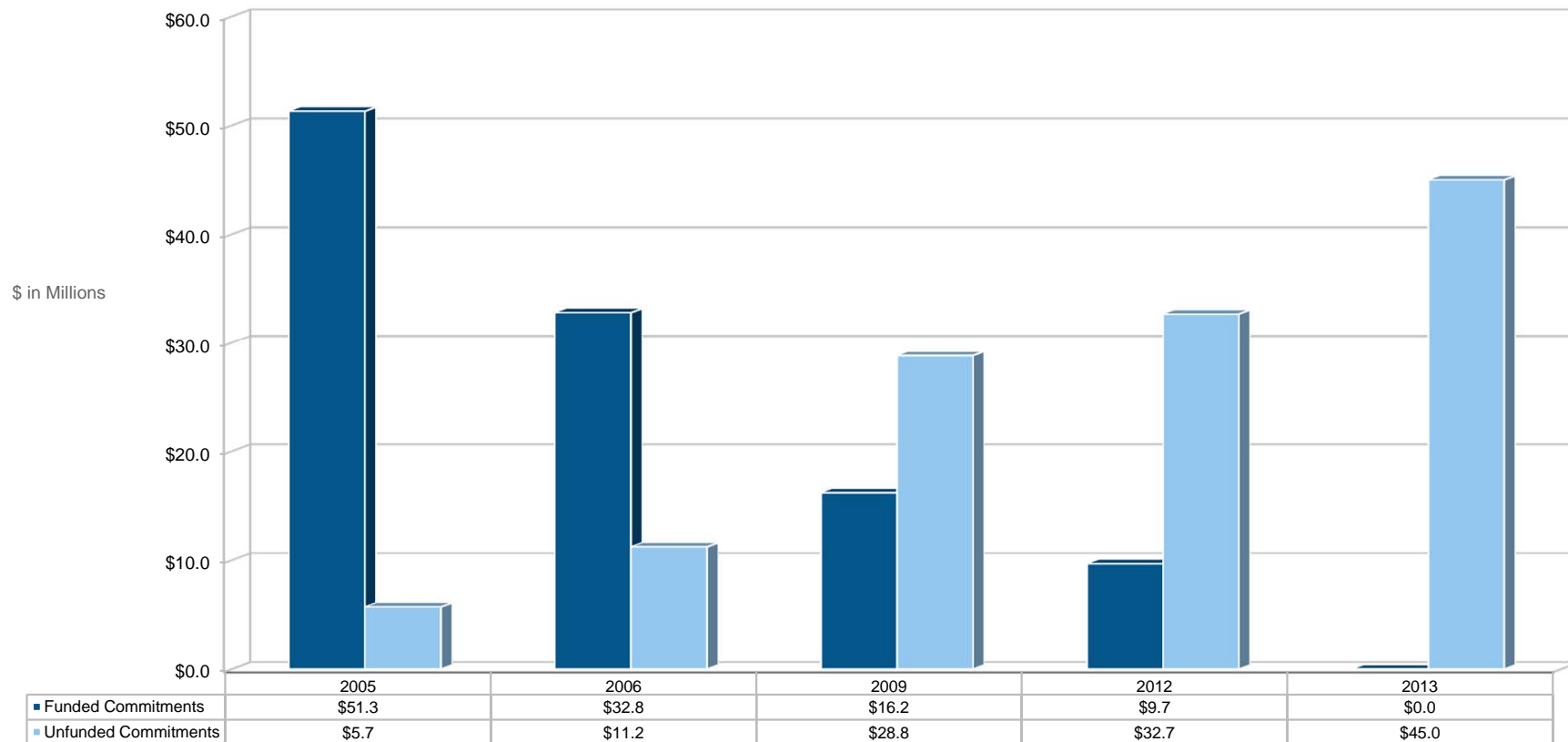
NYC Board of Education Retirement System
Private Equity Portfolio
As of March 31, 2013 (in USD)

Vintage Year	Investment	First Drawdown	Committed Capital	Paid-In Capital	Distributed Capital	Market Value	Multiple	IRR
Active Investments								
2005	Mesirow Financial Private Equity Partnership Fund III, L.P.	7/20/2006	\$ 57,000,000	\$ 51,673,273	\$ 16,741,092	\$ 51,223,745	1.32x	6.44%
2006	Mesirow Financial Private Equity Partnership Fund IV, L.P.	3/31/2008	25,000,000	17,717,233	2,378,759	18,276,498	1.17x	5.50%
2006	New York Fairview Private Equity Fund, L.P.	7/14/2006	19,000,000	15,298,266	4,945,043	13,283,763	1.19x	5.20%
2009	Mesirow Financial Private Equity Partnership Fund V, L.P.	3/7/2011	45,000,000	16,664,326	1,133,886	17,534,666	1.12x	9.45%
2012	Warburg Pincus Private Equity XI, L.P.	7/17/2012	25,000,000	5,448,050	18,750	5,715,283	1.05x	6.65%
2012	Platinum Equity Capital Partners III, L.P.	1/14/2013	15,000,000	4,370,173	872,803	3,803,352	1.07x	19.70%
2012	Carlyle Partners VI, L.P.	N/A	20,000,000	-	-	-	0.00x	N/A
2012	Carlyle Partners VI, L.P. - Side Car	N/A	2,200,000	-	-	-	0.00x	N/A
2013	Landmark Equity Partners XV, L.P.	N/A	19,000,000	-	-	-	0.00x	N/A
2013	Landmark Equity Partners XV, L.P. - Side Car	N/A	6,000,000	-	-	-	0.00x	N/A
Total Portfolio			\$ 233,200,000	\$ 111,171,321	\$ 26,090,333	\$ 109,837,307	1.22x	6.37%

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	\$ 20,000,000	\$ -	\$ -	\$ -	N/A	N/A
2013	CVC Capital Partners VI, L.P.	N/A	25,997,000	-	-	-	N/A	N/A
Total Commitments Closed Subsequent to as of Date			\$ 45,997,000	\$ -	\$ -	\$ -	N/A	N/A

Note: Where available, March 31, 2013 reported valuations were used. In the absence of March 31, 2013 reported values, market values have been adjusted forward using interim cashflows through March 31, 2013. The IRR calculated in the early years of a fund is not meaningful given the j-curve effect. The aggregate portfolio performance figures for IRR and multiple are as of March 31, 2013.

**NYC Board of Education Retirement System
Commitments By Vintage Year
As of March 31, 2013**



Funded Commitments exclude additional fees.

Unfunded Commitments include recallable returns of capital.

Appendix A:

Glossary of Terms

NYC Board of Education Retirement System

First Quarter 2013 Report

Additional Fees: The amount of capital an investor pays into a fund/investment that does not count against the investors' commitment. Additional fees typically consist of management fees or late-closing interest expense.

Capital Committed: An investor's financial obligation to provide a set amount of capital to the investment.

Capital Contributed: Capital contributed from an investor's capital commitment to fund partnership investments, organizational expenses and management fees.

Capital Distributed: Cash or stock disbursed to the investors of an investment.

Co/Direct Investment: A direct investment is a purchased interest of an operating company. A co-investment is a direct investment made alongside a partnership.

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.

Cost Basis: Capital contributions less return of principal.

Fund-of-Funds: An investment vehicle which invests in other private equity partnerships.

Fund/Investment Size: The total amount of capital committed by investors to a fund.

Investment Category: Used to identify investments in one of the following categories: co/direct investments, fund-of-funds, primary funds, secondary fund-of-funds or secondary purchases.

Investment Strategy: A sub-classification of a partnership's investment type, such as Co/Direct Investment, Corporate Finance/Buyout, Mezzanine, Real Estate, Special Situation, Venture Capital.

Life Cycle Period: The current stage of a partnership depending on the percentage contributed to date. Life cycle periods are investment and realization.

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.

Net Internal Rate Of Return ("IRR"): The discount rate that equates the net present value of the partnership's cash outflows with its inflows and residual value at the time of calculation. The calculation is net of management fees and the general partner's carried interest.

Originator: The institution responsible for recommending a client commit to an investment.

Ownership Percentage: The investor's percent of ownership as measured by capital committed divided by fund/investment size.

Paid-In Capital: The amount of capital an investor has contributed to a partnership, which includes capital contributions and additional fees.

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Pooled Average IRR: An IRR calculation which aggregates cash flows (paid-in capital and capital distributed) and the reported market values of each investment within a portfolio to create one portfolio investment and return.

Portfolio Holding Exposure: The limited partner's pro rata allocation to an underlying investment based on the ownership percentage of the partnership.

Primary Fund: Defines when the investor acquired an interest in the partnership. Primary fund is the investment category when an investor participates in a closing at the inception of the partnership.

Private Equity Partnership: A professionally managed pool of capital that generally invests in unlisted companies or securities. Common investment strategies include corporate finance/buyout, mezzanine, special situations and venture capital.

Realized Multiple: Ratio of cumulative distributions to paid-in capital.

Return On Investment ("ROI"): A calculation based on the total value (market value plus distributions) divided by paid-in capital for an investment.

Reported Market Value: The investment's capital account balance at quarter end, which includes the general partner's reported value of the underlying holdings and other assets and liabilities.

Secondary Fund-of-Funds: A private equity vehicle formed to purchase active partnership interests from an investor.

Secondary Purchase: A purchase of an existing partnership interest or pool of partnership interests from an investor.

Special Situation: Partnerships that invest using a unique strategy. Examples include distressed and turnaround, industry focused and multi-stage partnerships.

Total Exposure: Calculated by the summation of market value and unfunded commitments.

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.

Vintage Year: The year in which a partnership makes its first capital call for an investment into a portfolio company/holding.

Appendix B:

Disclosure Statements

NYC Board of Education Retirement System

First Quarter 2013 Report

Non-public information contained in this report is confidential and intended solely for dissemination to NYC Board of Education Retirement System and/or its Affiliates. Hamilton Lane has prepared this report to enable NYC Board of Education Retirement System and/or its Affiliates to assess the performance and status of its alternative investment portfolio. Hamilton Lane hereby disclaims any liability resulting from any unauthorized dissemination of the attached information.

The information contained in this report may include forward-looking statements regarding the funds presented or their portfolio companies. Forward-looking statements include a number of risks, uncertainties and other factors beyond the control of the funds or the portfolio companies, which may result in material differences in actual results, performance or other expectations. The information presented is not a complete analysis of every material fact concerning each fund or each company. The opinions, estimates and analyses reflect our current judgment, which may change in the future.

All opinions, estimates and forecasts of future performance or other events contained herein are based on information available to Hamilton Lane as of the date of this presentation and are subject to change. Past performance of the investments described herein is not indicative of future results. Certain of the information included in this presentation has not been reviewed or audited by independent public accountants. Certain information included herein has been obtained from sources that Hamilton Lane believes to be reliable but the accuracy of such information cannot be guaranteed.

The past performance information contained in this report is not necessarily indicative of future results and there is no assurance that the funds will achieve comparable results or that they will be able to implement their investment strategy or achieve their investment objectives. The actual realized value of currently unrealized investments will depend on a variety of factors, including future operating results, the value of the assets and market conditions at the time of disposition, any related transaction costs and the timing and manner of sale, all of which may differ from the assumptions and circumstances on which the current unrealized valuations are based.

Any tables, graphs or charts relating to past performance included in this report are intended only to illustrate the performance of the funds or the portfolio companies referred to for the historical periods shown. Such tables, graphs and charts are not intended to predict future performance and should not be used as the basis for an investment decision.

Real Estate Quarterly Report

The New York City Board of Education Retirement System

Executive Summary: First Quarter 2013 Performance Measurement Report Real Estate

Portfolio Profile

The New York City Board of Education Retirement System has allocated 7.0% (+/- 2%) of the total plan to Real Assets. Real Estate investments are categorized under Real Assets. The Real Estate Portfolio's objective is to generate a total net return that exceeds the NFI-ODCE +100 bps total net return measured over full market cycles.

Portfolio Statistics (March 31, 2013)

Total Plan Assets	\$3.4 billion
Target Real Assets Allocation (%)	7%
Target Real Assets Allocation (\$)	\$241.1 million
Total Real Estate Market Value	\$76.2 million
Real Estate Unfunded Commitments	\$41.4 million
Total Real Estate Exposure	\$1.3 billion
Number of Investments	4
Number of Managers	4

Net Returns (as of March 31, 2013)

1Q13 Time-Weighted Net Return:	2.1%
1 Year Time Weighted Net Return:	7.8%
3 Year Time Weighted Net Return:	n/a
Inception-to-Date (ITD) Time-Weighted:	10.2%
ITD Net IRR:	9.5%
ITD Net Equity Multiple:	1.2x

Investment Guidelines

Style Sector:	Target •40-60% Core/Core Plus •40-60% Non-Core
Benchmark	NFI-ODCE Index +100 bps net over full market cycles
Region Diversification	Maximum 25% Int'l
Investment Diversification	Limit 15% to a single investment
Manager Diversification	Limit 15% to a single manager
Leverage	65%

First Quarter Investment Activity

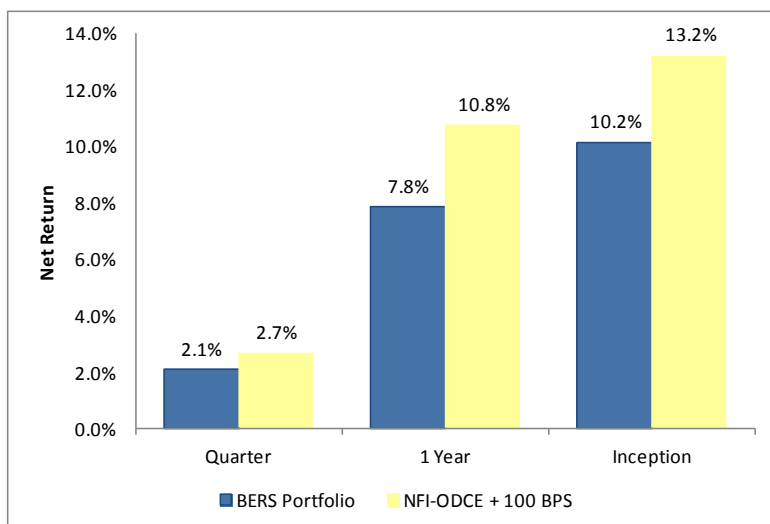
During the Quarter, the Board made commitments of \$19 million with two Managers for Superstorm Sandy related investments.

OVERVIEW

During the First Quarter of 2013 the global real estate market experienced over \$100 billion in transaction volume for the first time in five years. Property markets continued to recover. Demand continued to grow and improve while supply remained constrained. Recovery is submarket specific, with primary cities and major markets prevailing.

Domestic investors continued to target core properties in prime gateway markets, however, pricing and limited supply has resulted in the focus shifting to high quality assets just outside of the prime gateway markets. Similarly in Europe, competition for high quality core assets in the primary markets continued. Higher pricing has caused some investors to target secondary markets to obtain higher yields. Cross-border investment flows remained slow throughout Europe as investors remained cautious. Importantly, we have observed greater optimism in the European banking community which should, over time, lead to improved lending conditions and greater liquidity. At \$27 billion in First Quarter, transaction volume in Asia rose some 26% when compared to the same period a year earlier. Investors in the major Asian markets of China, Japan and South Korea have continued to seek out investments in logistics. The region, and specifically these market driving nations, continue to suffer from inadequate and aging logistics stock. The Market Update section of this report provides additional information on global real estate conditions.

The New York City Board of Education Retirement System ("NYCBERS") Real Estate Portfolio is well positioned to take advantage of conditions in the real estate marketplace. NYCBERS has been active on the international front through investment in global allocator funds whose opportunistic strategies are designed to exploit the recovery in the European and Asian markets. At the end of the First Quarter 2013, the Portfolio achieved a total gross return of 2.4% which was comprised of 1.2% income and 1.2% appreciation. The net return for the Quarter was 2.1%. A detailed analysis of the Portfolios real estate performance is found later in this Executive Summary.



The New York City Board of Education Retirement System

Executive Summary: First Quarter 2013 Performance Measurement Report Real Estate

FUNDING AND COMPOSITION

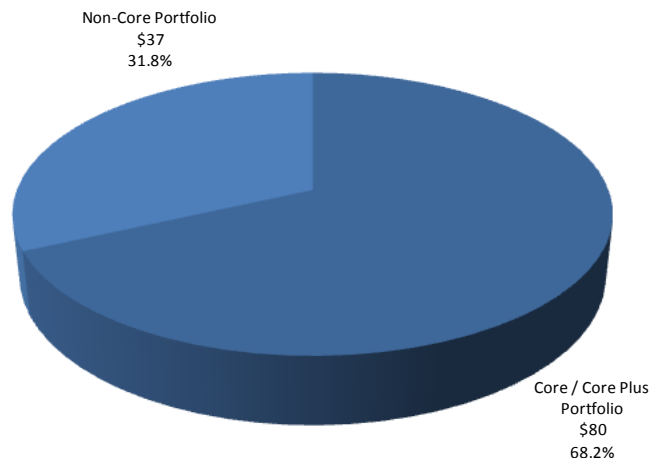
At the end of the First Quarter, the Portfolio was funded at \$76.2 million, or 2.2% of total plan assets. A total of \$41.4 million in unfunded commitments are still outstanding. Unfunded commitments are down from just over \$44.8 million as of Fourth Quarter 2012. However, new commitment activity has accelerated over the past several months and the trend will continue into the second half of 2013.

New contributions for the Quarter totaled \$3.1 million, offset by \$0.7 million in distributions and withdrawals. Distributions were weighted to the core/core plus sector.

Shown in the pie chart to the right is the current risk sector exposure calculated by Market Value + Unfunded Commitments. The Core/ Core Plus component accounts for 68.2% of the Portfolio exposure during the Quarter. The Non-Core component accounts for 31.8% of the Portfolio exposure.

A more detailed break-down of the Portfolio Composition is shown in the table below. Attached as Exhibit A is a matrix which demonstrates compliance with various Investment Policy Statement guidelines.

Real Estate Exposure



New York City Board of Education Retirement System		
Total Plan Assets	3/31/2013	\$3,444
Real Estate Allocation (%)		7.0%
Real Estate Allocation (\$)		\$241
Style Sector Allocation		
Core / Core Plus Portfolio	40.0%	\$96
Non-Core Portfolio	55.0%	\$145
Uncommitted Core / Core Plus Portfolio		\$16
Uncommitted Non-Core Portfolio		\$107
Funded (Market Value) and Committed Statistics		
Core / Core Plus Portfolio		68.2%
Non-Core Portfolio		31.8%
\$ Committed		\$118
% Committed on Real Estate Allocation		48.8%
% Committed on Total Plan Assets		3.4%
Funded (Market Value) Statistics		
% Funded (Market Value) of Total Plan Assets		2.2%
% Funded (Market Value) of Total Real Estate Allocation		31.6%

The New York City Board of Education Retirement System

Executive Summary: First Quarter 2013 Performance Measurement Report Real Estate

PERFORMANCE

During the Quarter under review, the NYCBERS Real Estate Portfolio produced a 2.4% total gross return. The total net return for the Quarter was 2.1%. On a rolling one-year basis the total gross return of 9.1% was recorded. On a net basis the total return was 7.8%. The benchmark return contemplates a 100 bps premium over the ODCE net return over full market cycles. This benchmark is not meaningful at this point in time as the NYCBERS Portfolio is in its infancy. The various components of the Portfolio returns are depicted in the chart below.

Core/Core Plus

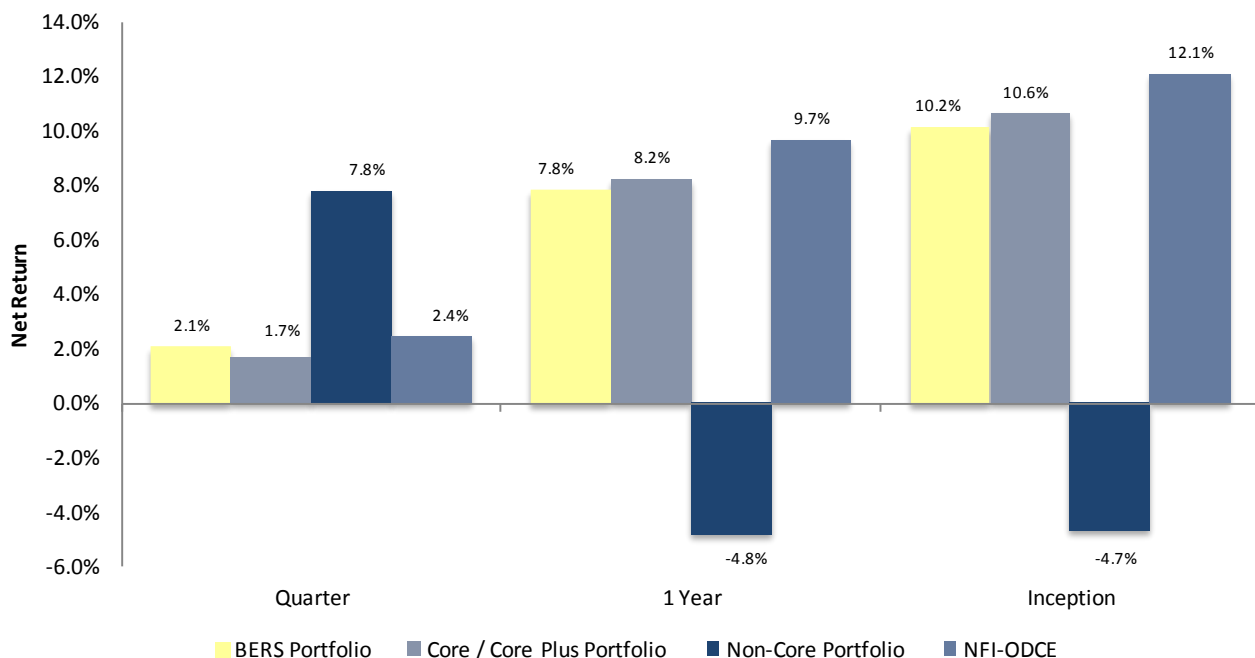
As of March 31, 2013 the market value of the Core/ Core Plus Portfolio was \$70.4 million, or 92.4% on an invested basis. On a funded and committed basis, the Core/ Core Plus Portfolio totaled \$80.2 million, or 68.2% of the total Portfolio. The Core/ Core plus Portfolio generated a 1.9% total gross return for the Quarter comprised of 1.3% in income and 0.6% in appreciation. The total net return for the Quarter was 1.7%.

The Core/Core Plus Portfolio achieved a 7.8% net return over the one-year period ending March 31, 2013 and has achieved a 10.6% net return since the inception of the Core/ Core Plus Portfolio in 2011.

Non-Core

As of March 31, 2013 the market value of the Non- Core Portfolio was \$5.8 million, or 7.6% on an invested basis. On a funded and committed basis, the Non-Core Portfolio totaled \$38 million, or 31.8% of the total Portfolio. The Non-Core Portfolio generated a 9.3% total gross return for the Quarter comprised of 0.2% in income and 9.0% in appreciation. The total net return for the Quarter was 7.8%.

The Non-Core Portfolio generated a one-year net return of (4.8)% and has achieved a (4.7)% since the inception of the Non-Core Portfolio in late 2011.



The New York City Board of Education Retirement System

Executive Summary: First Quarter 2013 Performance Measurement Report Real Estate

PERFORMANCE

Portfolio Performance

At the end of the First Quarter 2013, the Portfolio had a cumulative market value of \$76.2 million. Total market value plus unfunded commitments was \$117.6 million, or 48.8% of the real estate allocation. During the Quarter, the Portfolio achieved a total gross return of 2.4% which was comprised of 1.2% income and 1.2% appreciation. The Portfolio achieved a total net return of 2.1%. Since inception, the Portfolio has a net IRR of 9.5% and an equity multiple of 1.2x as of March 31, 2013. Note, attached as Exhibit B are performance metrics relating to each investment within the Portfolio.

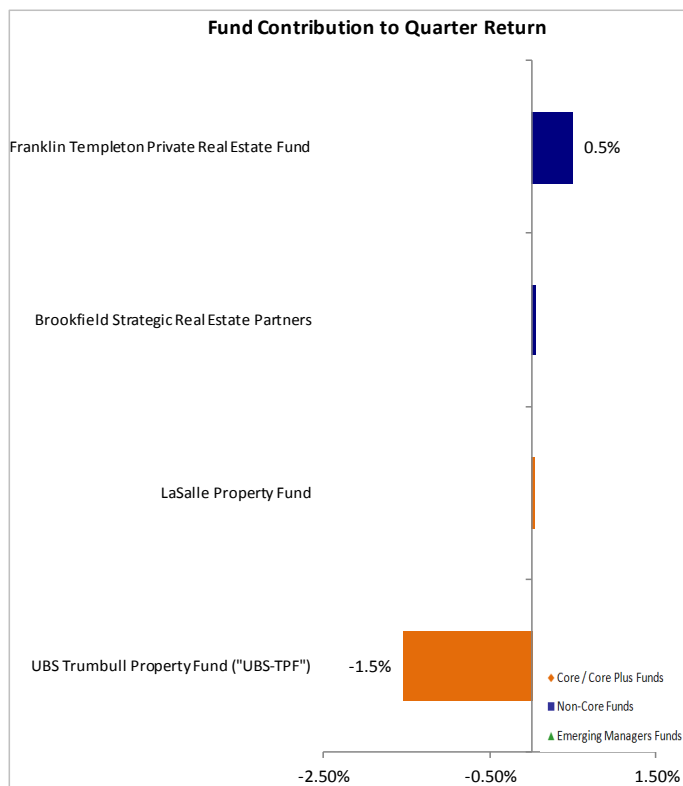
The Quarterly return was driven by Franklin Templeton Private Real Estate Fund which contributed 0.5% to the overall performance. The primary laggard in the Portfolio was UBS Trumbull Property Fund, which detracted (1.5%). Brief reviews of the Funds in the Portfolio are found below. Note, that attached as Exhibit C is a chart relating to fund contributions to returns over the one-year period.

