

#### THE CITY OF NEW YORK OFFICE OF THE COMPTROLLER 1 CENTRE STREET

NEW YORK, N.Y. 10007-2341

Scott M. Stringer COMPTROLLER

# NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM

**INVESTMENT MEETING** 

MARCH 20, 2014

**LOCATION**:

1 Pennsylvania Plaza Manhattan, NY 10119

#### NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM

#### **INVESTMENT MEETING**

#### MARCH 20, 2014

#### PUBLIC AGENDA

		Page
I.	Performance Reviews: (30 Minutes)	
	<ul> <li>Quarterly Review/Annual Review – December 31, 2013</li> </ul>	
	(To be distributed)	~~~
	• ETI Quarterly Report – December 31, 2013	5
	<ul> <li>Private Equity Quarterly Report – September 30, 2013</li> </ul>	12
	<ul> <li>Real Estate Quarterly Report – September 30, 2013</li> </ul>	38
II.	January Monthly Performance Review: (30 Minutes)	49
III.	Risk Presentation: (15 Minutes)	71

#### APPENDICES:

•	Basket Clause	78
•	Liquidity Analysis	80

PUBLIC AGENDA

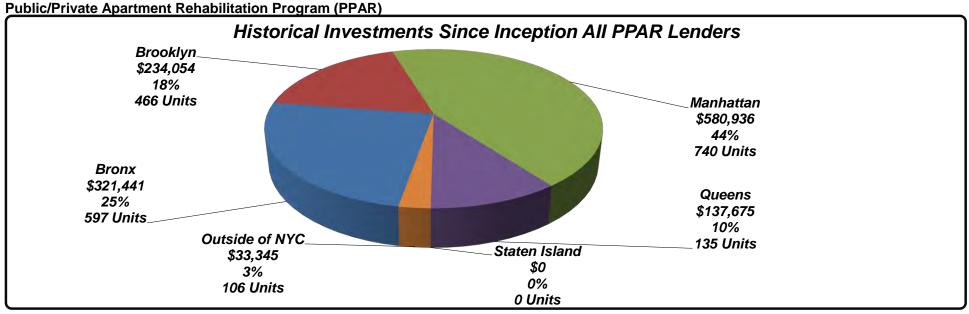
I. Performance Reviews/ Quarterly Reports:

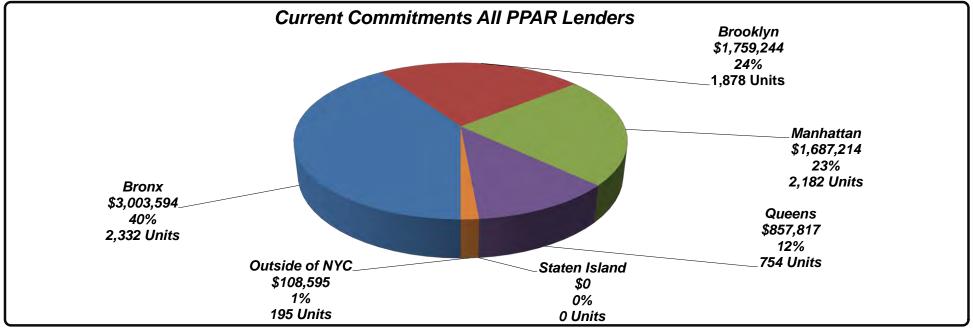
ETI Quarterly Report

Public/Private Apartme	nt Rehabilitat	ion Pro	gram (PPAR)	)														
Lenders*	BOA		CCD		<u>CFSB</u>		CPC		<u>JPM</u>		<u>LIIF</u>		NCBCI		<u>NHS</u>		All Lender To	otals
	Dollars	Units	Dollars Ur	nits	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units	Dollars	Units
Contractual Commitments	\$4,000,000	n/a	\$4,000,000	n/a	\$1,000,000	n/a	\$4,000,000	n/a	\$5,000,000	n/a	\$4,000,000	n/a	\$1,000,000	n/a	\$1,000,000	n/a	\$24,000,000	n/a
Commitments 4Q 13																		
(included in total)																		
Bronx	\$0	0	\$0	0	\$0	0	\$25,625	66	\$571,200	264	\$0	0	\$0	0	\$0	0	\$596,825	330
Brooklyn	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manhattan	0	0	68,850	1	0	0	12,006	66	0	0	0	0	0	0	0	0	80,856	67
Queens	Ö	Ó	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Staten Island	Ö	Ó	0	Ó	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outside of NYC	0	Ó	0	Ó	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		_		-		-												
Total	\$0	0	\$68,850	1	\$0	0	\$37,631	132	\$571,200	264	\$0	0	\$0	0	\$0	0	\$677,681	397
Delivered 4Q 13																		
(included in total)																		
Bronx	\$0	0	\$236,000	290	\$0	0	\$13,819	135	\$0	0	\$0	0	\$0	0	\$0	0	\$249,819	425
Brooklyn	0	0	. ,	0	0	0	44,729	168	0	0	0	0	0	0	0	0	44,729	168
Manhattan	0	0	0	0	0	0	3,675	9	8,100	47	0	0	0	0	0	0	11,775	
Queens	90,000	65	0	Ó	0	0	0	0	0	0	0	0	0	0	0	0	90,000	
Staten Island	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0
Outside of NYC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	\$90,000	65	\$236,000	290	\$0	0	\$62,223	312	\$8,100	47	\$0	0	\$0	0	\$0	0	\$396,323	714
Total Commitments																		
Bronx	\$262,500	60	\$269,480	86	\$0	0	\$262,517	970	\$1,945,647	1,099	\$263,450	117	\$0	0	\$0	0	\$3,003,594	2,332
Brooklyn	278,535	54	247,120 °	128	0	0	386,684	1,317	225,138	137	564,576	188	57,190	54	0	0	1,759,244	1,878
Manhattan	0	0	103,650	31	0	0	368,231	1,486	269,403	232	786,162	280	159,769	153	0	0	1,687,214	2,182
Queens	662,952	174	0	0	0	0	140,865	484	54,000	96	0	0	0	0	0	0	857,817	754
Staten Island	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outside of NYC	0	0	0	0	0	0	108,595	195	0	0	0	0	0	0	0	0	108,595	195
																		ŀ
Total	\$1,203,987	288	\$620,250	245	\$0	0	\$1,266,892	4,452	\$2,494,188	1,564	\$1,614,188	585	\$216,959	207	\$0	0	\$7,416,464	7,341
<u>Historical Investments</u>																		
Bronx	\$0	0	,	366	\$0	0	\$31,941	231	\$0	0		0	\$0	0	\$0	0	\$321,441	597
Brooklyn	0	0		124	0	0	44,729	168	0	0	,	174	0	0	0	0	234,054	
Manhattan	0	0	133,258	253	161,181	197	6,575	19	8,100	47	168,505	101	103,318	123	0	0	580,936	
Queens	90,000	65	40,000	54	0	0	7,675	16	0	0	0	0	0	0	0	0	137,675	135
Staten Island	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Outside of NYC	0	0	0	0	0	0	33,345	106	0	0	0	0	0	0	0	0	33,345	106
Total	\$90,000	65	\$543,874	797	\$161,181	197	\$124,265	540	\$8,100	47	\$276,714	275	\$103,318	123	\$0	^	\$1,307,452	2 044
Total *Lenders:	\$90,000 Bank of	03	Citibank Communit		Carver Feder	_	The Community	540	JP Morgan		Dow Incom		NCB Capital Im	_	Neighborhoo	U U	φ1,307,432	2,044
Lenuers.	Bank of		Citibalik Collimunit	y	Carver reder	aı	THE Community		Jr worgan	•	LOW INCOM		NCD Capital Im	μασι	iveigi iborno	, u		

America Development Savings Bank Preservation Corporation Investment Fund Housinging Services

BERS
Economically Targeted Investments Quarterly Report