LaSalle Property Fund (LaSalle). The Fund produced a 2.4% total gross return, comprised of 1.5% in income and 1.0% in appreciation. The net return after fees was 2.3%. The Fund closed on two new investments during the Quarter with an aggregate value of \$130.4 million. These properties include a \$103 million multifamily property in San Francisco, California and an industrial portfolio located in the Dallas Fort Worth Texas market. The Fund's core commercial portfolio and core multifamily portfolio were 96.0% and 92.0% leased, respectively. Including value-add properties, the Fund was 93.0% leased on a value-weighted basis.

UBS Trumbull Property Fund (formerly UBS RESA). During the Quarter, the Fund posted a gross return of 1.7%, comprised of 1.2% in income and 0.4% in appreciation. The net return after fees was 1.4%. The Fund experienced a net unrealized and realized gain of \$55.1 million during the Quarter. The office and retail property types provided the majority of the Fund's appreciation gain during the Quarter. The Fund completed eight acquisitions during the Quarter. The acquisitions included three retail investments, two apartment properties, one office building and two investments added to a prior industrial joint venture. In addition, the Fund disposed of a 310,000 square foot retail center in San Diego, California for a gross sales price of \$46.6 million.

Brookfield Strategic Real Estate Partners (BSREP). BSREP produced a total gross return of 5.4% comprised of 0.6% in income and 4.8% in appreciation. The net return after fees was 3.5%. To-date, the Fund has committed approximately 26% of its targeted equity, or \$913 million net of financing, to six closed investments with asset value of roughly \$2.6 billion. In April 2013, approximately \$276 million of the funds equity was used to acquire a UK-based industrial operating company. During the First Quarter, the Fund acquired an additional \$116 million of investments, including an office campus in Los Angeles and a portfolio of multifamily apartment buildings.

Franklin Templeton Private Real Estate Fund (FTPREF). The Fund's total return for the Quarter was 10.5% comprised of 0.1% in income and 10.4% in appreciation. The net return after fees was 9.1%. Through March 31, 2013, the Fund has closed nine investments. Income distributions have occurred from one of the investments in the Fund. Furthermore, stabilized assets will begin to be marketed for sale over the coming quarters.

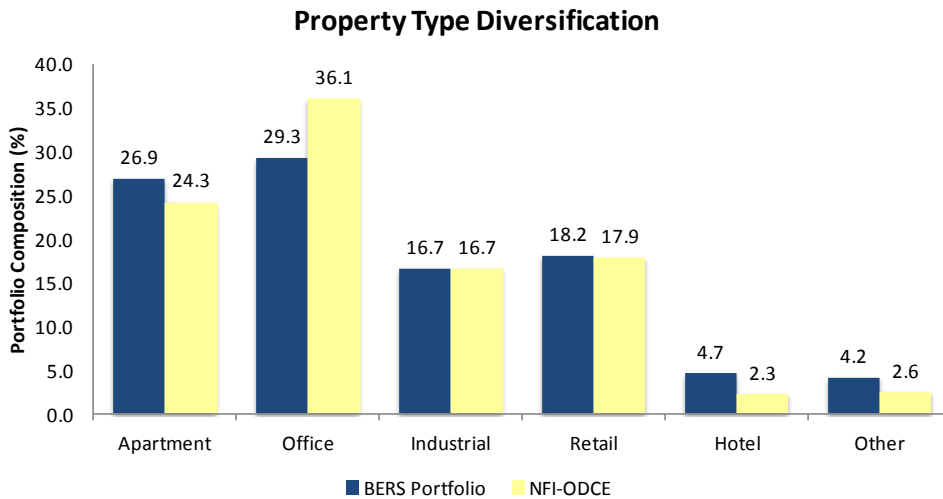


The New York City Board of Education Retirement System

Executive Summary: First Quarter 2013 Performance Measurement Report Real Estate

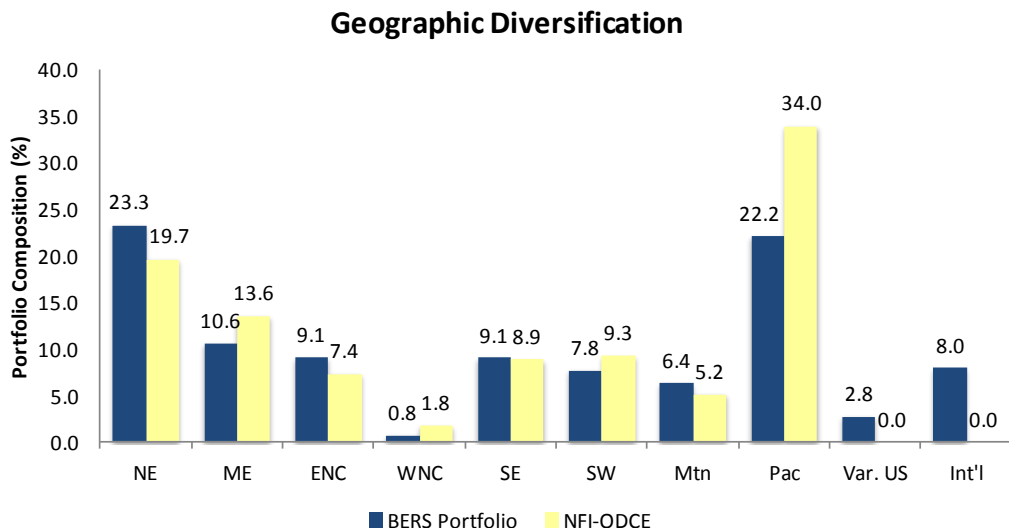
PROPERTY TYPE DIVERSIFICATION

The diversification of the current Portfolio by property type is shown below and compared to the diversification of the NCREIF-ODCE at the end of the Quarter. The Portfolio is in line with all property sectors relative to the ODCE, with a slight underweight to Office and a slight overweight to Apartment, Hotel and Other.



GEOGRAPHIC DIVERSIFICATION

The diversification of the current funded Portfolio by geographic region is shown below and compared to the diversification of the NFI-ODCE at the end of the Quarter. The ODCE is a US-only index. The domestic portion of the Portfolio is well diversified relative to the ODCE with a slight overweight to the Northeast and East North Central and a slight underweight to the Mideast, Southwest and Pacific. The 8% international exposure is appropriate for the risk and return profile of NYCBERS and consistent with our long-term target. Non-US exposures are diversified across Developed Asia (3.5%), Developed Europe (2.8%), Emerging Asia (1.1%) and other international markets.



The New York City Board of Education Retirement System

Executive Summary: First Quarter 2013 Performance Measurement Report Real Estate

MARKET UPDATE

General Market Overview

The commercial real estate market continues to show positive signs with the First Quarter 2013 experiencing over \$100 billion in transaction volume for the first time in five years, up 20% from First Quarter 2012. Declining unemployment rates will translate directly into income growth and improved occupancy across all sectors. Property markets are recovering as demand continues to improve and overall supply remains constrained, however, recovery is submarket specific with gateway and primary cities prevailing.

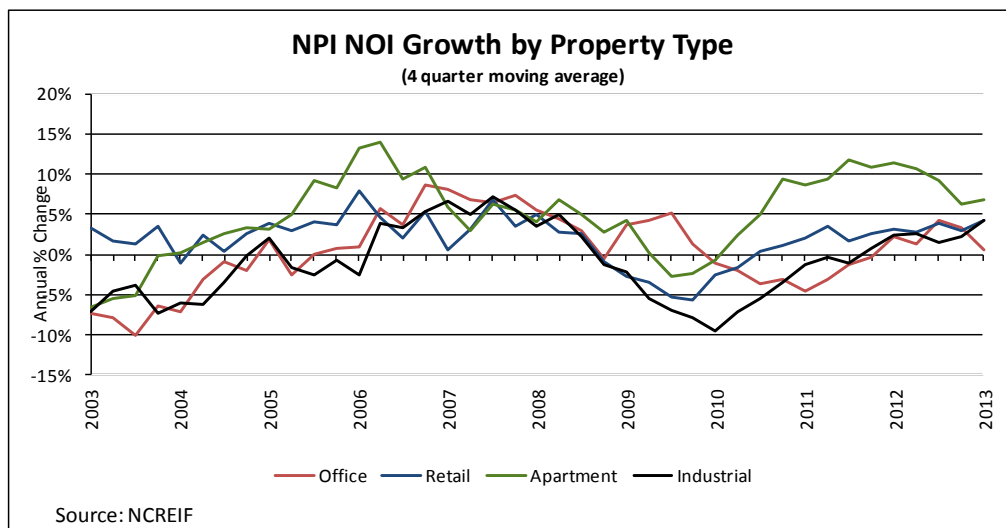
Direct Commercial Real Estate Volumes, 1Q12 - 1Q13

\$ US Billions	4Q12	1Q13	% Change 4Q12 - 1Q13	1Q12	% Change 1Q12 - 1Q13	2011	2012	% Change 2011 - 2012
Americas	64	38	-40%	35	9%	171	190	11%
EMEA	61	40	-34%	31	28%	166	160	-3%
Asia Pacific	27	27	0%	21	26%	99	99	0%
Total	152	105	-31%	87	20%	436	449	3%

Source: Jones Lang LaSalle

While yields have compressed for core real estate in prime markets, spreads to local government bonds remain at historic highs, providing strong relative performance. Lenders are beginning to return to the market and are providing attractive financing which will result in greater transaction volume and stronger investor demand. Leasing fundamentals have generally been strengthening as shown by increasing/stabilizing NOI growth in the chart below. Recovery in gateway markets and primary cities have been particularly strong as major CRE sectors have reported occupancy gains for two consecutive years.

Moving through 2013 and into 2014 the market will see tighter conditions of Grade A space. With new supply of high-quality space limited, the market will become more intense and tenants will find it difficult to gain leverage. Furthermore, demand for industrial and apartment properties is up, exceeding pre-recession levels.



The New York City Board of Education Retirement System

Executive Summary: First Quarter 2013 Performance Measurement Report Real Estate

MARKET UPDATE cont.

The United States

The U.S. real estate market experienced \$38 billion in transaction volume during the Quarter, up 9% from First Quarter 2012. During the Global Financial Crisis ("GFC"), real estate values declined 31% and 44% for the de-levered NCREIF Property Index ("NPI") and the levered NCREIF Open End Diversified Core Equity Index ("NFI-ODCE"), respectively. Since the market trough in 2010, both indices have recovered 22% and 30%, respectively. Increasing economic activity and improving employment conditions are stimulating tenant demand. Although demand for space is increasing, it is modest enough to keep a cap on new construction, thus driving down vacancy rates in existing properties. Vacancy rates continue to strengthen for the second straight year, translating into strong NOI growth. Additionally, real estate cap rate spreads are well above their long-term average relative to 10-year Treasuries. This healthy spread offers investors a cushion against bond yield increases in the near term. Furthermore, strong capital flows into real estate and improving NOI growth are expected to help offset the impact of higher Treasury rates.

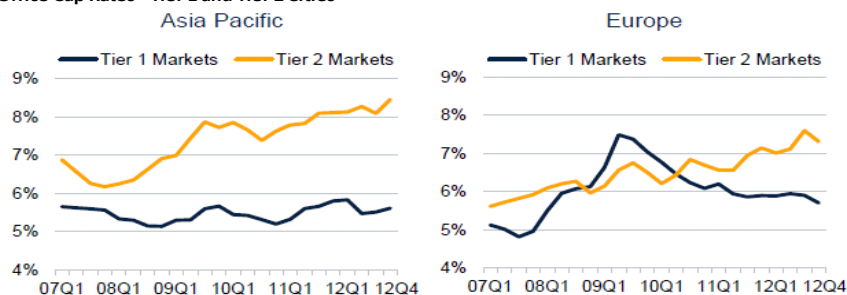
Investors continue to target core properties in prime gateway markets, however, pricing and limited supply have resulted in the focus shifting to high quality assets just outside of the prime gateway markets. Still, core real estate remains attractively priced relative to fixed-income alternatives. The spread to Treasuries and corporate bonds remains above their long-term averages, currently at 400 bps and 130 bps, respectively. Given the magnitude of the spreads we can gather that the Fed is not likely to act on interest rates soon and that real estate should maintain broad momentum moving through the coming periods. Even though primary markets remain the focal point, property values are starting to increase in secondary markets as financing availability improves and investors attempt to capture yield.

Europe

The European commercial real estate market has shown hopeful signs thus far in 2013. Optimism among Europe's banks is improving, leading to liquidity in the financial markets and increasing the number of active lenders. However, international investors continue to be cautious and cross-border investment flow remains low.

The European core asset environment remains extremely competitive. Still, an increasing number of non-core opportunities exist, especially in secondary locations. Given the low returns on prime assets, investors are assessing the need to move into secondary assets and regional markets. These markets generally offer higher income returns and elevated yields imply scope for capital growth via yield compression. As economic growth stabilizes, investor demand will continue to move beyond CBD and core markets in search of more attractive yields. As investor interest in these markets grows, downward pressure will be put on yields outside of major CBD markets. Furthermore, vacancy rates are expected to continue rising in many markets, however, investor demand remains strong in the United Kingdom, Germany and Sweden, as these markets are likely to recover before others in Europe. Property values in the periphery remain depressed and could decline further as debt capital remains difficult to attain for risky assets.

Office Cap Rates - Tier 1 and Tier 2 Cities



Sources: Real Capital Analytics and Deutsche Asset & Wealth Management.
As of April 2013.

Asia

The Asian real estate market experienced \$27 billion in transaction volume during the Quarter, up 26% from First Quarter 2012. Transaction volume during the second half of 2013 is likely to curtail as investors become more concerned that rising interest rates will lead to higher property yields, resulting in reduced property values.

Logistics remains a focus with a shortage of quality supply in China, Japan, and South Korea. Although new stock began to be built in the 2000's, it only represents a small share of the overall stock. Additionally, the Chinese government continues to stress domestic consumption which favors retail and logistics sectors. Among other factors, the recovery in the region is less rapid than it has been in previous market cycles and the two major economies of the region, China and Japan, are undergoing structural changes that may affect the market. Given the current market environment we should expect to see a reduction in corporate investment and hiring, as well as slower leasing volumes.

The New York City Board of Education Retirement System

Executive Summary: First Quarter 2013 Performance Measurement Report
Real Estate

EXHIBIT A: COMPLIANCE MATRIX

Category	Requirement	Portfolio Status
Benchmark	NFI-ODCE (net) +100 bps over full market cycles	N/A
Portfolio Composition	Core/Core Plus (minimum of 40%)	The portfolio is funded (market value) and committed at 48.8% of real asset allocation with a portfolio composition of 68.2% core and 31.8% non-core.
	Non Core (minimum of 60%)	
Real Asset Allocation	Target of 7.0%	Funded (market value) and committed dollars place the portfolio at 3.4% of total plan assets.
	Currently Funded at 2.2%	
Property Type Diversification	Up to 40% Multifamily Up to 35% Industrial Up to 45% Office Up to 35% Retail Up to 25% Hotel Up to 20% Other	All property type locations are in compliance.
Geographic Diversification	Diversified geographically Max 25% Ex-US	All geographic type locations are in compliance
LTV	65%	Portfolio is in early stages of funding, but is in compliance (21.7 %).
Manager Exposure	15% of real estate allocation	Manager exposure is within compliance ranges.

The New York City Board of Education Retirement System

Executive Summary: First Quarter 2013 Performance Measurement Report Real Estate

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EXHIBIT B: FOIL

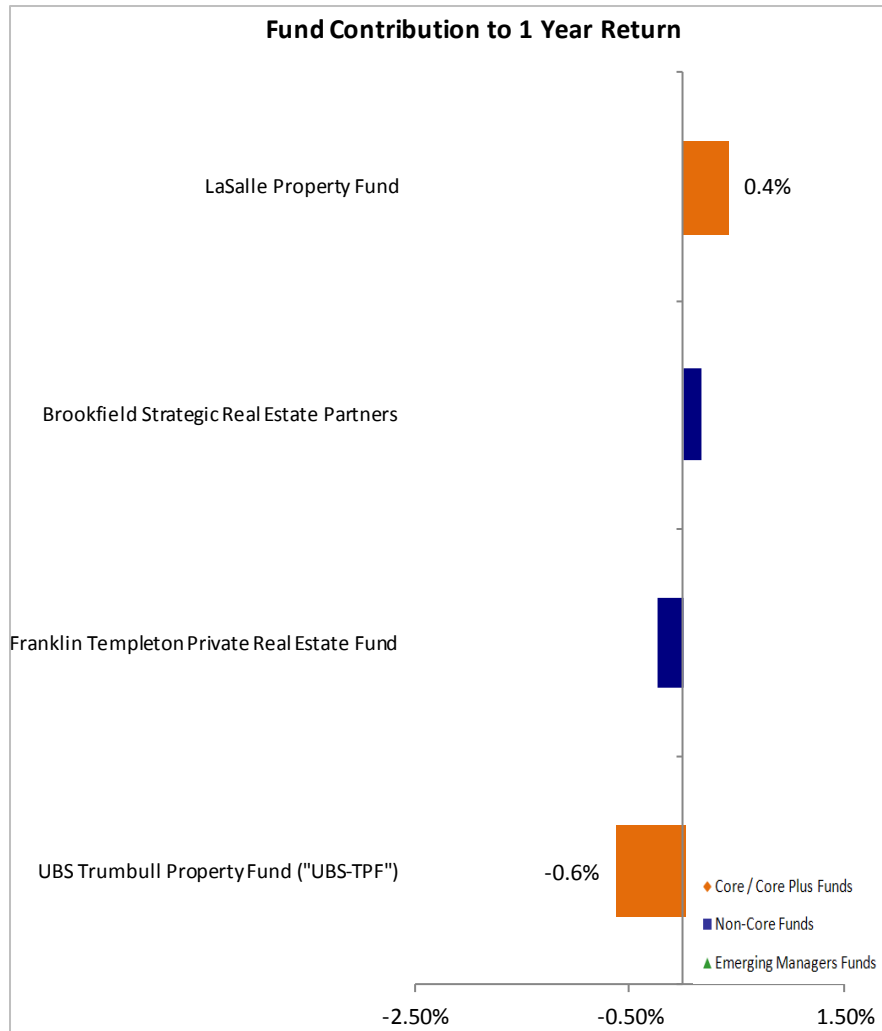
The Townsend Group®

New York City Board of Education Retirement System

Vintage Year	Fund Name	First Draw Down	Capital Committed	Contributions	Distributions	Market Value	Equity Multiple	Net IRR
2011	LaSalle Property Fund	12/13/2010	\$27,600,000	\$17,781,762	(\$922,441)	\$19,634,375	1.2	12.4%
2011	UBS Trumbull Property Fund ("UBS-TPF")	4/1/2011	\$41,400,000	\$45,531,008	(\$3,257,888)	\$50,736,155	1.2	9.6%
	Core/Core Plus Portfolio		\$69,000,000	\$63,312,770	(\$4,180,330)	\$70,370,530	1.2	10.2%
2011	Franklin Templeton Private Real Estate Fund	4/4/2011	\$30,000,000	\$6,550,006	(\$1,773,173)	\$4,502,485	1.0	-4.7%
2012	Brookfield Strategic Real Estate Partners	9/20/2012	\$10,000,000	\$1,214,300	\$0	\$1,318,027	1.1	17.0%
	Non-Core Portfolio		\$40,000,000	\$7,764,306	(\$1,773,173)	\$5,820,512	1.0	-2.6%
	New York City Board of Education Retirement System		\$109,000,000	\$71,077,075	(\$5,953,503)	\$76,191,041	1.2	9.5%

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.

EXHIBIT C : ATTRIBUTION



II. July Monthly Performance Review:

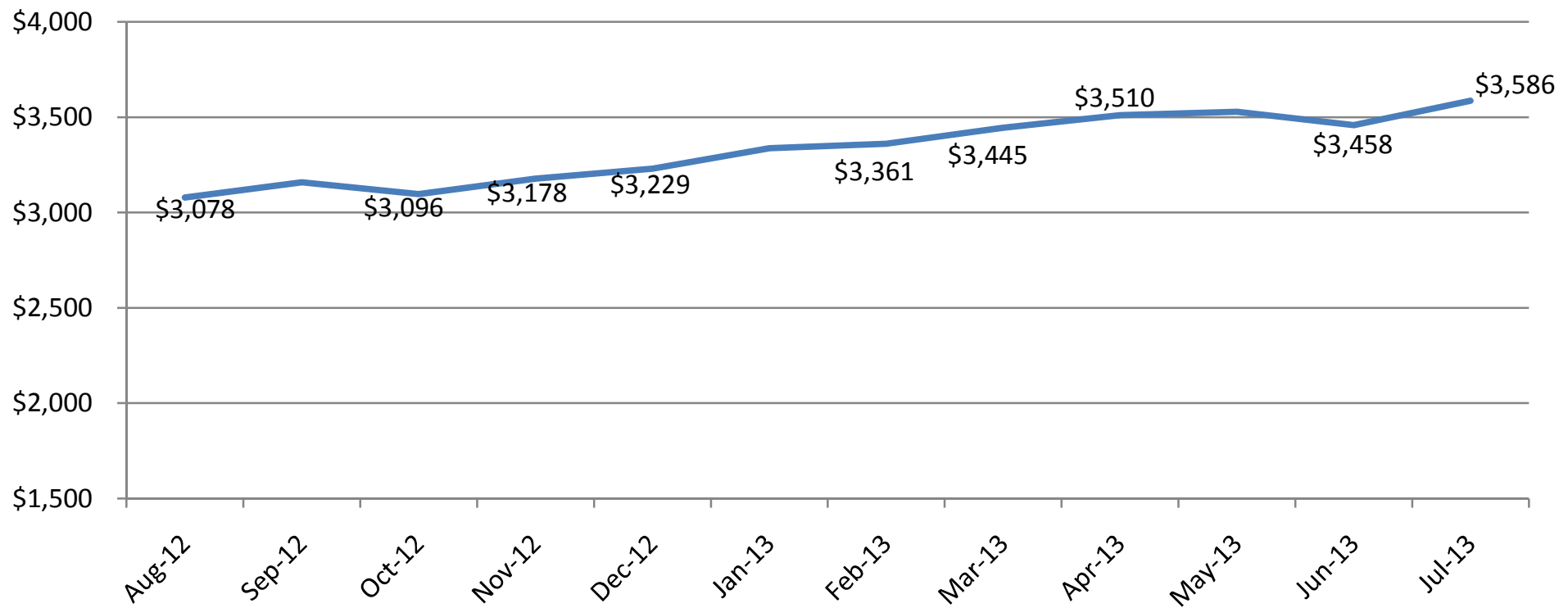
Monthly Performance Review *July 2013*

Prepared for the New York City
Board of Education Retirement System
9/27/2013

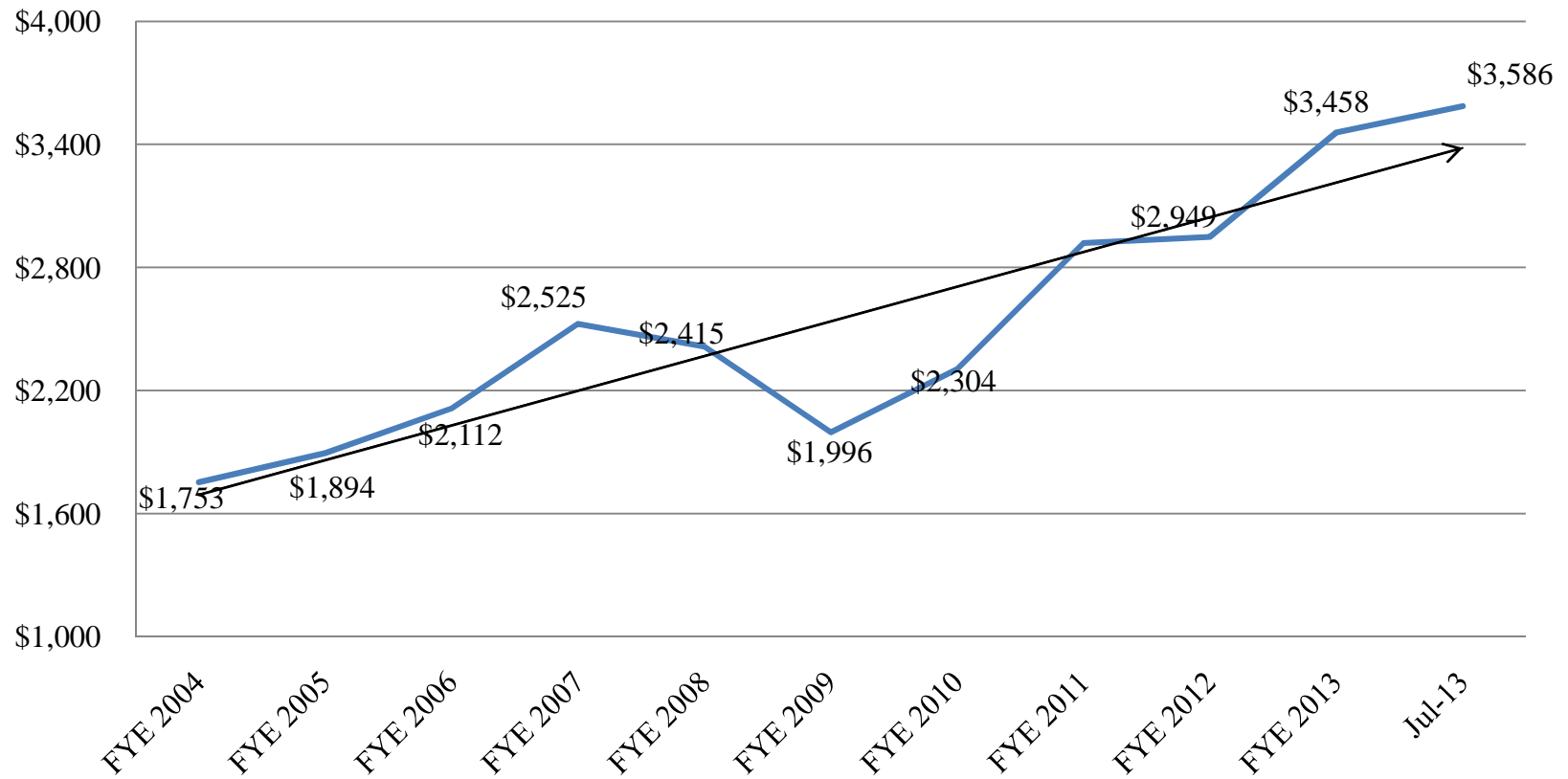
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BERS Market Values August 2012 - July 2013



BERS Market Values 2004 - 2013

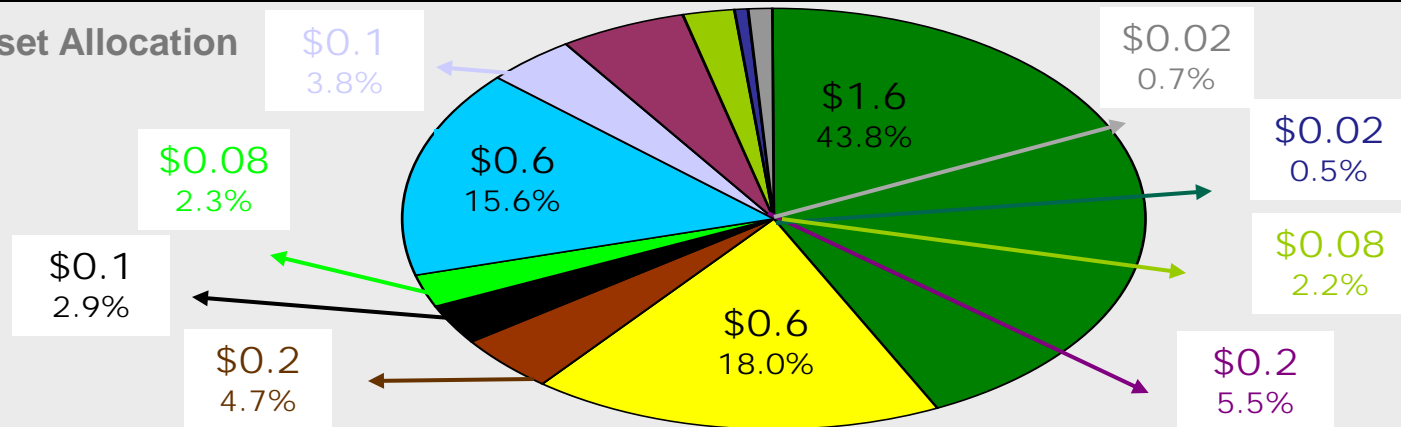


The 10 Year Return for BERS as of July 31, 2013 is 8.06%.

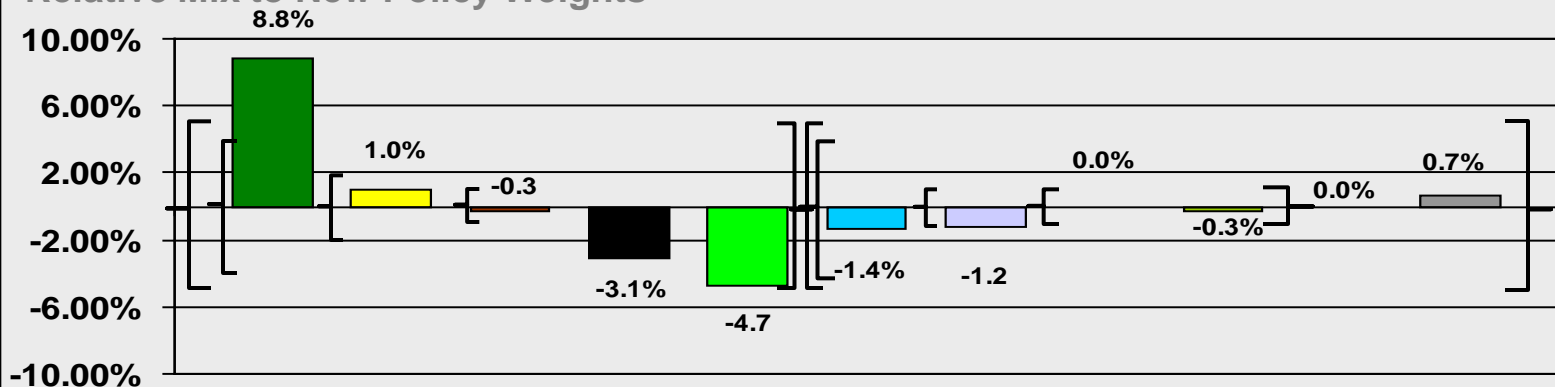
Portfolio Asset Allocation: July 31, 2013

\$3.6B Under Management

Asset Allocation



Relative Mix to New Policy Weights



Note: Brackets represent rebalancing ranges versus Policy.

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM

CLASSIFICATION OF INVESTMENTS

(as of July 31st, 2013)

ASSET CLASS ALLOCATIONS

	In \$MM	Actual	Policy Target	Adjustment	Adjusted Policy	Adjusted Target Range ***
TOTAL EQUITIES	\$2,573.0	71.7%	70.0%	NA	70.0%	65.0% - 75.0%
TOTAL FIXED INCOME	\$1,013.3	28.3%	30.0%	NA	30.0%	25.0% - 35.0%
TOTAL ASSETS	\$3,586.3	100.0%	100.0%	NA	100.0%	

	In \$MM	Actual	Policy Target	Adjustment	Adjusted Policy	Adjusted Target Range ***
US Equities	\$1,570.1	43.8%	35.0%	7.7%	42.7%	38.7% - 46.7%
Non-US Equities/EAFE	\$646.8	18.0%	17.0%	NA	17.0%	15.0% - 19.0%
Emerging Markets	\$167.7	4.7%	5.0%	NA	5.0%	4.0% - 6.0%
TOTAL PUBLIC EQUITY	\$2,384.6	66.5%	57.0%	NA	64.7%	
* PRIVATE REAL ESTATE	\$82.9	2.3%	7.0%	NA	2.3%	6.0% - 8.0%
* PRIVATE EQUITY	\$105.5	2.9%	6.0%	NA	2.9%	5.0% - 7.0%
TOTAL EQUITIES	\$2,573.0	71.7%	70.0%	NA	70.0%	65.0% - 75.0%

	In \$MM	Actual	Policy Target	Adjustment	Adjusted Policy	Adjusted Target Range ***
Core +5	US - Government	\$87.0	2.4%	NA	17.0%	13.0% - 21.0%
	US - Mortgage	\$237.6	6.6%	NA		
	US - Investment Grade Credit	\$236.2	6.6%	NA		
	TOTAL CORE + 5	\$560.7	15.6%	NA	17.0%	13.0% - 21.0%
	High Yield	\$197.0	5.5%	NA	5.5%	7.0% - 9.0%
	Bank Loans	\$79.3	2.2%	NA	2.5%	
	Total High Yield & Bank Loans	\$276.3	7.7%	NA	8.0%	7.0% - 9.0%
	TIPS	\$136.3	3.8%	NA	5.0%	4.0% - 6.0%
	** ETI	\$15.8	0.4%	** 2.0%	** 0.4%	** 0.4%
	Cash	\$24.1	0.7%	NA	0.0%	0.0% - 5.0%
	TOTAL PUBLIC FIXED INCOME	\$1,013.3	28.3%	NA	30.0%	
	TOTAL FIXED INCOME	\$1,013.3	28.3%	NA	30.0%	25.0% - 35.0%

* 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: +/-5%; Total Fixed Income: +/-5%; US Equities: +/-4%; Non-US Equities/EAFE: +/-2%; Emerging Markets: +/-1%; Real Estate: +/-1%; Private Equity: +/-1%; Core +5: +/-4%; TIPS: +/-1%; High Yield & Bank Loans: +/-1%; Cash: 0-5%.

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM

CLASSIFICATION OF INVESTMENTS

(as of July 31st, 2013)

Adjustments to Long-Term Asset Allocation

1) Private Equity

100% of uninvested commitments will be invested in Domestic Equity.

2) Real Estate

100% of uninvested commitments will be invested in Domestic Equity.

Impact of Adjustments

1) Domestic Equity Policy Target %

35.0%

Adjustment: 100% of uninvested Private Equity

3.1%

Adjustment: 100% of uninvested Real Estate

4.7%

Adjusted Domestic Equity Policy Target %

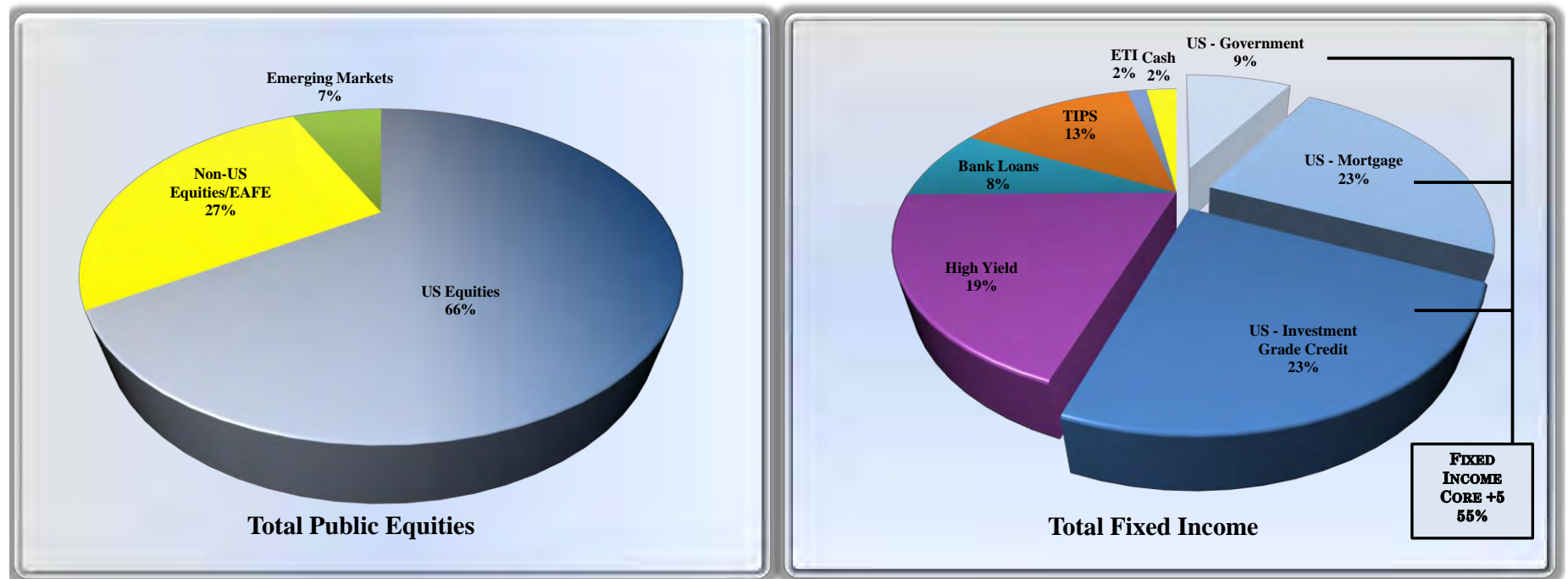
42.7%

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM

CLASSIFICATION OF INVESTMENTS

(as of July 31st, 2013)

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Note: Totals may not equal 100% due to rounding

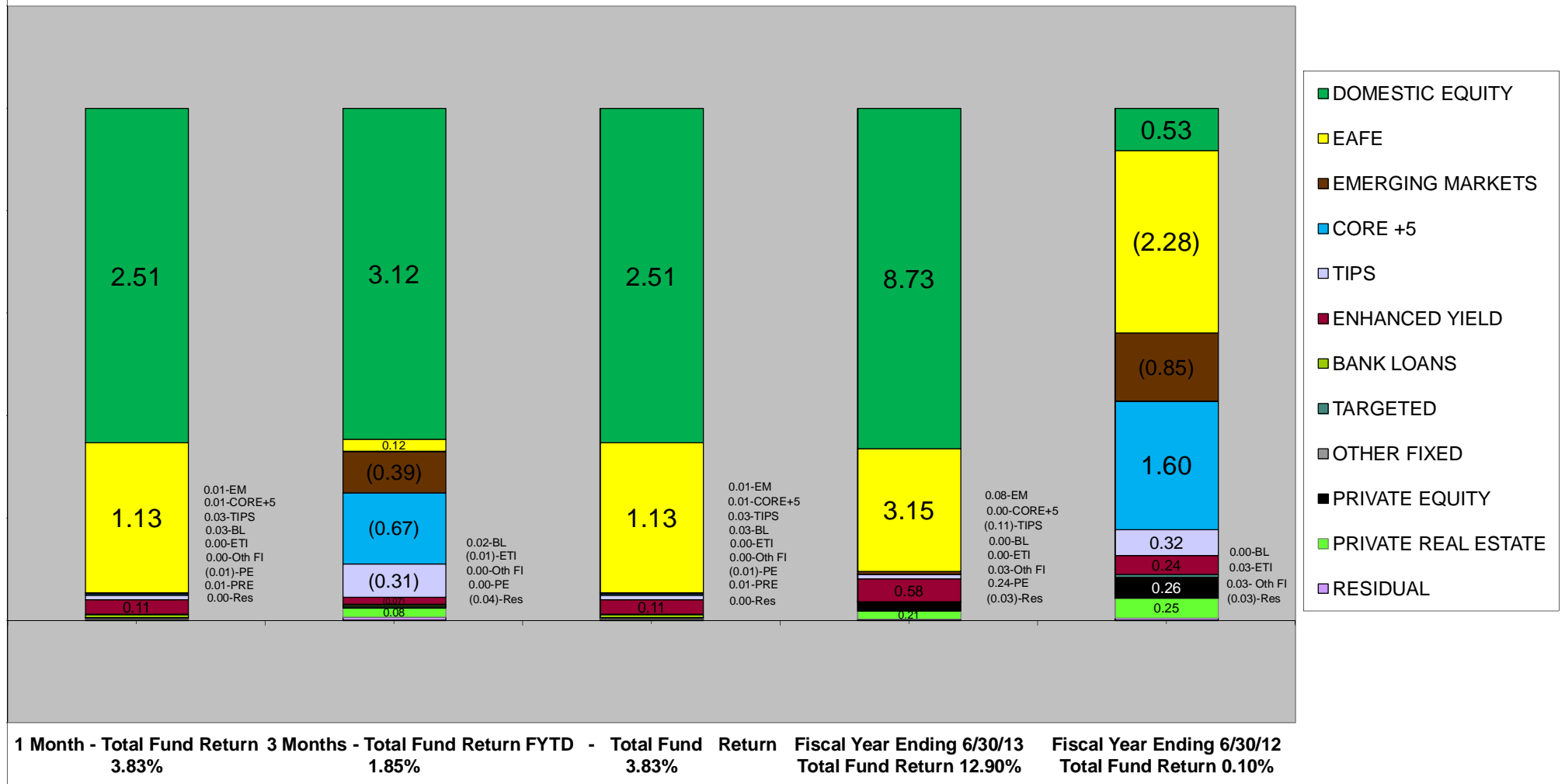
THE BANK OF NEW YORK MELLON
CITY OF NEW YORK
Market Indicator Page *NYC Board of Education Retirement System
July 31, 2013

	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	****
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	7.98	8.45	9.75	8.85	7.71
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

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	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
<u>MARKET INDICATORS</u>								
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	****
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	****	****	****	****	****	****
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 Board of Education Retirement System Contribution to Return - July 2013



THE BANK OF NEW YORK MELLON

CITY OF NEW YORK

Manager / Benchmark Comparison Report *NYC Board of Education Retirement System

July 31, 2013

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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	\$ 1,570.1	43.78%	5.85%	7.56%	5.85%	21.76%	23.09%	16.62%	-0.72%	17.27%	28.79%	29.49%	18.11%	8.63%	8.31%	9.45%
DEVELOPED MARKETS	646.8	18.04%	6.39	0.64	6.39	9.34	16.54	18.40	-10.35	17.92	39.95	22.40	10.62	4.62	10.14	7.97
EMERGING MARKETS	167.7	4.68%	0.13	-9.20	0.13	-10.49	1.83	18.15	-18.03	19.85	71.67	0.64	0.55	-1.13	13.36	8.40
CORE + 5	560.7	15.64%	0.08	-4.05	0.08	-2.91	-0.01	6.68	9.23	8.36	8.74	-1.73	4.32	6.59	5.73	8.25
TIPS MANAGERS	136.3	3.80%	0.81	-7.46	0.81	-6.56	-4.30	7.67	13.34	6.57	10.24	-5.21	4.96	4.98	****	5.11
HIGH YIELD	197.0	5.49%	1.95	-1.23	1.95	3.85	9.75	15.68	6.25	15.01	44.33	10.25	10.73	11.35	9.14	6.18
BANK LOANS	79.3	2.21%	1.13	0.74	1.13	3.70	****	****	****	****	****	****	****	****	****	4.48
ECONOMICALLY TARGETED INVESTMENTS	15.8	0.44%	-0.05	-2.79	-0.05	-2.12	-0.42	4.29	7.10	5.80	7.02	-1.40	3.10	5.22	****	5.51
PRIVATE EQUITY	105.5	2.94%	-0.17	-0.14	-0.17	4.10	7.31	7.70	19.15	13.64	-9.95	8.97	12.02	4.68	****	0.35
PRIVATE REAL ESTATE	82.9	2.31%	0.21	3.83	0.21	6.15	9.79	14.30	9.43	****	****	10.03	****	****	****	11.21
CASH	24.1	0.67%	0.54	0.06	0.54	0.19	-0.09	0.54	0.59	0.41	1.25	0.42	0.47	1.06	****	2.48
TOTAL BOARD OF EDUCATION	\$ 3,586.3		3.83%	1.85%	3.83%	9.44%	12.90%	13.50%	-0.42%	14.95%	25.74%	16.11%	11.42%	6.87%	8.06%	8.85%
TOTAL EQUITY	2,384.6	66.49%	5.59	4.36	5.59	15.54	19.79	17.29	-5.27	17.69	34.27	25.38	14.48	6.71	****	7.45
TOTAL FIXED INCOME	989.2	27.58%	0.63	-3.60	0.63	-1.65	1.65	8.55	9.42	9.39	14.01	0.55	5.89	7.48	****	5.95
TOTAL PRIVATE EQUITY	105.5	2.94%	-0.17	-0.14	-0.17	4.10	7.31	7.70	19.15	13.64	-9.95	8.97	12.02	4.68	****	0.35
PRIVATE REAL ESTATE	82.9	2.31%	0.21	3.83	0.21	6.15	9.79	14.30	9.43	****	****	10.03	****	****	****	11.21
TOTAL CASH	24.1	0.67%	0.54	0.06	0.54	0.19	-0.09	0.54	0.59	0.41	1.25	0.42	0.47	1.06	****	2.48

* Returns data throughout the various reports are shown Gross of Fees with the exception of PE and RE.

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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	\$ 1,570.1	43.78%	5.85%	7.56%	5.85%	21.76%	23.09%	16.62%	-0.72%	17.27%	28.79%	29.49%	18.11%	8.63%	8.31%	9.45%
PASSIVE DOMESTIC EQUITY	1,236.2	34.47%	5.50	6.57	5.50	20.37	21.69	16.50	0.69	16.99	28.31	27.22	18.00	8.58	8.15	9.13
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	
+/-			0.02	0.00	0.02	0.06	0.23	0.08	(0.33)	0.06	(0.03)	0.35	(0.08)	0.01	0.01	
TOTAL RUSSELL 3000	1,170.7	32.64%	5.46	6.57	5.46	20.28	21.46	16.41	0.95	16.99	28.31	26.85	18.04	8.60	8.14	9.02
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	
+/-			(0.02)	0.00	(0.02)	(0.03)	(0.00)	(0.01)	(0.08)	0.06	(0.03)	(0.02)	(0.04)	0.03	(0.00)	
TOTAL MID CAP PASSIVE	65.5	1.83%	6.17	6.62	6.17	21.68	25.17	17.89	****	****	****	32.92	****	****	****	13.86
S&P MIDCAP 400			6.20	6.59	6.20	21.69	25.18	17.88	****	****	****	33.00	****	****	****	
+/-			(0.03)	0.03	(0.03)	(0.01)	(0.01)	0.01	****	****	****	(0.07)	****	****	****	
ACTIVE DOMESTIC EQUITY	333.9	9.31%	7.15	11.36	7.15	26.83	27.60	16.91	-3.63	17.87	30.20	36.80	19.06	9.19	8.91	8.43
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	
+/-			1.67	4.80	1.67	6.53	6.14	0.49	(4.66)	0.94	1.86	9.93	0.98	0.62	0.77	
TOTAL LARGE CAP	65.7	1.83%	9.92	17.25	9.92	35.65	31.80	14.87	-1.64	16.72	30.50	46.68	21.67	11.55	9.83	9.46
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	
+/-			4.57	11.03	4.57	15.65	10.57	(1.56)	(3.14)	0.62	2.07	20.45	3.64	3.05	1.82	
TOTAL MID CAP ACTIVE	108.6	3.03%	6.85	8.95	6.85	25.17	25.66	19.88	-6.79	****	****	33.11	****	****	****	17.50
RUSSELL MID CAP			5.80	6.76	5.80	22.14	25.41	17.28	-1.55	****	****	32.37	****	****	****	
+/-			1.05	2.19	1.05	3.03	0.26	2.60	(5.25)	****	****	0.74	****	****	****	
TOTAL SMALL CAP ACTIVE	29.2	0.81%	5.86	13.32	5.86	26.19	33.60	19.91	-10.17	21.37	35.44	40.96	18.30	8.31	****	6.02
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	****	
+/-			(1.14)	2.61	(1.14)	2.22	9.39	3.56	(5.99)	(5.48)	8.26	6.20	(0.42)	(1.14)	****	
TOTAL EMERGING MGRS	130.3	3.63%	6.33	10.18	6.33	23.77	26.59	17.00	-1.75	18.99	28.60	33.57	18.90	8.62	****	7.66
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	****	
+/-			0.85	3.61	0.85	3.46	5.13	0.58	(2.78)	2.06	0.26	6.71	0.82	0.05	****	
TOTAL INTERNATIONAL EQUITY	814.6	22.71%	5.10	-1.41	5.10	5.13	13.52	18.36	-11.84	18.25	45.00	17.78	8.59	3.42	10.71	8.01
PASSIVE EMERGING MARKETS	-0.1	0.00%	1.00	-7.63	1.00	-8.41	3.21	18.27	****	****	****	2.27	****	****	****	-6.21
MSCI EMERGING MARKETS FREE			1.10	-7.67	1.10	-8.40	3.23	18.63	****	****	****	2.29	****	****	****	
+/-			(0.10)	0.04	(0.10)	(0.00)	(0.02)	(0.36)	****	****	****	(0.02)	****	****	****	
ACTIVE DEVELOPED MARKETS	646.8	18.04%	6.39	0.64	6.39	9.34	16.54	18.40	-10.35	17.92	39.95	22.40	10.62	4.62	10.07	8.27
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	
+/-			1.12	1.56	1.12	(0.26)	(2.09)	1.09	1.79	10.17	8.17	(1.08)	2.01	3.57	2.10	
ACTIVE EMERGING MARKETS	167.8	4.68%	0.00	-9.48	0.00	-10.89	1.53	18.12	-17.86	19.85	71.67	0.36	0.46	-1.18	****	9.94
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	****	
+/-			(1.10)	(1.80)	(1.10)	(2.49)	(1.70)	(0.51)	0.32	0.65	(7.35)	(1.94)	(0.88)	(2.04)	****	

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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
FIXED INCOME ASSET CLASS SUMMARY																
TOTAL FIXED INCOME	989.2	27.58%	0.63%	-3.60%	0.63%	-1.65%	1.65%	8.55%	9.42%	9.39%	14.01%	0.55%	5.89%	7.48%	****	5.95%
CORE + 5	560.7	15.64%	0.08	-4.05	0.08	-2.91	-0.01	6.68	9.23	8.36	8.74	-1.73	4.32	6.59	5.73	8.25
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	
			(0.01)	0.04	(0.01)	0.21	0.93	1.27	(0.17)	1.23	2.46	0.85	0.59	0.51	0.22	
ALL MORTGAGE	237.6	6.62%	-0.21	-2.84	-0.21	-2.26	-0.24	4.48	6.30	7.84	9.20	-1.35	3.01	5.74	5.40	6.36
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	
			(0.16)	(0.31)	(0.16)	(0.20)	0.91	1.88	(0.08)	2.34	3.44	0.61	0.77	0.81	0.47	
ALL INVESTMENT GRADE CREDIT	236.2	6.59%	0.67	-4.08	0.67	-2.37	2.29	10.36	8.34	9.02	22.61	0.15	5.66	7.60	5.64	7.79
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	0.14	0.05	0.51	1.10	0.83	0.55	0.66	6.25	1.03	0.73	0.57	0.10	
ALL TREASURY / AGENCY	87.0	2.43%	-0.70	-7.13	-0.70	-6.04	-4.81	3.95	18.52	8.93	-6.64	-7.24	4.44	6.46	6.16	7.91
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	
			0.05	(0.11)	0.05	(0.27)	(0.29)	0.11	0.08	(0.31)	0.80	(0.15)	(0.11)	0.08	(0.05)	
HIGH YIELD	197.0	5.49%	1.95	-1.23	1.95	3.85	9.75	15.68	6.25	15.01	44.33	10.25	10.73	11.35	9.14	6.18
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	
			0.19	0.28	0.19	1.27	1.64	1.23	(0.33)	1.66	3.96	2.27	0.98	2.50	1.43	
BANK LOANS	79.3	2.21%	1.13	0.74	1.13	3.70	****	****	****	****	****	****	****	****	****	4.48
CREDIT SUISSE LEVERAGED LOAN INDEX			1.07	0.74	1.07	3.91	****	****	****	****	****	****	****	****	****	
			0.06	(0.00)	0.06	(0.21)	****	****	****	****	****	****	****	****	****	
TIPS	136.3	3.80%	0.81	-7.46	0.81	-6.56	-4.30	7.67	13.34	6.57	10.24	-5.21	4.96	4.98	****	5.11
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	****	
			0.08	(0.34)	0.08	0.16	0.47	0.69	(0.22)	0.20	(1.17)	0.65	0.12	0.31	****	
ECONOMICALLY TARGETED INVESTMENTS	15.82	0.44%	-0.05	-2.79	-0.05	-2.12	-0.42	4.29	7.10	5.80	7.02	-1.40	3.10	5.22	****	5.51
BERS CUSTOM BENCHMARK (NO CASH)			0.10	-2.84	0.10	-2.03	-0.60	3.74	7.09	5.98	4.91	-1.65	2.91	4.83	****	
			(0.15)	0.04	(0.15)	(0.08)	0.18	0.55	0.01	(0.18)	2.11	0.26	0.19	0.39	****	
CASH ASSET CLASS SUMMARY																
CASH	24.1	0.67%	0.54	0.06	0.54	0.19	-0.09	0.54	0.59	0.41	1.25	0.42	0.47	1.06	****	2.48
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	****	
			0.54	0.03	0.54	0.14	(0.20)	0.43	0.49	0.28	1.04	0.30	0.36	0.81	****	

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US EQUITY																
TOTAL RUSSELL 3000	1,170.7	32.64%	5.46	6.57	5.46	20.28	21.46	16.41	0.95	16.99	28.31	26.85	18.04	8.60	8.14	9.02
BLACKROCK R3000	1,170.7	32.64%	5.46	6.57	5.46	20.28	21.46	16.41	0.95	16.99	28.31	26.85	18.04	8.60	8.14	4.20
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	
TOTAL RUSSELL 3000 +/-			(0.02)	0.00	(0.02)	(0.03)	(0.00)	(0.01)	(0.08)	0.06	(0.03)	(0.02)	(0.04)	0.03	(0.00)	
BLACKROCK R3000 +/-			(0.02)	0.00	(0.02)	(0.03)	(0.00)	(0.01)	(0.08)	0.06	(0.03)	(0.02)	(0.04)	0.03	(0.00)	
TOTAL SMALL CAP	29.2	0.81%	5.86	13.32	5.86	26.19	33.60	19.91	-10.17	21.37	35.44	40.96	18.30	8.31	7.59	8.69
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	
+/-			(1.14)	2.61	(1.14)	2.22	9.39	3.56	(5.99)	(5.48)	8.26	6.20	(0.42)	(1.14)	(2.01)	
TOTAL SMALL CAP ACTIVE	29.2	0.81%	5.86	13.32	5.86	26.19	33.60	19.91	-10.17	21.37	35.44	40.96	18.30	8.31	****	6.02
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	****	
+/-			(1.14)	2.61	(1.14)	2.22	9.39	3.56	(5.99)	(5.48)	8.26	6.20	(0.42)	(1.14)	****	
TOTAL SMALL CAP CORE ACTIVE	29.2	0.81%	5.86	13.32	5.86	26.19	33.60	19.91	-10.17	****	****	40.96	18.30	****	****	15.39
DARUMA -SCC	29.2	0.81%	5.86	13.32	5.86	26.19	33.60	19.91	-10.17	****	****	40.96	18.30	****	****	15.39
RUSSELL 2000			7.00	10.71	7.00	23.97	24.21	16.35	-4.18	****	****	34.76	18.71	****	****	
TOTAL SMALL CAP CORE +/-			(1.14)	2.61	(1.14)	2.22	9.39	3.56	(5.99)	****	****	6.20	(0.42)	****	****	
DARUMA -SCC +/-			(1.14)	2.61	(1.14)	2.22	9.39	3.56	(5.99)	****	****	6.20	(0.42)	****	****	
TOTAL MID CAP	174.1	4.85%	6.59	8.06	6.59	23.83	25.48	19.12	-5.53	****	****	33.04	****	****	****	17.36
RUSSELL MID CAP			5.80	6.76	5.80	22.14	25.41	17.28	-1.55	****	****	32.37	****	****	****	
+/-			0.80	1.30	0.80	1.69	0.07	1.84	(3.98)	****	****	0.67	****	****	****	
TOTAL MID CAP PASSIVE	65.5	1.83%	6.17	6.62	6.17	21.68	25.17	17.89	****	****	****	32.92	****	****	****	13.86
SSGA S&P 400	65.5	1.83%	6.17	6.62	6.17	21.68	25.17	17.89	****	****	****	32.92	****	****	****	13.86
S&P MIDCAP 400			6.20	6.59	6.20	21.69	25.18	17.88	****	****	****	33.00	****	****	****	
TOTAL MID CAP PASSIVE +/-			(0.03)	0.03	(0.03)	(0.01)	(0.01)	0.01	****	****	****	(0.07)	****	****	****	
SSGA S&P 400 +/-			(0.03)	0.03	(0.03)	(0.01)	(0.01)	0.01	****	****	****	(0.07)	****	****	****	
TOTAL MID CAP ACTIVE	108.6	3.03%	6.85	8.95	6.85	25.17	25.66	19.88	-6.79	****	****	33.11	****	****	****	17.50
RUSSELL MID CAP			5.80	6.76	5.80	22.14	25.41	17.28	-1.55	****	****	32.37	****	****	****	
+/-			1.05	2.19	1.05	3.03	0.26	2.60	(5.25)	****	****	0.74	****	****	****	
TOTAL MID CAP CORE ACTIVE	108.6	3.03%	6.85	8.95	6.85	25.17	25.66	19.88	-6.79	****	****	33.11	****	****	****	17.50
WELLINGTON	108.6	3.03%	6.85	8.95	6.85	25.17	25.66	19.88	-6.79	****	****	33.11	****	****	****	17.50
S&P MIDCAP 400			6.20	6.59	6.20	21.69	25.18	17.88	-1.73	****	****	33.00	****	****	****	
TOTAL MID CAP CORE +/-			0.65	2.36	0.65	3.48	0.48	2.00	(5.06)	****	****	0.12	****	****	****	
WELLINGTON +/-			0.65	2.36	0.65	3.48	0.48	2.00	(5.06)	****	****	0.12	****	****	****	
TOTAL LARGE CAP	65.7	1.83%	9.92	17.25	9.92	35.65	31.80	14.87	-1.64	16.72	30.50	46.68	21.67	11.55	9.83	9.46
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	
+/-			4.57	11.03	4.57	15.65	10.57	(1.56)	(3.14)	0.62	2.07	20.45	3.64	3.05	1.82	
TOTAL LARGE CAP GROWTH	65.7	1.83%	9.92	17.25	9.92	35.74	27.71	8.41	-8.93	17.52	44.55	46.92	17.21	9.80	8.83	8.96
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	
+/-			4.62	12.01	4.62	18.01	10.64	(6.85)	(11.57)	0.81	7.33	25.28	(0.78)	0.78	1.14	
ZEVENBERGEN	65.7	1.83%	9.92	17.25	9.92	35.74	27.71	8.41	-10.02	23.05	56.91	46.92	18.48	10.78	10.96	10.42
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	7.84	
+/-			4.44	11.47	4.44	17.36	10.14	(6.80)	(12.20)	5.41	19.91	24.27	0.31	1.70	3.12	

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TOTAL EMERGING MGRS RUSSELL 3000		130.3	3.63%	6.33	10.18	6.33	23.77	26.59	17.00	-1.75	18.99	28.60	33.57	18.90	8.62	****	7.66
	+/-			5.48	6.57	5.48	20.31	21.46	16.42	1.03	16.93	28.34	26.86	18.08	8.57	****	
				0.85	3.61	0.85	3.46	5.13	0.58	(2.78)	2.06	0.26	6.71	0.82	0.05	****	
F.I.S FUND MGMT RUSSELL 2000		66.9	1.87%	6.85	12.63	6.85	26.54	31.34	17.35	-2.62	27.68	23.31	40.99	20.56	9.01	****	6.11
	+/-			7.00	10.71	7.00	23.97	24.21	16.35	-4.18	26.85	27.18	34.76	18.71	9.45	****	
				(0.15)	1.92	(0.15)	2.57	7.14	1.00	1.55	0.83	(3.87)	6.23	1.85	(0.45)	****	
PROGRESS RUSSELL 3000		63.4	1.77%	5.79	7.71	5.79	20.46	22.95	16.87	-1.43	16.04	30.50	28.49	17.56	8.06	8.47	5.00
	+/-			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	
				0.31	1.14	0.31	0.16	1.49	0.45	(2.45)	(0.89)	2.16	1.62	(0.52)	(0.51)	0.33	
NON - US EQUITY																	
EAFE VALUE MSCI EAFE (NET DIVIDEND)		274.5	7.66%	4.19	-1.55	4.19	5.86	14.07	17.84	-9.92	18.56	34.34	17.85	9.24	4.34	****	7.61
MSCI EAFE VALUE				5.28	-0.92	5.28	9.60	18.62	17.32	-12.14	7.75	31.78	23.48	8.61	1.05	****	
	+/-			5.86	-0.93	5.86	9.21	19.21	18.43	-11.65	3.81	35.06	25.46	8.19	1.40	****	
	+/-			(1.08)	(0.63)	(1.08)	(3.74)	(4.55)	0.52	2.22	10.81	2.56	(5.63)	0.63	3.28	****	
				(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 VALUE SPRUCEGROVE		274.5	7.66%	4.19	-1.55	4.19	5.86	14.07	17.84	-9.92	18.56	34.34	17.85	9.24	4.34	****	7.61
MSCI EAFE VALUE		274.5	7.66%	4.19	-1.55	4.19	5.86	14.07	17.84	-9.92	18.56	34.34	17.85	9.24	4.34	****	7.61
				5.86	-0.93	5.86	9.21	19.21	18.43	-11.65	3.81	35.06	25.46	8.19	1.40	****	
	+/-			(1.67)	(0.62)	(1.67)	(3.36)	(5.14)	(0.60)	1.73	14.75	(0.72)	(7.61)	1.05	2.93	****	
	+/-			(1.67)	(0.62)	(1.67)	(3.36)	(5.14)	(0.60)	1.73	14.75	(0.72)	(7.61)	1.05	2.93	****	
EAFE GROWTH MSCI EAFE (NET DIVIDEND)		304.6	8.49%	8.66	3.09	8.66	12.03	17.89	18.88	-10.71	17.36	45.29	26.00	11.68	4.76	****	3.84
MSCI EAFE GROWTH				5.28	-0.92	5.28	9.60	18.62	17.32	-12.14	7.75	31.78	23.48	8.61	1.05	****	
	+/-			4.71	-0.63	4.71	10.74	19.05	17.28	-11.82	12.60	29.91	22.56	9.96	1.62	****	
	+/-			3.95	3.72	3.95	1.29	(1.16)	1.60	1.11	4.76	15.38	3.44	1.72	3.14	****	
				0.57	(0.28)	0.57	(1.14)	(0.43)	0.04	(0.32)	(4.85)	1.87	0.93	(1.35)	(0.57)	****	
TOTAL INTL GROWTH BAILLIE		304.6	8.49%	8.66	3.09	8.66	12.03	17.89	18.88	-10.71	17.36	45.29	26.00	11.68	4.76	****	3.84
MSCI EAFE GROWTH		304.6	8.49%	8.66	3.09	8.66	12.03	17.89	18.88	-10.71	17.36	45.29	26.00	11.68	4.76	****	3.84
				4.71	-0.63	4.71	10.74	19.05	17.28	-11.82	12.60	29.91	22.56	9.96	1.62	****	
	+/-			3.95	3.72	3.95	1.29	(1.16)	1.60	1.11	4.76	15.38	3.44	1.72	3.14	****	
	+/-			3.95	3.72	3.95	1.29	(1.16)	1.60	1.11	4.76	15.38	3.44	1.72	3.14	****	
TOTAL EAFE SMALL CAP S&P EPAC SMALL CAP		67.7	1.89%	5.55	****	5.55	****	****	****	****	****	****	****	****	****	****	-1.00
	+/-			6.33	****	6.33	****	****	****	****	****	****	****	****	****	****	
				0.84	****	(0.78)	****	****	****	****	****	****	****	****	****	****	
TOTAL EAFE SMALL CAP ACADIAN EAFE SMALL CAP MTA		67.7	1.89%	5.55	-1.00	5.55	****	****	****	****	****	****	****	****	****	****	-1.00
S&P EPAC SMALL CAP		67.7	1.89%	5.55	-1.00	5.55	****	****	****	****	****	****	****	****	****	****	-1.00
				6.33	0.51	6.33	****	****	****	****	****	****	****	****	****	****	
	+/-			0.84	(0.37)	0.84	****	****	****	****	****	****	****	****	****	****	
	+/-			0.84	(0.37)	0.84	****	****	****	****	****	****	****	****	****	****	
TOTAL DEVELOPED MARKETS MSCI EAFE (NET DIVIDEND)		646.8	18.04%	6.39	0.64	6.39	9.34	16.54	18.40	-10.35	17.92	39.95	22.40	10.62	4.62	10.14	7.97
	+/-			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	
				1.12	1.56	1.12	(0.26)	(2.09)	1.09	1.79	10.17	8.17	(1.08)	2.01	3.57	2.17	

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EMERGING MARKETS																
TOTAL EMERGING MARKETS	167.7	4.68%	0.13	-9.20	0.13	-10.49	1.83	18.15	-18.03	19.85	71.67	0.64	0.55	-1.13	13.36	8.40
ACTIVE EMERGING MARKETS	167.8	4.68%	0.00	-9.48	0.00	-10.89	1.53	18.12	-17.86	19.85	71.67	0.36	0.46	-1.18	****	9.94
ACADIAN	167.8	4.68%	0.00	-9.50	0.00	****	****	****	****	****	****	****	****	****	****	-9.58
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 +/-			(1.10)	(1.80)	(1.10)	(2.49)	(1.70)	(0.51)	0.32	0.65	(7.35)	(1.94)	(0.88)	(2.04)	****	
ACADIAN +/-			(1.10)	(1.82)	(1.10)	****	****	****	****	****	****	****	****	****	****	
PASSIVE EMERGING MARKETS	-0.1	0.00%	1.00	-7.63	1.00	-8.41	3.21	18.27	****	****	****	2.27	****	****	****	-6.21
BLACKROCK-EM	-0.1	0.00%	1.00	-7.63	1.00	-8.41	3.21	18.27	****	****	****	2.27	****	****	****	-6.21
MSCI EMERGING MARKETS FREE			1.10	-7.67	1.10	-8.40	3.23	18.63	****	****	****	2.29	****	****	****	
PASSIVE EMERGING MARKETS +/-			(0.10)	0.04	(0.10)	(0.00)	(0.02)	(0.36)	****	****	****	(0.02)	****	****	****	
BLACKROCK-EM +/-			(0.10)	0.04	(0.10)	(0.00)	(0.02)	(0.36)	****	****	****	(0.02)	****	****	****	
TOTAL INTERNATIONAL EQUITY	814.6	22.71%	5.10	-1.41	5.10	5.13	13.52	18.36	-11.84	18.25	45.00	17.78	8.59	3.42	10.71	8.01
MSCI WORLD INDEX			5.29	2.87	5.29	14.54	19.27	16.54	-5.02	12.34	30.80	23.96	13.35	4.88	8.16	
+/-			(0.19)	(4.28)	(0.19)	(9.42)	(5.75)	1.82	(6.82)	5.91	14.20	(6.17)	(4.76)	(1.47)	2.55	
FIXED INCOME																
TOTAL STRUCTURED FIXED INCOME	560.7	15.64%	0.08	-4.05	0.08	-2.91	-0.01	6.68	9.23	8.36	8.74	-1.73	4.32	6.59	5.73	8.25
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	
+/-			(0.01)	0.04	(0.01)	0.21	0.93	1.27	(0.17)	1.23	2.46	0.85	0.59	0.51	0.22	
ALL MORTGAGE	237.6	6.62%	-0.21	-2.84	-0.21	-2.26	-0.24	4.48	6.30	7.84	9.20	-1.35	3.01	5.74	5.40	6.36
PIMCO-MORTGAGE	237.6	6.62%	-0.21	-2.84	-0.21	-2.26	-0.24	4.48	6.30	7.84	9.20	-1.35	3.01	5.74	5.40	7.36
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 +/-			(0.16)	(0.31)	(0.16)	(0.20)	0.91	1.88	(0.08)	2.34	3.44	0.61	0.77	0.81	0.47	
PIMCO-MORTGAGE +/-			(0.16)	(0.31)	(0.16)	(0.20)	0.91	1.88	(0.08)	2.34	3.44	0.61	0.77	0.81	0.47	
ALL INVESTMENT GRADE CREDIT	236.2	6.59%	0.67	-4.08	0.67	-2.37	2.29	10.36	8.34	9.02	22.61	0.15	5.66	7.60	5.64	7.79
PRUDENTIAL - CREDIT	127.0	3.54%	0.78	-3.93	0.78	-2.37	1.44	9.51	8.00	8.72	****	-0.49	5.26	****	****	7.03
TAPLIN, CANADA -CREDIT	94.3	2.63%	0.55	-4.43	0.55	-2.62	3.19	11.51	8.83	9.43	22.42	0.79	6.12	7.91	5.79	7.07
PRUDENTIAL-PRIVEST	14.9	0.41%	0.57	-3.16	****	-0.83	****	****	****	****	****	****	****	****	****	-0.83
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	0.14	0.05	0.51	1.10	0.83	0.55	0.66	6.25	1.03	0.73	0.57	0.10	
PRUDENTIAL - CREDIT +/-			0.16	0.29	0.16	0.51	0.25	(0.01)	0.20	0.36	****	0.38	0.34	****	****	
TAPLIN, CANADA -CREDIT +/-			(0.07)	(0.21)	(0.07)	0.26	2.00	1.99	1.04	1.07	6.06	1.67	1.20	0.88	0.26	
PRUDENTIAL-PRIVEST +/-			(0.05)	1.05	****	2.05	****	****	****	****	****	****	****	****	****	
ALL TREASURY / AGENCY	87.0	2.43%	-0.70	-7.13	-0.70	-6.04	-4.81	3.95	18.52	8.93	-6.64	-7.24	4.44	6.46	6.16	7.91
STATE STREET	87.0	2.43%	-0.70	-7.13	-0.70	-6.04	-4.81	3.95	18.52	8.93	-6.64	-7.24	4.44	6.46	6.31	7.31
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 +/-			0.05	(0.11)	0.05	(0.27)	(0.29)	0.11	0.08	(0.31)	0.80	(0.15)	(0.11)	0.08	(0.05)	
STATE STREET +/-			0.05	(0.11)	0.05	(0.27)	(0.29)	0.11	0.08	(0.31)	0.80	(0.15)	(0.11)	0.08	0.10	

THE BANK OF NEW YORK MELLON

CITY OF NEW YORK

Manager / Benchmark Comparison Report *NYC Board of Education Retirement System

July 31, 2013

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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
HIGH YIELD																
TOTAL HIGH YIELD	197.0	5.49%	1.95	-1.23	1.95	3.85	9.75	15.68	6.25	15.01	44.33	10.25	10.73	11.35	9.14	6.18
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	
		+/-	0.19	0.28	0.19	1.27	1.64	1.23	(0.33)	1.66	3.96	2.27	0.98	2.50	1.43	
LOOMIS SAYLES & CO	106.0	2.96%	1.98	-0.86	1.98	5.47	12.38	17.52	7.14	15.79	52.73	13.37	12.24	13.13	10.35	7.98
NYC-LOOMIS (BoIA ML-MST II 7-03/BB&B PRIOR)			1.88	-1.33	1.88	3.41	9.57	15.58	4.38	15.19	57.51	9.53	9.86	11.40	9.10	
		+/-	0.10	0.47	0.10	2.06	2.82	1.94	2.76	0.60	(4.78)	3.84	2.38	1.73	1.26	
SHENKMAN ENHANCED YIELD	91.0	2.54%	1.92	-1.67	1.92	2.03	****	****	****	****	****	****	****	****	****	6.11
CITIGROUP BB & B			1.76	-1.52	1.76	2.58	****	****	****	****	****	****	****	****	****	
		+/-	0.15	(0.15)	0.15	(0.55)	****	****	****	****	****	****	****	****	****	
BANK LOANS																
TOTAL BANK LOANS	79.3	2.21%	1.13	0.74	1.13	3.70	****	****	****	****	****	****	****	****	****	4.48
BABSON BL MTA-BERS	79.3	2.21%	1.13	0.74	1.13	3.70	****	****	****	****	****	****	****	****	****	4.48
CREDIT SUISSE LEVERAGED LOAN INDEX			1.07	0.74	1.07	3.91	****	****	****	****	****	****	****	****	****	
TOTAL BANK LOANS		+/-	0.06	(0.00)	0.06	(0.21)	****	****	****	****	****	****	****	****	****	
BABSON BL MTA-BERS		+/-	0.06	(0.00)	0.06	(0.21)	****	****	****	****	****	****	****	****	****	
TIPS																
TOTAL ACTIVE TIPS MANAGERS	136.3	3.80%	0.81	-7.46	0.81	-6.56	-4.30	7.67	13.34	6.57	10.24	-5.21	4.96	4.98	****	5.11
PIMCO-TIPS-MTA	136.3	3.80%	0.81	-7.46	0.81	-6.56	-4.30	7.67	13.34	6.57	10.24	-5.21	4.96	4.98	****	5.11
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 ACTIVE TIPS MANAGERS		+/-	0.08	(0.34)	0.08	0.16	0.47	0.69	(0.22)	0.20	(1.17)	0.65	0.12	0.31	****	
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	0.31	****	
OTHER FIXED INCOME																
TOTAL ETI	15.8	0.44%	-0.05	-2.79	-0.05	-2.12	-0.42	4.29	7.10	5.80	7.02	-1.40	3.10	5.22	****	5.51
BERS CUSTOM BENCHMARK (NO CASH)			0.10	-2.84	0.10	-2.03	-0.60	3.74	7.09	5.98	4.91	-1.65	2.91	4.83	****	
		+/-	(0.15)	0.04	(0.15)	(0.08)	0.18	0.55	0.01	(0.18)	2.11	0.26	0.19	0.39	****	
AFL-CIO HOUSING INV TRUST	11.5	0.32%	-0.07	-3.34	-0.07	-2.67	-1.06	4.27	7.86	6.16	6.28	-2.10	3.09	5.17	****	4.93
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	****	
		+/-	(0.20)	(0.17)	(0.20)	(0.36)	(0.37)	0.06	0.02	(0.38)	0.35	(0.19)	(0.10)	(0.07)	****	
ACCESS RBC	3.0	0.08%	-0.25	-2.57	-0.25	-2.38	-0.51	4.15	6.78	5.72	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	0.20	8.10	(0.11)	0.51	1.55	****	
CPC TERM LOAN	0.6	0.02%	0.20	0.60	0.20	1.40	2.45	2.51	2.09	2.06	2.20	2.44	2.29	2.43	****	3.30
TOTAL PPAR	0.7	0.02%	0.68	2.16	0.68	4.86	8.70	9.28	4.97	8.51	11.61	8.40	7.52	8.43	****	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	5.81	11.00	4.51	2.84	****	
CFSB-PPAR	0.1	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	0.3	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	0.03	0.00%	****	****	****	****	****	****	****	****	****	****	****	****	****	****
LIIF-PPAR	0.2	0.00%	0.70	2.04	0.70	4.97	8.12	6.84	4.96	4.34	****	8.05	5.74	****	****	6.24
NCBCI-PPAR	0.1	0.00%	0.63	2.28	0.63	5.46	10.42	9.46	8.50	4.10	****	9.41	8.24	****	****	7.59

**THE BANK OF NEW YORK MELLON
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**Manager / Benchmark Comparison Report *NYC Board of Education Retirement System
July 31, 2013**

	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
CASH																
TOTAL CASH	24.1	0.67%	0.54	0.06	0.54	0.19	-0.09	0.54	0.59	0.41	1.25	0.42	0.47	1.06	****	2.48
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	1.72	
			0.54	0.03	0.54	0.14	(0.20)	0.43	0.49	0.28	1.04	0.30	0.36	0.81	****	
PRIVATE EQUITY																
TOTAL PRIVATE EQUITY	105.5	2.94%	-0.17	-0.14	-0.17	4.10	7.31	7.70	19.15	13.64	-9.95	8.97	12.02	4.68	****	0.35
NYC R3000 +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	****	
			(0.17)	(12.10)	(0.17)	(9.14)	(10.98)	(27.50)	13.60	(2.32)	(8.53)	(9.31)	(5.53)	(6.63)	****	
PRIVATE REAL ESTATE																
TOTAL PRIVATE REAL ESTATE	82.9	2.31%	0.21	3.83	0.21	6.15	9.79	14.30	9.43	****	****	10.03	****	****	****	11.21
NCREIF NFI-ODCE NET + 100 BP			0.08	3.85	0.08	6.72	12.08	10.77	15.97	****	****	12.08	****	****	****	
			0.13	(0.02)	0.13	(0.57)	(2.29)	4.53	(6.54)	****	****	(2.04)	****	****	****	
TOTAL BOARD OF EDUCATION	3,586.3		3.83	1.85	3.83	9.44	12.90	13.50	-0.42	14.95	25.74	16.11	11.42	6.87	8.06	8.85
BOARD OF EDUCATION POLICY BENCHMARK			3.45	1.55	3.45	9.68	13.70	14.05	0.47	12.54	25.48	16.11	11.82	6.67	7.86	
			0.38	0.30	0.38	(0.24)	(0.80)	(0.55)	(0.89)	2.41	0.26	(0.00)	(0.40)	0.20	0.21	

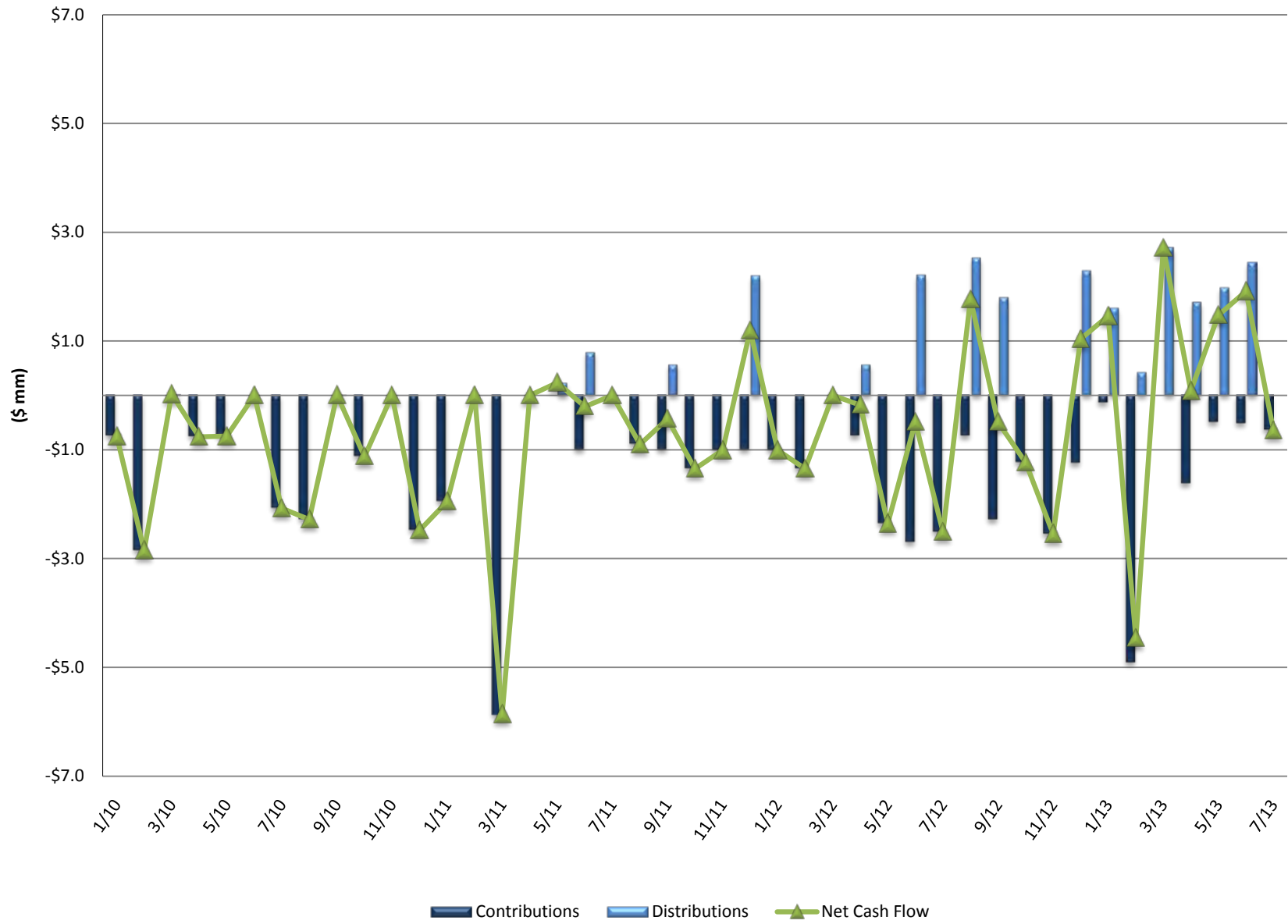
NYC Board of Education Retirement System
Private Equity Portfolio
As of March 31, 2013 (in USD)

Vintage Year	Investment	First Drawdown	Committed Capital	Paid-In Capital	Distributed Capital	Market Value	Multiple	IRR
Active Investments								
2005	Mesirow Financial Private Equity Partnership Fund III, L.P.	7/20/2006	\$ 57,000,000	\$ 51,673,273	\$ 16,741,092	\$ 51,223,745	1.32x	6.44%
2006	Mesirow Financial Private Equity Partnership Fund IV, L.P.	3/31/2008	25,000,000	17,717,233	2,378,759	18,276,498	1.17x	5.50%
2006	New York Fairview Private Equity Fund, L.P.	7/14/2006	19,000,000	15,298,266	4,945,043	13,283,763	1.19x	5.20%
2009	Mesirow Financial Private Equity Partnership Fund V, L.P.	3/7/2011	45,000,000	16,664,326	1,133,886	17,534,666	1.12x	9.45%
2012	Warburg Pincus Private Equity XI, L.P.	7/17/2012	25,000,000	5,448,050	18,750	5,715,283	1.05x	6.65%
2012	Platinum Equity Capital Partners III, L.P.	1/14/2013	15,000,000	4,370,173	872,803	3,803,352	1.07x	19.70%
2012	Carlyle Partners VI, L.P.	N/A	20,000,000	-	-	-	0.00x	N/A
2012	Carlyle Partners VI, L.P. - Side Car	N/A	2,200,000	-	-	-	0.00x	N/A
2013	Landmark Equity Partners XV, L.P.	N/A	19,000,000	-	-	-	0.00x	N/A
2013	Landmark Equity Partners XV, L.P. - Side Car	N/A	6,000,000	-	-	-	0.00x	N/A
Total Portfolio			\$ 233,200,000	\$ 111,171,321	\$ 26,090,333	\$ 109,837,307	1.22x	6.37%

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	\$ 20,000,000	\$ -	\$ -	\$ -	N/A	N/A
2013	CVC Capital Partners VI, L.P.	N/A	25,997,000	-	-	-	N/A	N/A
Total Commitments Closed Subsequent to as of Date			\$ 45,997,000	\$ -	\$ -	\$ -	N/A	N/A

Note: Where available, March 31, 2013 reported valuations were used. In the absence of March 31, 2013 reported values, market values have been adjusted forward using interim cashflows through March 31, 2013. The IRR calculated in the early years of a fund is not meaningful given the j-curve effect. The aggregate portfolio performance figures for IRR and multiple are as of March 31, 2013.

NYC BERS Monthly PE Cash Flow Summary



The Townsend Group®

New York City Board of Education Retirement System

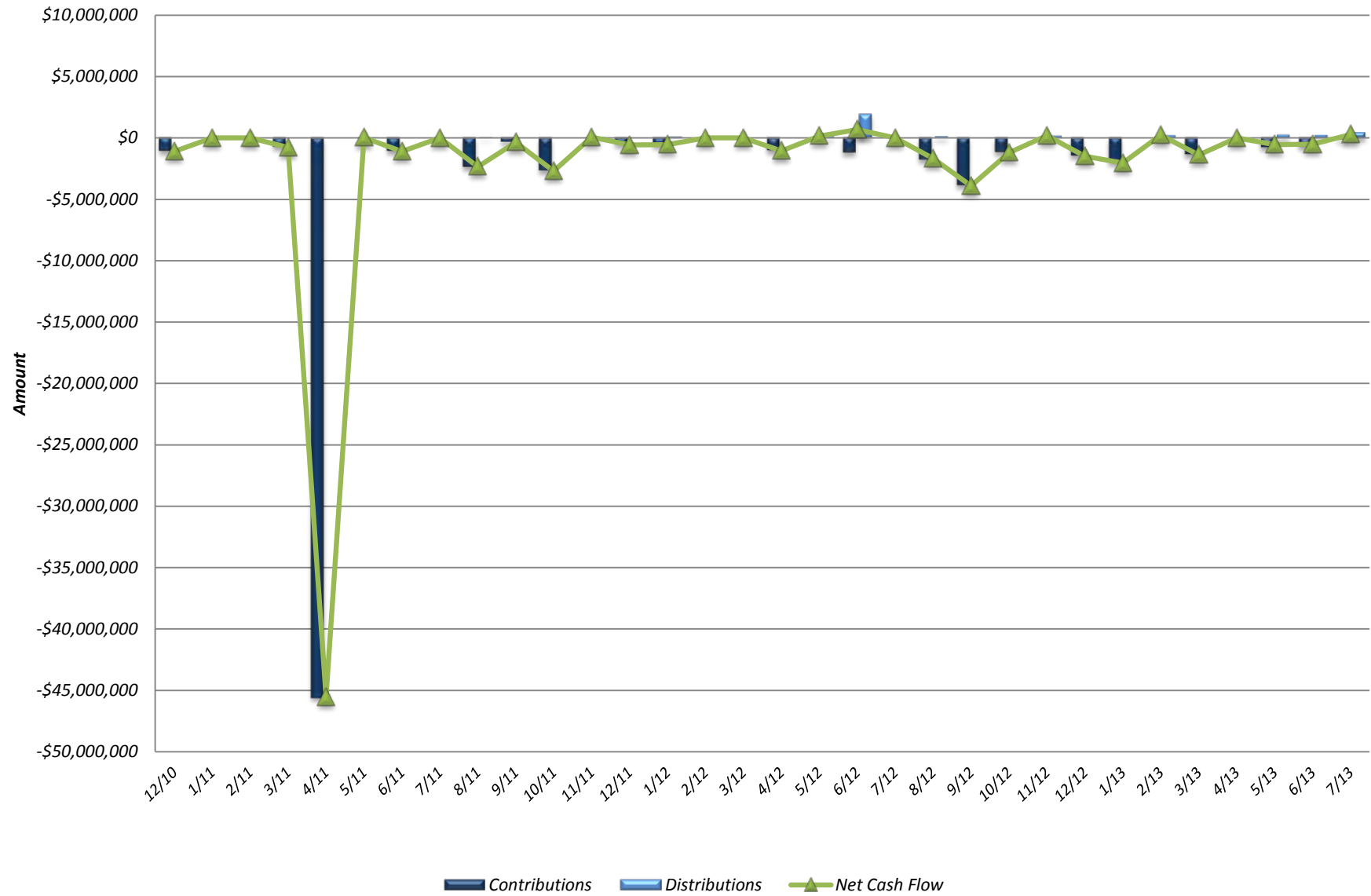
Vintage Year	Fund Name	First Draw Down	Capital Committed	Contributions	Distributions	Market Value	Equity Multiple	Net IRR
2011	UBS Trumbull Property Fund ("UBS-TPF")	4/1/2011	\$41,400,000	\$45,531,008	(\$3,257,888)	\$50,736,155	1.2	9.6%
2011	LaSalle Property Fund	12/13/2010	\$27,600,000	\$17,781,762	(\$922,441)	\$19,634,375	1.2	12.4%
	Core/Core Plus Portfolio		\$69,000,000	\$63,312,770	(\$4,180,330)	\$70,370,530	1.2	10.2%
2011	Franklin Templeton Private Real Estate Fund	4/4/2011	\$30,000,000	\$6,550,006	(\$1,773,173)	\$4,502,485	1.0	-4.7%
2012	Brookfield Strategic Real Estate Partners	9/20/2012	\$10,000,000	\$1,214,300	\$0	\$1,318,027	1.1	17.0%
	Non-Core Portfolio		\$40,000,000	\$7,764,306	(\$1,773,173)	\$5,820,512	1.0	-2.6%
	New York City Board of Education Retirement System		\$109,000,000	\$71,077,075	(\$5,953,503)	\$76,191,041	1.2	9.5%

Funds Closed Subsequent to Quarter

Vintage	Fund Name	First Draw Down	Capital Committed	Contributions				
2012	Emmes Asset Management		\$10,000,000	-	-	-	-	-
2013	NYC Related Superstorm Sandy Rebuilding Fund		\$11,000,000	-	-	-	-	-
2013	NYC Hudson Superstorm Sandy Rebuilding Fund		<u>\$8,000,000</u>	-	-	-	-	-
Grand Total			\$29,000,000					

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.

BERS Monthly Real Estate Cash Flow Summary



III. IPS Conforming Update:

INVESTMENT POLICY STATEMENT

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM

Adopted
January 2009

Amended through
June 2013

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SECTION I. PURPOSE OF THE INVESTMENT POLICY STATEMENT

This document is the Investment Policy Statement (the IPS, or the Statement) of the New York City Board of Education Retirement System (NYCBERS or the Fund). The IPS sets forth the investment objectives and philosophy of the NYCBERS investment program as adopted by the Board of Trustees (the Board), as well as its major components, procedures and policies relating to risk tolerances, liquidity needs, asset allocations and rebalancing ranges.

The structure of the IPS reflects the process for the direction of Fund assets. The Statement sets forth procedures to oversee and evaluate the overall performance of the Fund and provides a procedural framework for the Board of Trustees and the Comptroller's Bureau of Asset Management (BAM) to select, retain, monitor and evaluate the performance of Investment Managers, Consultants and others.

SECTION II. INVESTMENT POLICY ROLES

A. Board of Trustees

The Board, as a fiduciary, is responsible for the management of the Fund. The Board of Trustees may choose to operate with a committee structure to facilitate the monitoring and recommendation process. Such committees, whether for investments, proxy voting, or administrative matters, will report their findings and recommendations to the full Board for approval, as appropriate.

Responsibilities 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. passive 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 Fund assets as well as the investment activities of all Investment Managers and Investment Consultants as they affect Fund assets.
- Approve reasonable and necessary investment expenses to acquire, manage and protect Fund assets.

B. Comptroller

The Comptroller serves as custodian for NYCBERS assets. As custodian, the Comptroller, by and through the Bureau of Asset Management (BAM), performs activities such as the selection of custodial banks, the reconciliation of accounting statements, and the processing and auditing of payments to service providers.

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 Comptroller provides investment advice, implements Board decisions, and reports on investment performance. In carrying out these functions, BAM advises and reports to the Board on investment issues such as policies, strategies, and manager selection; analyzes, recommends, and votes on proxy issues; negotiates contracts; implements Board decisions; and monitors performance and market activity. In executing each of these responsibilities, BAM works closely with Consultants selected by the Board.

A full description of the Comptroller's roles as custodian and Investment Advisor is provided in the Appendix 1-A.

C. Executive Director

The Executive Director is the administrator of the Fund whose responsibilities are to:

- Analyze, evaluate, make recommendations upon, institute and maintain changes or additions in the Retirement System in such areas as Variable Annuity Program, Fixed Tax-Deferred Annuity Program, Variable Tax-Deferred Annuity Program, and any other new programs for the Retirement System.
- Coordinate the functions of the Investment Committee and the Board of Trustees to ensure the approval process is completed from the recommendation of the Investment Committee, through the approval of the full Board of Trustees, to the notification of relevant parties. This includes changes or additions to the IPS, asset allocation, and manager selection.

- Coordinate functions of BERS, the Independent consultant and the Comptroller.

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 NYCBERS.

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 NYCBERS 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:

- Fund assets generally may be invested in mortgages, bonds, notes and other fixed income securities of U.S. and certain other issuers.
- Fund assets may be invested in public equities, including common stock, preferred stock, and investment company shares, subject to an overall limit of 70% and the following requirements:
 - Up to 70% of Fund 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 Fund 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.

¹ Per the Actuary’s Resolution of February 2012 and subsequent legislative change.

- Additionally, up to 10%² of Fund 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:
 - Equity real estate in excess of 10% of the market value of Fund assets.
 - Private equity investments.

SECTION IV. INVESTMENT OBJECTIVE

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

NYCBERS 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 NYCBERS funding rates and the determination of pension liabilities. Based on the actuarial assumptions and methods recommended by the Actuary and adopted by the Board, an 7.0%³ per annum return on assets, together with employee and employer contributions, is expected to fully fund the Plan over time and 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.

² Per Legislative change to the NYS RSSL in February 2011

³ Per the Actuary's Resolution of February 2012 and subsequent legislative change.

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 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.

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 POLICY, PROCESS, AND REBALANCING

NYCBERS adopted its current Long Term Strategic Allocation (asset allocation) in February 2012. The Table below shows the adopted allocation and the approved rebalancing ranges (for the traditional asset classes) as well as the approved pacing ranges (for the alternatives 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 and TIPS respectively. Each investment program, including its objective and performance benchmark, is described in Appendix 1-G.

	Long Term Strategic Allocation	Rebalancing Range
Equity Securities		
U.S. Equity	35%	+/-4
Non-U.S. Equity	17	+/-2
Emerging Markets Equity	5	+/-1
Private Equity*	6	+/-1
Real Estate*	7	+/-1
Total Equity	70%	±5%
Fixed Income Securities		
Core +5 Fixed-Income	17	+/-4
High Yield**	5.5	+/-1
Bank Loans**	2.5	+/-1
TIPS	5	+/-1
Total Fixed-Income	30%	±5%

*Pacing ranges represent minimums and maximums which will be monitored to influence pacing analysis, but will not necessarily result in purchases or sales.

**The Board views Bank Loans and High Yield as one Enhanced Yield allocation; with a target allocation of 8% split between High Yield and Bank Loans

The Board reviews the asset allocation along with the underlying capital market expectations on a periodic basis. When the Board desires to conduct this review, BAM works with the NYCBERS 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 undertakes other appropriate solicitation processes to identify and select investment managers or investments, which selection is subject to Board approval.

Concurrent with the asset allocation study, the Board reviews with its Consultant the⁴ parking places for unfunded commitments in illiquid asset classes and the

⁴ Parking places, rebalancing ranges, and pacing ranges were adopted in February 2012 as well.

rebalancing/pacing ranges for each asset class and class component and determines and/or makes any revisions to those ranges that seem appropriate given changes in capital market conditions. The rebalancing process is further described in Appendix 1-B.

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 balance levels for liquidity, are expected to remain below 5%⁵; except in unusual circumstances. Cash in excess of 5% will require prior notification to, and approval by the Board.

The stated asset allocation policy also does not present an allocation for "opportunistic" public market equity and fixed income investments, which are not typically part of traditional public equity or fixed income programs. These investments are strategies that offer the potential for higher excess returns relative to more traditional public market strategies. However, because of their variety and/or other unique characteristics, such as illiquidity, concentration, or relatively short track records, "opportunistic" investments are not considered a definable asset class. Such strategies may include, but are not limited to, activist, environmental and sustainable investments within the equity markets, private bank loans and distressed debt in the fixed income markets, and portable alpha and hedge fund investments across multiple asset classes. BAM, in coordination with the general consultants to all the New York City Retirement Systems, has developed a process and structure for the evaluation and inclusion of such investments for the Systems, including an overall policy. BAM and NYCBERS' Consultant will evaluate strategies for potential Opportunistic Equity and Opportunistic Fixed Income Programs with NYCBERS' unique needs in mind and will present specific recommendations, suggested allocations, objectives, and other terms to the Board as individual opportunities arise.

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.

SECTION VIII. ROLES AND RESPONSIBILITIES OF SERVICE PROVIDERS

The Board retains service providers to assist in the management of the Fund, including, but not limited to, investment managers and consultants. These providers perform in a

⁵ Adopted by the Board as a part of the Asset Allocation rebalancing decision in February 2012.

fiduciary capacity and must exercise the requisite duties of care and loyalty to NYCBERS. A summary of the roles and responsibilities of each of these service providers follows below. Detailed descriptions are provided in Appendix 1-C.

A. General Consultant

The Board employs a general consultant. The responsibilities of the Consultant include: advising the Board on asset allocation structure, investment policies, and strategies; recommending appropriate investment providers; monitoring investment managers and products; conducting topical research on the investment markets and other Fund-related issues; presenting performance reports and research to the Board; and attending Board meetings.

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.

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. Managers of public market securities enter into an investment advisory agreement which requires the Manager to exercise the standard of care of an ERISA fiduciary (or any applicable higher standard). Responsibilities include investing Fund assets consistent with guidelines and risk management policies; advising BAM on capital actions; and reporting to BAM (and, as requested, to the Board) on portfolio strategy, activity, and the securities markets.

C. Master Custodian

The Comptroller is the custodian of NYCBERS assets, as well as the assets of other New York City Retirement Systems. Assets include cash (in any currency), securities, any other investment assets and earnings and profits thereon.

As Custodian, the Comptroller retains by Agreement a Master Custodian to hold and safeguard Fund assets. (In the case of certain assets such as Non-U.S. equities in commingled accounts, other custodians may be retained to serve as custodians of particular accounts.)

The Master Custodian is a fiduciary to the Comptroller and NYCBERS.

The Master Custodian provides many services. It holds and reports on Fund accounts, effects purchases and sales of the securities, operates a securities lending program for the benefit of the Fund (see Section XIII), collects income that becomes due and payable on property held in the accounts, makes payment from the accounts at the Comptroller's direction, maintains books and records to clearly identify cash, securities

and other property of the Fund, and performs other reporting, performance, risk measurement and compliance monitoring functions.

D. Specialist Consultants

NYCBERS may retain one or more Specialist Consultants to assist in the implementation of its strategic allocations to those asset classes. Any such consultant will be required to act as a fiduciary to the Comptroller and NYCBERS. The Board has recently hired Private Equity and Real Estate Consultants⁶ in furtherance of implementing those asset classes. Their specific roles and responsibilities are further defined in the attached IPS' which were also adopted by the Board in December 2012 and January 2013 respectively.

SECTION IX. INVESTMENT MANAGERS

A. Manager Selection – Public Markets

The Board generally selects Investment Managers to manage NYCBERS assets through a competitive RFP process conducted by BAM. In selecting Managers, BAM and the Board evaluate 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.

Managers selected to manage publicly traded assets for NYCBERS must be registered investment advisers under the 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 NYCBERS.

Contracts with Investment Managers and other service providers are generally awarded for an initial term of three years, with renewal options of up to an additional 6 years. Contracts typically provide that the Board may terminate a service provider without cause on 30 days notice.

B. Manager Selection – Private Markets

NYCBERS may invest in Private Equity ⁷through direct funds or through "Fund of Funds", and may also invest in Real Estate through such vehicles or similar vehicles.

⁶ Real Estate Consultants were approved for hire by the Board December 2011, while the Private Equity Consultant was approved for hire in September 2012.

⁷ The Board has adopted Policies allowing the Fund to make direct Fund investments in alternative asset classes.

Opportunities are evaluated by BAM and the Consultants in the context of the Investment Policy Statement, and specifically the policies for alternative investments, including private equity and private real estate investments appended hereto.

Prospective Fund of Fund managers are evaluated on investment management and decision making capabilities, in particular their due diligence procedures for the selection of individual limited partnerships; organizational characteristics, including ownership and management; performance and fees. The Board may elect to retain a Private Equity Consultant or a Real Estate Consultant, as needed, to assist with investment selection and other needs. The Board selects Fund of Fund investment managers to invest at their discretion under discrete mandates, subject to investment guidelines established by BAM and the Investment Committee in conjunction with input from the investment manager.

C. Manager Selection – Economically Targeted Investments

NYCBERS 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.

The Comptroller presents the Board with quarterly reports on the status of the ETI Program. Additionally, as the ETI Program progresses, BAM periodically presents the Board with an investment plan reflecting experience and availability of investment opportunities in the market. Prospective investment opportunities are evaluated by BAM (and Consultants as appropriate) in the context of: 1) the ETI Policy; 2) the policy for the relevant asset class as stated herein; and 3) the Investment 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. The complete ETI Policy is provided in Appendix 3.

D. Manager Selection – Emerging and Developing 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 Investment Manager Selection process. Smaller Emerging Managers are typically retained pursuant to a Manager of Managers arrangement, while larger Emerging Managers (also referred to as "Developing Managers") may be retained directly. The Board implements its Emerging and Developing Manager programs through a competitive RFP process.

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 Fund. These reports shall be provided periodically in accordance with the relevant investment advisory agreement and with the Ethics and Compliance Policy of the Fund (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 X. PERFORMANCE MONITORING AND EVALUATION

A. Benchmarks

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

1. Policy and Asset Class Benchmarks

To monitor Fund performance, the Board adopts a Policy Benchmark which reflects the performance and weightings of the asset classes 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 is included in all quarterly evaluation reports of NYCBERS.

As of June 30, 2013, the composition (i.e. the asset classes and the accompanying benchmark) of the Policy Benchmark reflects the following Asset Class benchmarks:

- U.S. Equity: Russell 3000 Index
- Non-U.S. Equity: Morgan Stanley Capital EAFE Index
- Emerging Markets: MSCI Emerging Markets Free Index
- Private Equity: Russell 3000 Index + 300 basis points
- Real Estate: NFI - ODCE Index (Net) +100bps
- Core +5 Fixed Income: Citigroup Core +5 Fixed Income Index
- Enhanced Yield: Citigroup BB & B Fixed Income Index
- Leveraged Loans: Credit Suisse Leveraged Loan Index
- TIPS: Barclays Capital U.S. Inflation-Linked Index

The Board will review performance of the total Fund and each asset class relative to its selected benchmark on a quarterly basis. Additionally, 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.

2. 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 NYCBERS 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. Additional information regarding these benchmarks may be found in Appendix 1-F and -G.

B. Investment Reporting

The Board monitors the performance of the Fund and of individual Managers through ongoing monthly and quarterly reviews of performance, market developments, and Manager activities. The Board uses various⁸ reports to monitor investment information:

- A monthly and quarterly performance report produced by the Custodian under the direction of BAM, with qualitative input from BAM staff and the Consultants.

⁸ BAM rolled out a new Board package in May 2010, which includes various reports intended for the Board to monitor the Fund.

- Monthly economic reports, and
- A monthly performance review and flash report that estimates fiscal year-to-date returns, produced by BAM.

BAM and the Consultants report to the Board periodically on issues they or the Board have identified as requiring additional review through day-to-day monitoring of the markets, the institutional investment industry, and Manager communications on organizational and investment events. These reviews may result in a product or firm being placed on the Watch List, another tool by which the Board monitors the Managers. Additional details regarding performance reporting and the Watch List are provided in Appendix 1-E.

SECTION XI. RISK MANAGEMENT

The Trustees recognize 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 XII. 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. The Comptroller, on behalf of the Board, has retained a pool of transition managers to perform this service.

Transitions are to be completed in a cost-efficient manner given the characteristics of the portfolios and market conditions. Cost-efficiency for transitions is typically measured by an analysis of total implementation shortfall. Transition Managers present BAM a post-trade analysis of the transition upon completion. BAM and/or the Transition Manager present a summary analysis to the Investment Committee.

SECTION XIII. 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 equal or greater value (depending on the type of securities), 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. For each loan, the value of the securities used as collateral is marked-to-market daily and may need to be supplemented if the value falls below the agreed-upon level. 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 NYCBERS, 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 XIV. SECURITIES LITIGATION PROTOCOL

NYCBERS objectives in choosing to take an active role in securities litigation include: preservation of Fund assets and collection of all amounts due to NYCBERS; maximizing the net recovery to the class; and effecting corporate governance reforms, when appropriate. NYCBERS will use the process outlined in the Securities Litigation Protocol, (set forth in Appendix 1-I), in evaluating and acting on any situation in which securities litigation may be appropriate.

SECTION XV. INVESTMENT EXPENSES

It is the policy of the Board that expenses such as investment advisors' fees, attorneys' fees and costs, funding for Personnel and Other Than Personnel 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. BAM reviews consultant, investment advisory, and attorney fees and other costs. The Board adopts a budget to fund certain expenditures at BAM and is provided with a variance report at least annually.

SECTION XVI. PROXY VOTING POLICY AND 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; since renamed Employee Benefits Security Administration, or 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 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 NYCBERS established a Proxy Committee. The Committee promulgates proxy voting policies and procedures, and oversees NYCBERS sponsorship of shareholder proposals to improve corporate governance and corporate social responsibility of companies in which NYCBERS invests. NYCBERS adopted a "Statement of Procedures and Policies for Voting Proxies" in 1987 which is amended periodically. 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 three or five Trustees. The operations of this Committee are described in Appendix 1-J and in the above-mentioned Statement of Procedures and Policies.

SECTION XVII. 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 XVIII. REVIEW AND MODIFICATION OF THE IPS

The BERS 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 in conjunction with changes to the asset allocation policy or the major asset class policies, or at least every five years.

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

Date	Summary of Amendment or Modification
April 2009	The Board approved the restructuring of the Core+ 5 Program.
October 2009; Nov. 2010; February 2012	The Board approved several amendments to the US Equity sub-allocations and structure – including decisions on size and style mix and to terminate the SMID-cap program.
February 2011	NYS Retirement Security Law was amended to increase the amount of assets that can be invested in real property; affecting the basket clause.
December 2011	The Board voted to hire a Real Estate Consultant to provide specialised consultation for that asset class.
February 2012; March 2013???	Adopted Asset Allocation to reflect new AA approved by the Board including the addition of Leveraged Loans, updated the Board's policy expectations for the "parking places" for unfunded alternative asset classes and rebalancing ranges, and to update the cash balance limit for liquidity.
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.
April 2012	New Proxy Voting Guidelines and additional methods for communicating with the Proxy Committee were adopted by the Committee.
September 2012	The Board voted to hire a Private Equity Consultant to provide specialised consultation for that asset class.
October 2012	The Board voted to add a new allocation to Small Cap EAFE to be 10% of the total EAFE Policy allocation.

May 2009; October 2012	The Board adopted a ban on placement agents for Private Equity investments. Also adopted the updated Private Equity IPS in October 2012 - which changed the Benchmark premium over the Russell 3000 Index.
January 2013	Adopted the Real Assets IPS to include Real Estate and any other Real Asset investments, thus approving an allocation to Infrastructure. A new RE Benchmark was also added with the new Real Assets IPS. Implementation to be determined for the new infrastructure 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 1. RESPONSIBILITIES, POLICIES, AND PROCEDURES

A. Roles and Responsibilities of the New York City Comptroller

As custodian, the Office of the Comptroller, by and through the Bureau of Asset Management, performs activities including:

- Selection of one or more custody banks, including a Master Custodian for the safekeeping of NYCBERS 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 NYCBERS Chief Accountant and form the basis for the investment performance sections of the NYCBERS financial statements.
- Review, audit and processing of payments to Investment Advisors and Investment Counsel.

In its role as Investment Advisor, the Office of the Comptroller, through 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 Managers and investment partners for NYCBERS 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 NYCBERS annual ownership initiatives.
- Informs the Board of significant developments regarding NYCBERS assets.
- Implements Board investment decisions.

- Rebalances the portfolio within ranges established by the Board.
- Implements portfolio transitions to effectuate Board decisions.
- Negotiates and administers agreements with Investment Managers and investment partners on behalf of the Board.
- Directs Investment Managers to sell assets to meet NYCBERS liquidity needs, and transfers cash to NYCBERS 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 investment performance of Fund assets.

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

B. Rebalancing Process

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. A rebalancing 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.

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 overweight asset class(es) and transferring assets to the underweight 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.

C. Roles and Responsibilities of Service Providers

1. General Consultant

The Board employs a general Consultant. The responsibilities of the general Consultant include:

- Assisting the Board to create and maintain the Investment Policy Statement
- Advising the Board on the investment of NYCBERS 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.
- Monitoring the Investment Managers employed by NYCBERS 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.

2. Investment Managers

Responsibilities of external Investment Managers include:

- Arranging, ordering and monitoring the purchase and sale of securities for the System's portfolio.
- 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.
- Implementing its decisions 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.

3. Master Custodian

In addition to the responsibilities delineated in Section VIII C of the IPS, the Master Custodian is also responsible for:

- the preparation, audit and distribution of investment account reports,
- plan accounting,
- performance calculation and reporting of 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 NYCBERS,
- providing the Comptroller with the underlying data to support NYCBERS proxy voting, and
- filing class action settlement proofs of claims on NYCBERS's behalf, and collecting and posting settlements to various accounts.

D. Manager Selection for Public Markets

BAM, working with the Consultant, develops and the Investment Committee approves a Scope of Services document that defines the investment services sought, the minimum requirements for proposers, and evaluation criteria. In most instances, each RFP is developed and offered on behalf of more than one New York City Retirement System. BAM is responsible for coordinating the requirements of the Boards that are participating in the RFP and the advice of their consultants in order to issue an RFP that integrates the needs of all participating Systems. This consolidated effort provides a cost-effective means of procuring services. BAM notifies firms in BAM's data base as well as firms suggested by the Systems' consultants of the availability of the approved RFP. The RFP is also advertised in industry periodicals.

BAM, with the consultants' input, scores proposals to identify a "short list" of respondents to be interviewed based on technical proposals. At one or more meetings open to the Trustees of all System Boards, BAM and the Systems' consultants conduct interviews. BAM, utilizing any additional information obtained at the interviews and input from the consultants, ranks the finalists, and with additional input from BERS' Consultant, prepares a recommendation of finalists to the Board.

The Board may conduct interviews of each of the finalists, and, with the advice and assistance of BAM and the Consultant, selects managers and allocates assets. In making its final selection, the Board considers factors set forth in the RFP such as: the quality and depth of the Manager's investment team; the Manager's clear articulation and execution of its investment strategy, historical quarterly performance based on a Global Investment Performance Standards (GIPS) compliant composite; the risk/return profile of the Manager relative to other Managers; significant or adverse regulatory issues; and the Manager's compliance and information systems and the fees to be charged. BAM and the Consultant provide the Board appropriate analytical and comparative data to assist in this final evaluation.

BAM negotiates contracts with selected firms and funds the Managers' portfolios in accordance with the Board's mandate.

E. Manager Monitoring and Evaluation – Public Markets

1. General

Managers are to be evaluated through a formal annual account review process conducted by the Bureau of Asset Management staff. Additionally, Trustees review Manager and portfolio performance quarterly. 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 designated benchmark index and, for active managers, a comparison universe of their peers. Investment approach, styles, and other characteristics (e.g., capitalization focus for U.S. equity) are considerations in the

determination of the benchmark index, objective, and comparison universe (as further described below in the description for each investment program).

2. Performance Reporting

On a quarterly basis, the Board reviews a performance report that includes a commentary prepared by the general Consultant summarizing the recent market environment, portfolio developments and performance. The quarterly performance report also provides detailed quantitative information regarding the risk and performance of Fund 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 current 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. The Consultant and BAM review responses to the questionnaire and report material developments affecting the Fund to the Board.

3. Watch List

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

FACTOR	EVALUATION TECHNIQUE	ACTION STEPS
<u>Qualitative</u>		
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.

FACTOR	EVALUATION TECHNIQUE	ACTION STEPS
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 Manager evaluation	Require Manager to provide immediate written disclosure.	Review information to determine materiality and reasons for failure to disclose.
<u>Quantitative</u>		
Performance below expectations for rolling three-to-five years	BAM and Consultant to do quarterly review of tracking error, information ratio, other statistics and factors as necessary. Active management: should exceed benchmark plus premium net of fees Index funds: should match benchmark.	Assess reasons for underperformance and whether they are likely to persist.
Not managing to stated investment style, approach and philosophy	Manager to immediately advise of changes. Consultant to evaluate consistency through style mapping, attribution analysis, tracking error relative to benchmark, and in-depth discussions with manager.	Assess results of analysis and discussions to determine how and why manager has veered from expectations.

F. Public Markets Policies

1. U.S. Equity

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. 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. 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 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 U.S. Equity portfolio, in aggregate, is managed in a style- and size-neutral basis, and 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 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. 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. The Board retains Proxy Voting rights, which are exercised by BAM in accordance with the NYCBERS Proxy Voting policy.

Performance Objective: The total U.S. Equity portfolio is expected to marginally outperform the Russell 3000 Index Fund over a full market cycle.

Market Sector Allocations and Benchmarks⁹

	Percent of US Equity Program	Benchmark	Expected Active Return over Benchmark (gross)	Comparison Universe
Passive				
Russell 3000	67.42%	Russell 3000 Index	0 bp	N/A
S&P 400	3.75%	S&P 400 Index	0 bp	N/A
Active				Top Half of:
Large Cap Value and Growth	11.25%	Russell 1000	100 bp	TUCS Large-Cap Managers
Mid Cap	7.25%	Russell Mid-Cap	150 bp	TUCS Mid-Cap Managers
Small Cap	2.83%	Russell 2000	200 bp	TUCS Small-Cap Managers
Emerging Mgrs. (currently two mandates)	7.5%	50% Russell 3000 / 50 % Russell 2000	100 bp	TUCS Large-Cap Managers and TUCS Small-Cap Managers
Total Active	28.83%		122 bp	
Total U.S. Equity	100.0%	Russell 3000 Index	35 bp	N/A

2. Non-U.S. Equities – EAFE Markets

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. The EAFE Equity portfolio is structured to capture exposure to the broad

⁹ The Board approved several changes to the US equity allocations over the period, including adoptions in October 2009, November 2010, and February 2012.

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 100% of the EAFE allocation to external active Managers.

The EAFE Equity portfolio style allocation changes depending upon market trends and individual manager performance. By manager mandate, it is weighted 50% to value and 50% to growth styles, and, due to the structure of the EAFE index, has a large-cap bias. In October 2012, the Board added a Small Cap EAFE allocation to its portfolio, to represent 10% of the Non-US Equity allocation.

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 permitted to hedge the currency exposure to a maximum of 10% of the value of their portfolio (for defensive purposes only and not as a form of leverage). Investment in emerging equity markets is permitted to a maximum of 15% of the portfolio. 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. Proxies are voted by the Managers.

Performance Objective: The total EAFE Equity portfolio is expected to outperform the MSCI EAFE index by 250 basis points per year gross of fees over a full market cycle.

3. Non-U.S. Equities – Emerging Markets

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 Depositary Receipts (ADRs) or Global Depositary Receipts (GDRs) denominated in U.S. dollars. 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.¹⁰

Historically over long periods of time, Emerging 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 external active Managers. The Emerging Markets Equity portfolio, in the aggregate, is managed in a style-neutral

¹⁰ EM Equities and US Equities are now much more highly correlated in recent years.

basis but may change based upon market trends and individual manager performance. There are no distinct policy weights by investment style.

The Emerging Markets Equity program may be implemented through a separate account structure similar to the EAFE and U.S. Equity programs, or through a collective fund whereby the Plan's assets are commingled with other investors' assets and managed pursuant to investment guidelines developed by the fund manager. For commingled investment funds, BAM reviews the fund's investment guidelines relative to the investment philosophy, approach, characteristics, permissible and restricted securities, benchmarks and performance objectives in order to confirm that the fund is being managed in keeping with the Board's understanding of the Managers' product. Managers' use of currency hedging is determined by the fund's legal documents. Managers' allocation to cash is also determined by the fund documents. As necessary, BAM may liquidate shares of the fund to pay benefits and certain eligible system expenses, or as otherwise appropriate for rebalancing purposes.

Performance Objective: 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

4. Fixed Income: NYC Core +5 Program¹¹

Fixed income securities are bonds and other debt securities such as mortgage-backed securities, most paying interest on a current basis. The NYCBERS Fixed Income allocation consists of the Core + 5 Portfolio, the Enhanced Yield Portfolio – including an allocation to leveraged loans, the TIPS Portfolio, and the Fixed Income portion of the ETI Program. The Core +5 Program is the dominant NYCBERS Fixed Income Program, and is 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.

The Core +5 Program is currently benchmarked to a customized version of the Citigroup 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: the customized U.S. Government benchmark; the Citigroup MBS index; and the Investment Grade Credit index. The total portfolio 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.

¹¹ 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.

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 sectors and current weights (at 6/30/13) are:

- U.S. Government +5 (Treasury and Agency issues) – 18.63%
- Mortgage backed securities – 40%
- Investment Grade Credit – 41.33%

The Core +5 Program is implemented through a sector specialist program, in which external 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.

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. Broad investment parameters under which the portfolios are managed include: duration control (generally ranging from 0.5 to 1.0 year of the benchmark duration); sub-sector weighting limits (within specified ranges of the benchmark sub-sector weights); security selection, including certain securities/issuers not specifically included in the benchmark, such as unregistered securities, Global bonds, and Eurodollar bonds. Also, Domestic Corporate and Yankee Managers may invest up to 10% of the portfolio in non-investment grade securities.

As a fixed income alternative, cash equivalents are integral to managing risk in fixed income portfolios through portfolio duration. Fixed Income Managers are given wider latitude to use cash equivalents as compared with equity managers. 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. Investment Grade Credit Managers are allowed to invest up to 10% in cash. MBS Sector Managers are also allowed to invest up to 10% in cash, however at times they may hold significantly more cash to back certain widely used mortgage instruments that, by intent, experience delayed settlements. 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.

Performance Objective: The total Core +5 Program is expected to outperform the custom index over a full market cycle by 20 basis points before fees. Individual Manager performance expectations vary, as each employs a distinct approach that may be categorized as index-like, enhanced index or active.

5. Fixed Income: Enhanced Yield Program (Includes Leveraged Loans Sub-Sector)

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; and common stock may appear in traditional high yield portfolios as a result of debt restructuring. Consequently, 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.

The Enhanced Yield Program employs a variety of external Managers with active management approaches. The Program benchmark and the benchmark for most of NYCBERS Managers is the Citigroup BB & B Index. It is a subset of the 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 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), broad investment parameters under which the portfolios are managed include: 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.

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 NYCBERS 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, the Enhanced Yield Managers have been given latitude to hold cash to a maximum 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.

Performance Objective: 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 before fees.

6. Fixed Income: Leveraged Loans¹²

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

¹² In February 2012, the Board voted to adopt an allocation to Leveraged Loans (as a part of the asset allocation decision) and adopted appropriate IPS language for the new Program.

- 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.

6. Fixed Income: U.S. TIPS Program

The U.S. TIPS Program's primary purpose is to hedge inflation (as measured by the CPI - U) and, secondarily, to provide diversification. U.S. Treasury Inflation-Protected Securities are the predominant holding.

The U.S. TIPS Program is managed using only active Managers. The Program and individual Managers' benchmark is the Barclays Capital¹³ U.S. Inflation-Linked Index, which is comprised of all outstanding TIPS of the U.S. Treasury.

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 the guidelines, 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

¹³ Barclays Capital took over the Lehman Indices, after Lehman Brothers went out of business.

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. The active Managers are permitted to hold up to 20% cash.

Performance Objective: The total U.S. TIPS Program is expected to exceed the inflation rate and to outperform the Lehman Brothers U.S. TIPS Index over a full market cycle, as indicated below. Individual Manager performance expectations vary, as each employs a distinct approach. Current Active Managers are expected to exceed the index by 75 basis points before fees.

G. Alternative Investments Policies - Listing

ECONOMICALLY TARGETED INVESTMENTS POLICY; ADOPTED NOVEMBER 21, 2008. SEE APPENDIX #3 FOR THE POLICY

PRIVATE EQUITY INVESTMENTS POLICY; ADOPTED DECEMBER 12, 2012. SEE APPENDIX #4 FOR THE POLICY

REAL ASSETS EQUITY INVESTMENTS POLICY; ADOPTED JANUARY 16, 2013. SEE APPENDIX #5 FOR THE POLICY

H. Securities Litigation Protocol

1. 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 City Board of Education Retirement System ('NYCBERS'), 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.

2. Objectives

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

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

3. 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 NYCBERS and the other Funds.

4. 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.

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 serving¹⁴ as Litigation Counsel on any matter they have evaluated.

Utilizing a consultant's services as described in Part 3 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.

¹⁴ 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.

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 NYCBERS' 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 NYCBERS 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 NYCBERS? 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 NYCBERS' 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 NYCBERS and the other Funds consider seeking to serve as co-lead plaintiff with other parties?
- m. Is the suit a nuisance suit? Should NYCBERS 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 NYCBERS 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.

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 Private Securities Litigation Reform Act of 1995 (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,¹⁵ 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 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

¹⁵ In April 2013, the NYCPPF adopted a resolution to omit the requirement that evaluation counsel is not eligible to serve as litigation counsel in the same matter.

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.

5 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.

NYCBERS 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 this protocol. The Fund Counsel shall also review the Law Department’s monthly litigation report to the Trustees once it is issued.

I. Proxy Voting Policies and Procedures¹⁶

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 NYCBERS annual shareholder proposal program. The committee considers the Comptroller’s recommendations for voting proxy issues that are not covered by NYCBERS 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 adhere to the following guidelines:

¹⁶ New Proxy Voting Guidelines and additional methods for communicating with the Committee were adopted in April 2012.

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 NYCBERS 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 NYCBERS Proxy Committee.

Vote Action - Abstain

Absent enabling NYCBERS 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 Acquisitions¹⁷

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 summary¹⁸ reports to the Proxy Committee on the results of the NYCBERS shareholder proposal programs, and on votes cast by the Comptroller's Office against management director nominees.

¹⁷ New Proxy Voting Guidelines governing votes on mergers and acquisitions were adopted in April 2012.

¹⁸ Summary reports were accepted by the Committee since the Fall 2001 reporting.

APPENDIX 2. ETHICS AND COMPLIANCE POLICY

A. 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 (“SEC”), 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.

B. 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 the NYCRS Ethics and Compliance Certification form 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 SEC filings may be provided as a supplement; the firm must make full and complete disclosure in the body of the Annual Statement itself.

2. 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.

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.

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.

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.

2. Compliance with Law

Managers and Consultants, as applicable, shall further certify compliance with, and provide any disclosures required by, the following:

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.

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.

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.

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-A199. 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.

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).

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 SEC Form 8K or is yet due to file a Form ADV.

C. Non-Compliance with this Policy - Reporting Requirements

1. 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.

D. Dissemination of Policy to Consultants and Managers

1. 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.

2. 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.

APPENDIX 3. ECONOMICALLY TARGETED INVESTMENT POLICY

Purpose of Economically Targeted Investments Policy

The purpose of this Policy is to establish the parameters by which the New York City Board of Education Retirement System (“BERS,” 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.

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. BERS 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 BERS and will seek to avoid investment

programs that 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. BERS 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 expects to review this Policy periodically, as recommended by the Comptroller. In addition, the Board shall:

- Approve an investment Plan;
- 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 ETIs shall target the five boroughs of New York City (the "Targeted Areas"), such investments may additionally provide benefits to 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 BERS 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 (BERS; the New York City Police Pension Fund, Subchapter 2; the New York City Fire Department Pension Fund, Subchapter 2; the Teachers' Retirement System of the City of New York; and the New York City Employees' 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.

INVESTMENT POLICY STATEMENT

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM

Adopted

January, 2009

Amended through
June 2013

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SECTION I. PURPOSE OF THE INVESTMENT POLICY STATEMENT

This document is the Investment Policy Statement (the IPS, or the Statement) of the New York City Board of Education Retirement System (NYCBERS or the Fund). The IPS sets forth the investment objectives and philosophy of the NYCBERS investment program as adopted by the Board of Trustees (the Board), as well as its major components, procedures and policies relating to risk tolerances, liquidity needs, asset allocations and rebalancing ranges.

The structure of the IPS reflects the process for the direction of Fund assets. The Statement sets forth procedures to oversee and evaluate the overall performance of the Fund and provides a procedural framework for the Board of Trustees and the Comptroller's Bureau of Asset Management (BAM) to select, retain, monitor and evaluate the performance of Investment Managers, Consultants and others.

SECTION II. INVESTMENT POLICY ROLES

A. Board of Trustees

The Board, as a fiduciary, is responsible for the management of the Fund. The Board of Trustees may choose to operate with a committee structure to facilitate the monitoring and recommendation process. Such committees, whether for investments, proxy voting, or administrative matters, will report their findings and recommendations to the full Board for approval, as appropriate.

Responsibilities 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. passive 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 Fund assets as well as the investment activities of all Investment Managers and Investment Consultants as they affect Fund assets.
- Approve reasonable and necessary investment expenses to acquire, manage and protect Fund assets.

B. Comptroller

The Comptroller serves as custodian for NYCBERS assets. As custodian, the Comptroller, by and through the Bureau of Asset Management (BAM), performs activities such as the selection of custodial banks, the reconciliation of accounting statements, and the processing and auditing of payments to service providers.

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 Comptroller provides investment advice, implements Board decisions, and reports on investment performance. In carrying out these functions, BAM advises and reports to the Board on investment issues such as policies, strategies, and manager selection; analyzes, recommends, and votes on proxy issues; negotiates contracts; implements Board decisions; and monitors performance and market activity. In executing each of these responsibilities, BAM works closely with Consultants selected by the Board.

A full description of the Comptroller's roles as custodian and Investment Advisor is provided in the Appendix 1-A.

C. Executive Director

The Executive Director is the administrator of the Fund whose responsibilities are to:

- Analyze, evaluate, make recommendations upon, institute and maintain changes or additions in the Retirement System in such areas as Variable Annuity Program, Fixed Tax-Deferred Annuity Program, Variable Tax-Deferred Annuity Program, and any other new programs for the Retirement System.
- Coordinate the functions of the Investment Committee and the Board of Trustees to ensure the approval process is completed from the recommendation of the Investment Committee, through the approval of the full Board of Trustees, to the notification of relevant parties. This includes

changes or additions to the IPS, asset allocation, and manager selection.

- Coordinate functions of BERS, the Independent consultant and the Comptroller.

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 NYCBERS.

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 NYCBERS periodically recommends to the Board an AIR assumption, which is currently set at 78.0%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:

- Fund assets generally may be invested in mortgages, bonds, notes and other fixed income securities of U.S. and certain other issuers.
- Fund assets may be invested in public equities, including common stock, preferred stock, and investment company shares, subject to an overall limit of 70% and the following requirements:
 - Up to 70% of Fund assets may be invested in equity securities of U.S.-based publicly traded companies that are traded on a U.S. exchange.

¹ Per the Actuary's Resolution of February 2012 and subsequent legislative change.

- Up to 10% of Fund 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 105%² of Fund 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:
 - Equity real estate in excess of 105% of the market value of Fund assets.
 - Private equity investments.
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SECTION IV. INVESTMENT OBJECTIVE

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

NYCBERS 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 NYCBERS funding rates and the determination of pension liabilities. Based on the actuarial assumptions and methods recommended by the Actuary and adopted by the Board, an 78.0%³ per annum return on assets, together with employee and employer contributions, is expected to fully fund the Plan over time and 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.

² Per Legislative change to the NYS RSSL in February 2011

³ Per the Actuary's Resolution of February 2012 and subsequent legislative change.

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 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.

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 POLICY, PROCESS, AND REBALANCING

NYCBERS adopted its current Long Term Strategic Allocation (asset allocation) in ~~September 2007~~ February 2012. The ~~T~~ table below shows the adopted allocation and the approved rebalancing ranges (for the traditional asset classes) as well as the approved pacing ranges (for the alternatives asset classes) as well as the interim allocation as of September 30, 2008, 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 U.S. Domestic Equity and TIPS respectively. ~~Also provided below are the primary performance benchmarks for~~

~~each asset class.~~ Each investment program, including its objective and performance benchmark, is described in Appendix 1-G.

	Long Term	Rebalancing
	Strategic Allocation	Range

Equity Securities

U.S. Equity	35%	+/-4
Non-U.S. Equity	17	+/-2
Emerging Markets Equity	5	+/-1
Private Equity*	6	+/-1
Real Estate*	7	+/-1
Total Equity	70%	+5%

Fixed Income Securities

Core +5 Fixed-Income	17	+/-4
High Yield**	5.5	+/-1
Bank Loans**	2.5	+/-1
TIPS	5	+/-1
Total Fixed-Income	30%	+5%

	Long Term	Interim	Rebalancing
	Strategic Allocation	Allocation	Range

Equity Securities

U.S. Equity	35%	44	+/-4
Non-U.S. Equity	21	21	+/-2
Emerging Markets Equity	4	4	+/-1
Private Equity	5	1	N/A
Real Estate	5	0	N/A
Total Equity	70%	70	±5

Fixed Income Securities

Core +5 Fixed-Income	22	22	+/-4
Enhanced Yield	5	5	+/-1
TIPS	3	3	+/- 1/2%
Total Fixed-Income	30%	30	±5%

*Pacing ranges represent minimums and maximums which will be monitored to influence pacing analysis, but will not necessarily result in purchases or sales.

**The Board views Bank Loans and High Yield as one Enhanced Yield allocation; with a target allocation of 8% split between High Yield and Bank Loans

The Board reviews the asset allocation along with the underlying capital market expectations on a periodic basis. When the Board desires to conduct this review, BAM works with the NYCBERS 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 undertakes other appropriate solicitation processes to identify and select investment managers or investments, which selection is subject to Board approval.

Concurrent with the asset allocation study, the Board reviews with its Consultant the ⁴parking places for unfunded commitments in illiquid asset classes and the rebalancing/pacing the rebalancing ranges for each asset class and class component and determines and/or makes any revisions to those ranges that seem appropriate given changes in capital market conditions. The rebalancing process is further described in Appendix 1-B.

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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 balance levels ~~of the fund~~ for liquidity, are expected to remain below 54%⁵; except in unusual circumstances. although eCash may in exceed excess of 54% will require prior notification to, and approval by the Board for brief periods to meet benefit payments and rebalancing requirements.

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The stated asset allocation policy also does not present an allocation for “opportunistic” public market equity and fixed income investments, which are not typically part of traditional public equity or fixed income programs. These investments are strategies that offer the potential for higher excess returns relative to more traditional public market strategies. However, because of their variety and/or other unique characteristics, such as illiquidity, concentration, or relatively short track records, “opportunistic” investments are not considered a definable asset class. Such strategies may include, but are not limited to, activist, environmental and sustainable investments within the equity markets, private bank loans and distressed debt in the fixed income markets, and portable alpha and hedge fund investments across multiple asset classes. BAM, in coordination with

⁴ Parking places, rebalancing ranges, and pacing ranges were adopted in February 2012 as well.

⁵ Adopted by the Board as a part of the Asset Allocation rebalancing decision in February 2012.

the general consultants to all the New York City Retirement Systems, has developed a process and structure for the evaluation and inclusion of such investments for the Systems, including an overall policy. BAM and NYCBERS' Consultant will evaluate strategies for potential Opportunistic Equity and Opportunistic Fixed Income Programs with NYCBERS' unique needs in mind and will present specific recommendations, suggested allocations, objectives, and other terms to the Board as individual opportunities arise.

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.

SECTION VIII. ROLES AND RESPONSIBILITIES OF SERVICE PROVIDERS

The Board retains service providers to assist in the management of the Fund, including, but not limited to, investment managers and consultants. These providers perform in a fiduciary capacity and must exercise the requisite duties of care and loyalty to NYCBERS. A summary of the roles and responsibilities of each of these service providers follows below. Detailed descriptions are provided in Appendix 1-C.

A. General Consultant

The Board employs a general consultant. The responsibilities of the Consultant include: advising the Board on asset allocation structure, investment policies, and strategies; recommending appropriate investment providers; monitoring investment managers and products; conducting topical research on the investment markets and other Fund-related issues; presenting performance reports and research to the Board; and attending Board meetings.

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.

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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. Managers of public market securities enter into an investment advisory

agreement which requires the Manager to exercise the standard of care of an ERISA fiduciary (or any applicable higher standard). Responsibilities include investing Fund assets consistent with guidelines and risk management policies; advising BAM on capital actions; and reporting to BAM (and, as requested, to the Board) on portfolio strategy, activity, and the securities markets.

C. Master Custodian

The Comptroller is the custodian of NYCBERS assets, as well as the assets of other New York City Retirement Systems. Assets include cash (in any currency), securities, any other investment assets and earnings and profits thereon.

As Custodian, the Comptroller retains by Agreement a Master Custodian to hold and safeguard Fund assets. (In the case of certain assets such as Non-U.S. equities in commingled accounts, other custodians may be retained to serve as custodians of particular accounts.)

The Master Custodian is a fiduciary to the Comptroller and NYCBERS.

The Master Custodian provides many services. It holds and reports on Fund accounts, effects purchases and sales of the securities, operates a securities lending program for the benefit of the Fund (see Section XIII), collects income that becomes due and payable on property held in the accounts, makes payment from the accounts at the Comptroller's direction, maintains books and records to clearly identify cash, securities and other property of the Fund, and performs other reporting, performance, risk measurement and compliance monitoring functions.

D. ~~Private Equity and Real Estate~~ Specialist Consultants

NYCBERS may retain one or more ~~Specialist Private Equity or Real Estate~~ Consultants to assist in the implementation of its strategic allocations to these asset classes. Any such consultant will be required to act as a fiduciary to the Comptroller and NYCBERS. The Board has recently hired Private Equity and Real Estate Consultants⁶ in furtherance of implementing those asset classes. Their specific roles and responsibilities are further defined in the attached IPS' which were also adopted by the Board in December 2012 and January 2013 respectively.

⁶ Real Estate Consultants were approved for hire by the Board December 2011, while the Private Equity Consultant was approved for hire in September 2012.

SECTION IX. INVESTMENT MANAGERS

A. Manager Selection – Public Markets

The Board generally selects Investment Managers to manage NYCBERS assets through a competitive RFP process conducted by BAM. In selecting Managers, BAM and the Board evaluate 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.

Managers selected to manage publicly traded assets for NYCBERS must be registered investment advisers under the 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 NYCBERS.

Contracts with Investment Managers and other service providers are generally awarded for an initial term of three years, with renewal options of up to an additional 6 years. Contracts typically provide that the Board may terminate a service provider without cause on 30 days notice.

B. Manager Selection – Private Markets

NYCBERS ~~primarily may~~ invests in Private Equity ⁷through direct funds or through "Fund of Funds", and ~~is may~~ also ~~expected to~~ invest in Real Estate through such vehicles or similar vehicles. Opportunities are evaluated by BAM and the Consultants in the context of the Investment Policy Statement, and specifically the policies for alternative investments, including private equity and private real estate— ~~investments appended hereto as stated herein.~~

Prospective Fund of Fund managers are evaluated on investment management and decision making capabilities, in particular their due diligence procedures for the selection of individual limited partnerships; organizational characteristics, including ownership and management; performance and fees. The Board may elect to retain a Private Equity Consultant or a Real Estate Consultant, as needed, to assist with investment selection and other needs. The Board selects Fund of Fund investment managers to invest at their discretion under discrete mandates, subject to investment guidelines established by BAM and the Investment Committee in conjunction with input from the investment manager.

⁷ The Board has adopted Policies allowing the Fund to make direct Fund investments in alternative asset classes.

C. Manager Selection – Economically Targeted Investments

NYCBERS 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.

The Comptroller presents the Board with quarterly reports on the status of the ETI Program. Additionally, as the ETI Program progresses, BAM periodically presents the Board with an investment plan reflecting experience and availability of investment opportunities in the market. Prospective investment opportunities are evaluated by BAM (and Consultants as appropriate) in the context of: 1) the ETI Policy; 2) the policy for the relevant asset class as stated herein; and 3) the Investment 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. The complete ETI Policy is provided in Appendix 3.

D. Manager Selection – Emerging and Developing 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 Investment Manager Selection process. Smaller Emerging Managers are typically retained pursuant to a Manager of Managers arrangement, while larger Emerging Managers (also referred to as "Developing Managers") may be retained directly. The Board implements its Emerging and Developing Manager programs through a competitive RFP process.

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 Fund. These reports shall be provided periodically in accordance with the relevant investment advisory agreement and with the Ethics and Compliance Policy of the Fund (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 X. PERFORMANCE MONITORING AND EVALUATION

A. Benchmarks

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

1. Policy and Asset Class Benchmarks

To monitor Fund performance, the Board adopts a Policy Benchmark which reflects the performance and weightings of the asset classes to which the Board has allocated assets. Because of the allocations to new asset classes in ~~September 2003 and September 2007~~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 is included in all quarterly evaluation reports of NYCBERS.

As of ~~September-June 30, 2007~~2013, the composition (i.e. the asset classes and the accompanying benchmark) of the Policy Benchmark reflects ~~the "Interim Allocations" appearing in Section VI, Asset Allocation, and~~ the following Asset Class benchmarks:

- U.S. Equity: Russell 3000 Index
- Non-U.S. Equity: Morgan Stanley Capital EAFE Index
- Emerging Markets: MSCI Emerging Markets Free Index
- Private Equity: Russell 3000 Index + ~~3500~~ basis points
- Real Estate: NFI - ODCE Index (Net) +100bps~~NCREIF NPI + 100 bps (preliminary)~~
- Core +5 Fixed Income: NYC-Citigroup Core +5 Fixed Income Index
- Enhanced Yield: Citigroup BB & B Fixed Income Index
- Leveraged Loans: Credit Suisse Leveraged Loan Index
- TIPS: Lehman-Barclays Capital U.S. TIPSInflation-Linked Index

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The Board will review performance of the total Fund and each asset class relative to its selected benchmark on a quarterly basis. Additionally, 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.

2. 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 NYCBERS 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. Additional information regarding these benchmarks may be found in Appendix 1-F and -G.

B. Investment Reporting

The Board monitors the performance of the Fund and of individual Managers through ongoing monthly and quarterly reviews of performance, market developments, and Manager activities. -The Board uses ~~two primary~~⁸ various reports to monitor investment information:

- A monthly and quarterly performance report produced by the Custodian under the direction of BAM, with qualitative input from BAM staff and the Consultants.
- Monthly economic reports, and
- A monthly performance review and flash report that estimates fiscal year-to-date returns, produced by BAM.

BAM and the Consultants report to the Board periodically on issues they or the Board have identified as requiring additional review through day-to-day monitoring of the markets, the institutional investment industry, and Manager communications on organizational and investment events. These reviews may result in a product or firm being placed on the Watch List, another tool by which the Board monitors the Managers. Additional details regarding performance reporting and the Watch List are provided in Appendix 1-E.

SECTION XI. RISK MANAGEMENT

The Trustees recognize 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

⁸ BAM rolled out a new Board package in May 2010, which includes various reports intended for the Board to monitor the Fund.

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 XII. 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. The Comptroller, on behalf of the Board, has retained a pool of transition managers to perform this service.

Transitions are to be completed in a cost-efficient manner given the characteristics of the portfolios and market conditions. Cost-efficiency for transitions is typically measured by an analysis of total implementation shortfall. Transition Managers present BAM a post-trade analysis of the transition upon completion. BAM and/or the Transition Manager present a summary analysis to the Investment Committee.

SECTION XIII. 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 equal or greater value (depending on the type of securities), 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. For each loan, the value of the securities used as collateral is marked-to-market daily and may need to be supplemented if the value falls below the agreed-upon level. 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 NYCBERS, 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 XIV. SECURITIES LITIGATION PROTOCOL

NYCBERS objectives in choosing to take an active role in securities litigation include: preservation of Fund assets and collection of all amounts due to NYCBERS; maximizing the net recovery to the class; and effecting corporate governance reforms, when appropriate. NYCBERS will use the process outlined in the Securities Litigation Protocol, (set forth in Appendix 1-I), in evaluating and acting on any situation in which securities litigation may be appropriate.

SECTION XV. INVESTMENT EXPENSES

It is the policy of the Board that expenses such as investment advisors' fees, attorneys' fees and costs, funding for Personnel and Other Than Personnel 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. BAM reviews consultant, investment advisory, and attorney fees and other costs. The Board adopts a budget to fund certain expenditures at BAM and is provided with a variance report at least annually.

SECTION XVI. PROXY VOTING POLICY AND /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; since renamed Employee Benefits Security Administration, or 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 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 NYCBERS established a Proxy Committee. The Committee promulgates proxy voting policies and procedures, and oversees NYCBERS sponsorship of shareholder proposals to improve corporate governance and corporate social responsibility of companies in which NYCBERS invests. NYCBERS adopted a “Statement of Procedures and Policies for Voting Proxies” in 1987 which is amended periodically. 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 three or five Trustees. The operations of this Committee are described in Appendix 1-J and in the above-mentioned Statement of Procedures and Policies.

SECTION XVII. 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~~~~appended hereto as Appendix 2~~) 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 XVIII. REVIEW AND MODIFICATION OF THE IPS

The BERS 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 in conjunction with changes to the asset allocation policy or the major asset class policies, or at least every five years.

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

<u>Date</u>	<u>Summary of Amendment or Modification</u>
<u>April 2009</u>	<u>The Board approved the restructuring of the Core+ 5 Program.</u>
<u>October 2009; Nov. 2010; February 2012</u>	<u>The Board approved several amendments to the US Equity sub-allocations and structure – including decisions on size and style mix and to terminate the SMID-cap program.</u>
<u>February 2011</u>	<u>NYS Retirement Security Law was amended to increase the amount of assets that can be invested in real property; affecting the basket clause.</u>
<u>December 2011</u>	<u>The Board voted to hire a Real Estate Consultant to provide specialised consultation for that asset class.</u>
<u>February 2012; March 2013???</u>	<u>Adopted Asset Allocation to reflect new AA approved by the Board including the addition of Leveraged Loans, updated the Board's policy expectations for the "parking places" for unfunded alternative asset classes and rebalancing ranges, and to update the cash balance limit for liquidity.</u>
<u>February 2012</u>	<u>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.</u>
<u>April 2012</u>	<u>New Proxy Voting Guidelines and additional methods for communicating with the Proxy Committee were adopted by the Committee.</u>
<u>September 2012</u>	<u>The Board voted to hire a Private Equity Consultant to provide specialised consultation for that asset class.</u>
<u>October 2012</u>	<u>The Board voted to add a new allocation to Small Cap EAFE to be 10% of the total EAFE Policy allocation.</u>
<u>May 2009; October 2012</u>	<u>The Board adopted a ban on placement agents for Private Equity investments. Also adopted the updated Private Equity IPS in October 2012 - which changed the Benchmark premium over the Russell 3000 Index.</u>
<u>January 2013</u>	<u>Adopted the Real Assets IPS to include Real Estate and any other Real Asset investments, thus approving an allocation to Infrastructure. A new RE Benchmark was also added with the new Real Assets IPS. Implementation to be determined for the new infrastructure asset class.</u>
<u>April 2013</u>	<u>The Board adopted a resolution to omit the requirement that evaluation counsel cannot serve as litigation counsel in the same matter, thus</u>

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	<u>amending the Securities Litigation Protocol.</u>
<u>May 2013</u>	<u>The Board approved the expansion of the ETI Public/Private Apartment Rehabilitation Program to include additional NYS Counties.</u>

APPENDIX 1. RESPONSIBILITIES, POLICIES, AND PROCEDURES

A. Roles and Responsibilities of the New York City Comptroller

As custodian, the Office of the Comptroller, by and through the Bureau of Asset Management, performs activities including:

- Selection of one or more custody banks, including a Master Custodian for the safekeeping of NYCBERS 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 NYCBERS Chief Accountant and form the basis for the investment performance sections of the NYCBERS financial statements.
- Review, audit and processing of payments to Investment Advisors and Investment Counsel.

In its role as Investment Advisor, the Office of the Comptroller, through 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 Managers and investment partners for NYCBERS 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 NYCBERS annual ownership initiatives.
- Informs the Board of significant developments regarding NYCBERS assets.
- Implements Board investment decisions.

- Rebalances the portfolio within ranges established by the Board.
- Implements portfolio transitions to effectuate Board decisions.
- Negotiates and administers agreements with Investment Managers and investment partners on behalf of the Board.
- Directs Investment Managers to sell assets to meet NYCBERS liquidity needs, and transfers cash to NYCBERS 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 investment performance of Fund assets.

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

B. Rebalancing Process

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. A rebalancing 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.

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 overweight asset class(es) and transferring assets to the underweight 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.

C. Roles and Responsibilities of Service Providers

1. General Consultant

The Board employs a general Consultant. The responsibilities of the general Consultant include:

- Assisting the Board to create and maintain the Investment Policy Statement
- Advising the Board on the investment of NYCBERS 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.
- Monitoring the Investment Managers employed by NYCBERS 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.

2. Investment Managers

Responsibilities of external Investment Managers include:

- Arranging, ordering and monitoring the purchase and sale of securities for the System's portfolio.
- 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.
- Implementing its decisions 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.

3. Master Custodian

In addition to the responsibilities delineated in Section VIII C of the IPS, the Master Custodian is also responsible for:

- the preparation, audit and distribution of investment account reports,
- plan accounting,
- performance calculation and reporting of 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 NYCBERS,
- providing the Comptroller with the underlying data to support NYCBERS proxy voting, and
- filing class action settlement proofs of claims on NYCBERS's behalf, and collecting and posting settlements to various accounts.

D. Manager Selection for Public Markets

BAM, working with the Consultant, develops and the Investment Committee approves a Scope of Services document that defines the investment services sought, the minimum requirements for proposers, and evaluation criteria. In most instances, each RFP is developed and offered on behalf of more than one New York City Retirement System. BAM is responsible for coordinating the requirements of the Boards that are participating in the RFP and the advice of their consultants in order to issue an RFP that integrates the needs of all participating Systems. This consolidated effort provides a cost-effective means of procuring services. BAM notifies firms in BAM's data base as well as firms suggested by the Systems' consultants of the availability of the approved RFP. The RFP is also advertised in industry periodicals.

BAM, with the consultants' input, scores proposals to identify a "short list" of respondents to be interviewed based on technical proposals. At one or more meetings open to the Trustees of all System Boards, BAM and the Systems' consultants conduct interviews. BAM, utilizing any additional information obtained at the interviews and input from the consultants, ranks the finalists, and with additional input from BERS' Consultant, prepares a recommendation of finalists to the Board.

The Board may conduct interviews of each of the finalists, and, with the advice and assistance of BAM and the Consultant, selects managers and allocates assets. In making its final selection, the Board considers factors set forth in the RFP such as: the quality and depth of the Manager's investment team; the Manager's clear articulation and execution of its investment strategy, historical quarterly performance based on a Global Investment Performance Standards (GIPS) compliant composite; the risk/return profile of the Manager relative to other Managers; significant or adverse regulatory issues; and the Manager's compliance and information systems and the fees to be charged. BAM and the Consultant provide the Board appropriate analytical and comparative data to assist in this final evaluation.

BAM negotiates contracts with selected firms and funds the Managers' portfolios in accordance with the Board's mandate.

E. Manager Monitoring and Evaluation – Public Markets

1. General

Managers are to be evaluated through a formal annual account review process conducted by the Bureau of Asset Management staff. Additionally, Trustees review Manager and portfolio performance quarterly. 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 designated benchmark index and, for active managers, a comparison universe of their peers. Investment approach, styles, and other characteristics (e.g., capitalization focus for U.S. equity) are considerations in the

determination of the benchmark index, objective, and comparison universe (as further described below in the description for each investment program).

2. Performance Reporting

On a quarterly basis, the Board reviews a performance report that includes a commentary prepared by the general Consultant summarizing the recent market environment, portfolio developments and performance. The quarterly performance report also provides detailed quantitative information regarding the risk and performance of Fund 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 current 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. The Consultant and BAM review responses to the questionnaire and report material developments affecting the Fund to the Board.

3. Watch List

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

FACTOR	EVALUATION TECHNIQUE	ACTION STEPS
<u>Qualitative</u>		
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.

FACTOR	EVALUATION TECHNIQUE	ACTION STEPS
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 Manager evaluation	Require Manager to provide immediate written disclosure.	Review information to determine materiality and reasons for failure to disclose.
<u>Quantitative</u>		
Performance below expectations for rolling three-to-five years	BAM and Consultant to do quarterly review of tracking error, information ratio, other statistics and factors as necessary. Active management: should exceed benchmark plus premium net of fees Index funds: should match benchmark.	Assess reasons for underperformance and whether they are likely to persist.
Not managing to stated investment style, approach and philosophy	Manager to immediately advise of changes. Consultant to evaluate consistency through style mapping, attribution analysis, tracking error relative to benchmark, and in-depth discussions with manager.	Assess results of analysis and discussions to determine how and why manager has veered from expectations.

F. Public Markets Policies

1. U.S. Equity

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. 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. 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 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 U.S. Equity portfolio, in aggregate, is managed in a style- and size-neutral basis, and 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 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. 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. The Board retains Proxy Voting rights, which are exercised by BAM in accordance with the NYCBERS Proxy Voting policy.

Performance Objective: The total U.S. Equity portfolio is expected to marginally outperform the Russell 3000 Index Fund over a full market cycle.

Market Sector Allocations and Benchmarks⁹

	Percent of US Equity Program	Benchmark	Expected Active Return over Benchmark (gross)	Comparison Universe
Passive				
Russell 3000	67.0 <u>67.042</u> %	Russell 3000 Index	0 bp	N/A
<u>S&P 400</u>	<u>3.75%</u>	<u>S&P 400 Index</u>	<u>0 bp</u>	<u>N/A</u>
Active				Top Half of:
Large Cap Value and Growth	11.25 <u>11.25</u> %	Russell 1000	100 bp	TUCS Large-Cap Managers
Mid Cap	7.25 <u>7.25</u> %	Russell Mid-Cap	150 bp	TUCS Mid-Cap Managers
Small/Mid Cap	2.665 %	Russell 2500	175 bp	TUCS Small-Mid Cap Mgrs.
Small Cap	2.83 5 %	Russell 2000	200 bp	TUCS Small-Cap Managers
Emerging Mgrs. (currently two mandates)	7.5%	56 0% Russell 3000 / 54 0 % Russell 2000	65 <u>100</u> bp	TUCS Large-Cap Managers and TUCS Small-Cap Managers
Total Active	30.028 <u>30.028</u> <u>3</u> %		1 224 <u>22</u> bp	
Total U.S. Equity	100.0%	Russell 3000 Index	35 <u>4</u> bp	N/A

⁹ The Board approved several changes to the US equity allocations over the period, including adoptions in October 2009, November 2010, and February 2012.

2. Non-U.S. Equities – EAFE Markets

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. 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 100% of the EAFE allocation to external active Managers.

The EAFE Equity portfolio style allocation changes depending upon market trends and individual manager performance. By manager mandate, it is weighted 50% to value and 50% to growth styles, and, due to the structure of the EAFE index, has a large-cap bias. In October 2012, the Board added a Small Cap EAFE allocation to its portfolio, to represent 10% of the Non-US Equity allocation.

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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 permitted to hedge the currency exposure to a maximum of 10% of the value of their portfolio (for defensive purposes only and not as a form of leverage). Investment in emerging equity markets is permitted to a maximum of 15% of the portfolio. 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. Proxies are voted by the Managers.

Performance Objective: The total EAFE Equity portfolio is expected to outperform the MSCI EAFE index by 250 basis points per year gross of fees over a full market cycle.

3. Non-U.S. Equities – Emerging Markets

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 Depositary Receipts (ADRs) or Global Depositary Receipts (GDRs) denominated in U.S. dollars. 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.~~¹⁰

Historically over long periods of time, Emerging 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 external active Managers. 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. There are no distinct policy weights by investment style.

The Emerging Markets Equity program may be implemented through a separate account structure similar to the EAFE and U.S. Equity programs, or through a collective fund whereby the Plan's assets are commingled with other investors' assets and managed pursuant to investment guidelines developed by the fund manager. For commingled investment funds, BAM reviews the fund's investment guidelines relative to the investment philosophy, approach, characteristics, permissible and restricted securities, benchmarks and performance objectives in order to confirm that the fund is being managed in keeping with the Board's understanding of the Managers' product. Managers' use of currency hedging is determined by the fund's legal documents. Managers' allocation to cash is also determined by the fund documents. As necessary, BAM may liquidate shares of the fund to pay benefits and certain eligible system expenses, or as otherwise appropriate for rebalancing purposes.

Performance Objective: 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

4. Fixed Income: NYC Core +5 Program¹¹

Fixed income securities are bonds and other debt securities such as mortgage-backed securities, most paying interest on a current basis. The NYCBERS Fixed Income allocation consists of the Core + 5 Portfolio, the Enhanced Yield Portfolio ~~– including an allocation to leveraged loans~~, the TIPS Portfolio, and the Fixed Income portion of the ETI Program. The Core +5 Program is the dominant NYCBERS Fixed Income Program, and is 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.

¹⁰ ~~EM Equities and US Equities are now much more highly correlated in recent years.~~

¹¹ ~~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.~~

The Core +5 Program is currently benchmarked to a customized version of the Citigroup 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 ~~four-three~~ sectors: the customized U.S. Government benchmark; the Citigroup MBS index; ~~the customized Domestic Corporate index~~; and the Yankee Investment Grade Credit index ~~(also known as the non-U.S. BIG index)~~. The total portfolio 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 sectors and current weights (at 6/30/13) are:

- U.S. Government +5 (Treasury and Agency issues) – ~~20~~18.63%
- Mortgage backed securities – ~~48~~40%
- ~~Domestic corporate bonds~~Investment Grade Credit – ~~24~~41.33%
- ~~Yankee bonds (U.S. dollar-denominated foreign, including Canadians and Supranationals)~~ – ~~8~~8%

The Core +5 Program is implemented through a sector specialist program, in which external 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. ~~On or about July 2009, the Program is expected to be modified by combining the Domestic Corporate and Yankee bond sectors and establishing a new benchmark index for that combination.~~

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. Broad investment parameters under which the portfolios are managed include: duration control (generally ranging from 0.5 to 1.0 year of the benchmark duration); sub-sector weighting limits (within specified ranges of the benchmark sub-sector weights); security selection, including certain securities/issuers not specifically included in the benchmark, such as unregistered securities, Global bonds, and Eurodollar bonds. Also, Domestic Corporate and Yankee Managers may invest up to 10% of the portfolio in non-investment grade securities.

As a fixed income alternative, cash equivalents are integral to managing risk in fixed income portfolios through portfolio duration. Fixed Income Managers are given wider latitude to use cash equivalents as compared with equity managers. 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~~Investment Grade Credit Managers are allowed to invest

up to 10% in cash. MBS Sector Managers are also allowed to invest up to 10% in cash, however at times they may hold significantly more cash to back certain widely used mortgage instruments that, by intent, experience delayed settlements. 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.

Performance Objective: The total Core +5 Program is expected to outperform the custom index over a full market cycle by 20 basis points before fees. Individual Manager performance expectations vary, as each employs a distinct approach that may be categorized as index-like, enhanced index or active.

5. Fixed Income: Enhanced Yield Program (Includes Leveraged Loans Sub-Sector)

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; and common stock may appear in traditional high yield portfolios as a result of debt restructuring. Consequently, 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.

The Enhanced Yield Program employs a variety of external Managers with active management approaches. The Program benchmark and the benchmark for most of NYCBERS Managers is the Citigroup BB & B Index. It is a subset of the 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 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), broad investment parameters under which the portfolios are managed include: 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.

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 NYCBERS 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, the Enhanced Yield Managers have been given latitude to hold cash to a maximum 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.

Performance Objective: 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 before fees.

6. Fixed Income: Leveraged Loans¹²

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

¹² In February 2012, the Board voted to adopt an allocation to Leveraged Loans (as a part of the asset allocation decision) and adopted appropriate IPS language for the new Program.

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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

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.

6. Fixed Income: U.S. TIPS Program

~~The U.S. TIPS Program's is the newest NYCBERS fixed income program and one of the smallest. Its~~ primary purpose is to hedge inflation (as measured by the CPI - U) and, secondarily, to provide diversification. U.S. Treasury Inflation-Protected Securities are the predominant holding.

The U.S. TIPS Program is managed using only active Managers. The Program and individual Managers' benchmark is the Lehman-Barclays Capital¹³ U.S. TIPS-Inflation-Linked Index, which is comprised of all outstanding TIPS of the U.S. Treasury.

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 the guidelines, 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. The active Managers are permitted to hold up to 20% cash.

Performance Objective: The total U.S. TIPS Program is expected to exceed the inflation rate and to outperform the Lehman Brothers U.S. TIPS Index over a full market cycle, as indicated below. Individual Manager performance expectations vary, as each employs a distinct approach. Current Active Managers are expected to exceed the index by 75 basis points before fees.

G. Alternative Investments Policies - ListingPrivate Markets

1. Private Equity

~~Private Equity 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. Private Equity 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. The Board has approved a separate allocation to Real Estate; as such, this category of investment will not be considered an element of the Private Equity Investment Program. Risk arbitrage, commodities and derivatives are examples of the more liquid alternative asset types and are not included in the current investment program.~~

~~*Objectives of Private Equity Investment*~~

~~The System has mandated investments in Private Equity to increase the diversification of its overall portfolio. By investing in asset classes with higher returns and relatively lower correlations to the performance of the public markets, such as Private Equity, the~~

¹³ Barclays Capital took over the Lehman Indices, after Lehman Brothers went out of business.

~~System can reduce the volatility and increase the risk-adjusted returns of the overall portfolio. The financial objective of the program is to earn at least 500 bps net excess return above the Russell 3000 Index over very long term horizons, typically rolling 10-year periods.~~

~~Structure of Private Equity Program~~

~~The Private Equity Program is managed predominantly utilizing a “fund of funds” approach. The Managers (which collectively refers to the general partners or advisers of the funds of funds) are expected to diversify the investments across a variety of other private partnerships (“sub-partnerships”), to be determined by the contractual terms of the partnership agreement or Manager contract, as well as the availability of appropriate opportunities that will allow the program to reach its return objective. While the quality of the partners and deals of the sub-partnerships must be at least institutional quality (e.g., appropriate for pension plans under ERISA), the average size of the underlying partnerships is expected to be relatively small by many institutional standards so that NYCBERS may take advantage of opportunities that represent top quartile returns according to the rankings of Thomson Venture Economics’ Investment Benchmark Reports. NYCBERS encourages the use of “emerging managers” as it does for the public markets investment programs.~~

~~Overall asset allocation of the program is expected to reflect a U.S. bias, diversified by buyouts, venture capital, mezzanine debt, special situations, and other opportunities, with a lesser position in non-U.S. markets.~~

~~NYCBERS seeks 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. The investments anticipated by the principals will not have the potential of eliminating public sector jobs, i.e., cause the loss of more than a *de minimus* number of public sector jobs, and will apply to investments made after the effective date hereof, and will apply at the time of investment.~~

~~The Board of Trustees recognizes it might take several years to achieve the target exposure to private equity that it authorized in 2007, as commitments to some vehicles, particularly private partnerships, are drawn down over time. Therefore, the Program’s interim allocations by type of investment or strategy and number of Managers may not reflect the diversification level desired or that achieved in a mature Program.~~

~~Actual total return of private equity investments is difficult to determine until the end of a partnership’s life as interim valuations of non-marketable securities tend to be subjective and difficult to verify. In the interim, qualitative evaluations, similar in nature to those used for public markets Managers, are a significant factor during shorter periods. Additionally, the general partners’ and/or Managers’ ability to generate deal flow and their due diligence procedures for sub-partnerships are critical.~~

2. Private Real Estate

Private Real Estate Investments are equity participations in real property and other real estate related investments. The Board has also defined this asset class to include Real Estate Investment Trusts ("REITs"), which are expected to be owned through public stock and, possibly, private stock.

Objectives of Private Real Estate Investment

The System has mandated investments in Private Real Estate to increase the diversification of its overall portfolio. By investing in asset classes with relatively lower correlations to the performance of the public markets, such as Private Real Estate, the System can reduce the volatility and improve the risk-adjusted returns of the overall portfolio. Secondary objectives of the program include serving as a hedge against inflation and providing long-term income-based returns. The financial objective of the program is to exceed the performance of the National Council of Real Estate Investment Fiduciaries' (NCREIF) National Property Index (NPI) by 100 basis points over rolling 5 year periods.

Private Real Estate, compared to public real estate held through REITs, has more favorable diversification benefits versus most other asset classes, so private holdings are expected to be the predominant holding in the portfolio. To the extent the Board chooses to invest in REITs, a blended benchmark of the NPI and the FTSE NAREIT Equity REIT Index will be developed as a secondary benchmark.

Controlling risk in the Program is as important as obtaining the desired risk-adjusted returns. The Fund will follow prudent risk management policies that will manage the risk through control over the investment process and investment vehicles and will ensure prudent diversification by property type, geographic location, investment strategy and by manager.

Structure of Real Estate Program

The Private Real Estate Program will be managed predominantly utilizing a "fund of funds" approach. NYCBERS seeks to hire providers that offer investment in real estate through fund of funds, manager of manager funds, commingled real property funds, limited partnerships, and combination REIT and real property funds (collectively referred to as Managers). Individual, direct property investments will not be considered.

The Managers of the selected investment vehicles are expected to diversify the investments across a variety of properties, other managers, funds, or other interests, to be determined by the contractual terms of the partnership agreement, fund documents, or manager contract, as well as the availability of appropriate opportunities that will allow the program to reach its return objective.

The overall investment allocation of the program, looking through the structures to the underlying investments, is expected to be predominantly direct properties (over 60%) through equity ownership. The Board, with the assistance of BAM and the Consultant, may achieve this objective by retaining Managers that, by mandate, maintain this level, and/or by retaining a combination of more narrowly defined "specialty" Managers that in combination will achieve this level of direct property ownership.

For each of the four traditional property types (Office, Retail, Industrial, Multifamily) and for each of the primary NCREIF Property Index (NPI) regions (East, West, Midwest, South) the Program is expected to be invested such that the overall Program weighting will be within a range of the NPI weighting for such property type or region of $\pm 30\%$. The four property types are, in the aggregate, expected to represent at least 85% of the total real estate portfolio. The aggregate holding of other property types is expected to be limited to no more than 15% of the total portfolio. This category may include hotel, health care, and specialized property types, whether held directly or through specialty REITs.

The Trustees will balance the use of various types of properties, products and/or strategies defined by their expected returns in order to meet Program objectives. "Core" properties/products/strategies are defined to be those providing a relatively stable return, such as investments in operating and substantially leased assets of institutional quality in traditional property types. The Trustees may also consider an allocation to enhanced or higher return/higher risk "value" or "opportunistic" investments. These may include funds of funds and properties with greater leverage, non-U.S. properties, properties requiring value-added activities (such as re-positioning), or private equity-based real estate funds, and are expected to generate enhanced or higher returns than core properties. Each of the two components, core and value/opportunistic, is expected to range from 40-60% of the Program.

Additional program characteristics and requirements, including the appropriate property size and an allowance for leverage will be determined by the Trustees with the assistance of BAM and the Consultant as the RFP search process proceeds.

NYCBERS seeks 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, bring public or regulatory scrutiny or cause the loss of public sector jobs. NYCBERS encourages the submission of proposals for review from proposers that demonstrate a strong commitment to diversity in their firms.

The Board of Trustees recognizes it might take several years to achieve the target exposure to private real estate that it authorized in 2007 to the extent that partnerships are among the selected investments, as commitments to partnerships are drawn down

over time. Therefore, the Program's interim allocations by property type, geography, et cetera, may exceed the target market value exposure of a mature Program.

H. Economically Targeted Investment Policy

The Economically Targeted Investment Policy for the New York City Board of Education Retirement System is appended hereto (Appendix 3). This investment policy may be amended from time to time as necessary.

ECONOMICALLY TARGETED INVESTMENTS POLICY; ADOPTED NOVEMBER 21, 2008. SEE APPENDIX #3 FOR THE POLICY

PRIVATE EQUITY INVESTMENTS POLICY; ADOPTED DECEMBER 12, 2012. SEE APPENDIX #4 FOR THE POLICY

REAL ASSETS EQUITY INVESTMENTS POLICY; ADOPTED JANUARY 16, 2013. SEE APPENDIX #5 FOR THE POLICY

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HI. Securities Litigation Protocol

1. 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 City Board of Education Retirement System ('NYCBERS'), 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.

2. Objectives

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

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

- 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.

3. 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 NYCBERS and the other Funds.

4. 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.

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

serving¹⁴ as Litigation Counsel on any matter they have evaluated ~~thus removing the financial incentives that might bias a firm's recommendation to pursue litigation.~~

Utilizing a consultant's services as described in Part 3 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.

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:

¹⁴ 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.

- 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 NYCBERS' 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 NYCBERS 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 NYCBERS? 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 NYCBERS' 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 NYCBERS and the other Funds consider seeking to serve as co-lead plaintiff with other parties?
- m. Is the suit a nuisance suit? Should NYCBERS 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 NYCBERS 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.

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 Private Securities Litigation Reform Act of 1995 (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, ~~who did not~~¹⁵including 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 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.

5 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

¹⁵ In April 2013, the NYCPFP adopted a resolution to omit the requirement that evaluation counsel is not eligible to serve as litigation counsel in the same matter.

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.

NYCBERS 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 this protocol. The Fund Counsel shall also review the Law Department's monthly litigation report to the Trustees once it is issued.

1. Proxy Voting Policies and Procedures¹⁶

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 NYCBERS annual shareholder proposal program. The committee considers the Comptroller's recommendations for voting proxy issues that are not covered by NYCBERS 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 adhere to 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 NYCBERS Proxy Committee.

¹⁶ New Proxy Voting Guidelines and additional methods for communicating with the Committee were adopted in April 2012.

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 NYCBERS Proxy Committee.

Vote Action - Abstain

Absent enabling NYCBERS 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 Acquisitions¹⁷

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~~

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¹⁷ New Proxy Voting Guidelines governing votes on mergers and acquisitions were adopted in April 2012.

~~acquisitions, the Comptroller's Office shall consult Investment Managers of NYCBERS 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 financial Advisor.~~

Reports to the Trustees

The Comptroller's Office shall submit annual summary¹⁸ reports to the Proxy Committee on the results of the NYCBERS shareholder proposal programs, and on votes cast by the Comptroller's Office against management director nominees.

¹⁸ Summary reports were accepted by the Committee since the Fall 2001 reporting.

APPENDIX 2. ETHICS AND COMPLIANCE POLICY

A. 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 (“SEC”), 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.

B. 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 the NYCRS Ethics and Compliance Certification form 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 SEC filings may be provided as a supplement; the firm must make full and complete disclosure in the body of the Annual Statement itself.

2. 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.

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.

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.

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.

2. Compliance with Law

Managers and Consultants, as applicable, shall further certify compliance with, and provide any disclosures required by, the following:

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.

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.

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.

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-A199. 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.

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).

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 SEC Form 8K or is yet due to file a Form ADV.

C. Non-Compliance with this Policy - Reporting Requirements

1. 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.

D. Dissemination of Policy to Consultants and Managers

1. 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.

2. 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.

APPENDIX 3. ECONOMICALLY TARGETED INVESTMENT POLICY

Purpose of Economically Targeted Investments Policy

The purpose of this Policy is to establish the parameters by which the New York City Board of Education Retirement System (“BERS,” 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.

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. BERS 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 BERS and will seek to avoid investment

programs that 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. BERS 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 expects to review this Policy periodically, as recommended by the Comptroller. In addition, the Board shall:

- Approve an investment Plan;
- 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 ETIs shall target the five boroughs of New York City (the "Targeted Areas"), such investments may additionally provide benefits to 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 BERS 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 (BERS; the New York City Police Pension Fund, Subchapter 2; the New York City Fire Department Pension Fund, Subchapter 2; the Teachers' Retirement System of the City of New York; and the New York City Employees' 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.

NYC Board of Education Retirement System
Private Equity Update - Investment Policy Statement (dated January, 2009)

APPENDIX 1. RESPONSIBILITIES, POLICIES, AND PROCEDURES

G. Private Markets

1. Private Equity

Private Equity 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. Private Equity 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. The Board has approved a separate allocation to Real Estate; as such, this category of investment will not be considered an element of the Private Equity Investment Program. Risk arbitrage, commodities and derivatives are examples of the more liquid alternative asset types and are not included in the current investment program.

Objectives of Private Equity Investment

The System has mandated investments in Private Equity to increase the diversification of its overall portfolio. By investing in asset classes with higher returns and relatively lower correlations to the performance of the public markets, such as Private Equity, the System can reduce the volatility and increase the risk-adjusted returns of the overall portfolio.

The performance objective of the program is to earn at least 300 basis points net excess return above the Russell 3000 Index (one quarter lag) over very long-term horizons, typically rolling 10-year periods.

Structure of Private Equity Program

NYCBERS 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. The System 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 NYCBERS from liability in excess of the amounts invested. 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. The Program may, from time to time, use funds of funds or Managers with discretionary mandates to accomplish investment strategies and activities.

NYCBERS encourages the use of “emerging managers” as it does for the public markets investment programs.

NYC Board of Education Retirement System Private Equity Update - Investment Policy Statement (dated January, 2009)

Overall asset allocation of the program is expected to reflect a U.S. bias, diversified by buyouts, venture capital, mezzanine debt, special situations, and other opportunities, with a lesser position in non-U.S. markets.

NYCBERS seeks 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 a reputational risk to investors or bring public or regulatory scrutiny other than that which is required by law or regulation to consummate an investment transaction. The investments anticipated by the principals will not have the potential of eliminating public sector jobs, i.e., cause the loss of more than a *de minimus* number of public sector jobs, and will apply to investments made after the effective date hereof, and will apply at the time of investment.

The Board of Trustees recognizes it might take several years to achieve the target exposure to private equity that it authorized in 2007, as commitments to some vehicles, particularly private partnerships, are drawn down over time. Therefore, the Program's interim allocations by type of investment or strategy and number of Managers may not reflect the diversification level desired or that achieved in a mature Program.

Actual total return of private equity investments is difficult to determine until the end of a partnership's life as interim valuations of non-marketable securities tend to be subjective and difficult to verify. In the interim, qualitative evaluations, similar in nature to those used for public markets Managers, are a significant factor during shorter periods. Additionally, the general partners' and/or Managers' ability to generate deal flow and their due diligence procedures for sub-partnerships are critical.

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 \$50 million. The 15% (or \$50 million) limit does not apply to a fund of funds manager or a separate account.

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM

REAL ASSETS INVESTMENT POLICY

Proposed: December 21, 2012
Adopted January 16, 2013

I. SCOPE

The Real Assets Investment Policy Statement (the “IPS”) applies to the Real Assets Program within the New York City Board of Education Retirement System (“BERS” 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 BERS. 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 BERS 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 7% (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 Plan¹;
- 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

BERS retains consultants (the "Real Asset Consultants") to assist in the implementation of its strategic allocation to Real Assets. BERS may retain different consultants for each component Real 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 BERS 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 BERS'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 BERS 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;
 - Periodic and real-time reports on developments at and performance of individual investments in the BERS 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-urgent² matters requiring an exception to this IPS will be addressed at the next scheduled BERS 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 matters³ (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 BERS investment meeting.

³ Urgent matters are defined as those requiring an affirmative decision by the Board prior to the next scheduled BERS 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. 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 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.

- Core Plus Real Estate Investments. 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. 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.

E. 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.

F. 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.

G. 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.

H. 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.

I. 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

BERS 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 net of fees 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.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.⁵ 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, government regulation or concessions, and generate a reliable income stream. These

⁴ 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")

⁵ Per BERS's Core IPS dated January, 2009

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 Infrastructure Investment opportunities that emerge over the market cycle. Non-Core 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 or 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 B. 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 BERS 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 BERS, 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 BERS 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.

APPENDICES:

Basket Clause

BERS- BASKET/NON BASKET SUMMARY

As of July 31st, 2013

	Adjusted Fund Policy			Fund Actual (PE & RE on an invested basis)		
	Non Basket*	Basket*	Total	Non Basket*	Basket*	Total
Equity						
Domestic Equity	42.6%	0.0%	42.6%	43.7%	0.0%	43.7%
Non-U.S. Equity	10.0%	12.0%	22.0%	10.0%	12.7%	22.7%
Private Equity	0.0%	2.9%	2.9%	0.0%	2.9%	2.9%
Real Estate	2.5%	0.0%	2.5%	2.5%	0.0%	2.5%
Total Equity	55.1%	14.9%	70.0%	56.2%	15.6%	71.8%
Fixed Income						
Core+5	16.5%	0.5%	17.0%	15.1%	0.5%	15.6%
<i>U.S. Gov't Sector</i>	3.2%	0.0%	3.2%	2.4%	0.0%	2.4%
<i>Mortgage Sector</i>	6.7%	0.0%	6.7%	6.6%	0.0%	6.6%
<i>Credit Sector</i>	6.5%	0.5%	7.0%	6.6%	0.5%	7.1%
High Yield	5.0%	0.6%	5.5%	5.1%	0.4%	5.5%
Bank Loans	0.0%	2.5%	2.5%	0.0%	2.2%	2.2%
TIPS	4.5%	0.5%	5.0%	3.4%	0.4%	3.8%
Other Fixed Income	0.0%	0.0%	0.0%	1.1%	0.0%	1.1%
Total Fixed Income	26.0%	4.1%	30.0%	24.7%	3.5%	28.2%
Total Fund	81.0%	19.0%	100.0%	80.9%	19.1%	100.0%

Remaining Capacity

6.0%

5.9%

* Note: Basket amounts are estimates

Liquidity Analysis

BERS Liquidity Profile - Static Analysis

9/11/13

AUM as of July 31, 2013

	Current MV	Liquid Assets		
		Today	1 Year	2 Years
Domestic Equity	\$1,570	\$1,570	\$1,570	\$1,570
International Equity	647	647	647	647
Emerging Markets	168	168	168	168
Private Equity	105	0	0	0
Private Real Estate	88	0	0	0
Core + 5	561	561	561	561
TIPS	136	136	136	136
Enhanced Yield	197	197	197	197
Bank Loans	79	79	79	79
ETI	16	3	15	15
Cash	24	24	24	24
Total Assets	\$3,592	\$3,385	\$3,397	\$3,397
Total Illiquid \$		\$207	\$195	\$195
Total Illiquid %		5.7%	5.4%	5.4%
Unfunded PE Commitments	\$168			
Unfunded RE Commitments	13			
Unfunded OFI Commitments	0			
Total commitments \$	\$182			
Total commitments %	5.1%			

BERS Liquidity Profile - Static Analysis

9/11/13

AUM as of July 31, 2013

Denominator Effect - Decrease AUM by One-Third

Total Illiquid \$	\$207	\$195	\$195
Total Illiquid %	8.6%	8.1%	8.1%

Note: Assumes zero realizations, no new commitments and a five-year investment period; funded out of liquids

	Current MV	Liquid Assets		
		Today	1 Year	2 Years
Total Assets	\$3,592	\$3,385	\$3,397	\$3,397

Private Equity, Real Estate and Opportunistic Fixed Income Stress Case

Unfunded PE Commitments Drawn	\$34	\$67
Unfunded RE Commitments Drawn	3	5
Unfunded OFI Commitments Drawn	0	0
Total commitments \$	\$36	\$73
Total commitments %	1.0%	2.0%

Total Illiquid \$	\$231	\$268
Total Illiquid %	6.4%	7.5%

Note: Assumes zero realizations, no new commitments and a five-year investment period; funded out of liquids

Denominator Effect - Decrease AUM by One-Third

Total Illiquid \$	\$207	\$231	\$268
Total Illiquid %	8.6%	9.7%	11.2%

Note: Assumes zero realizations, no new commitments and a five-year investment period; funded out of liquids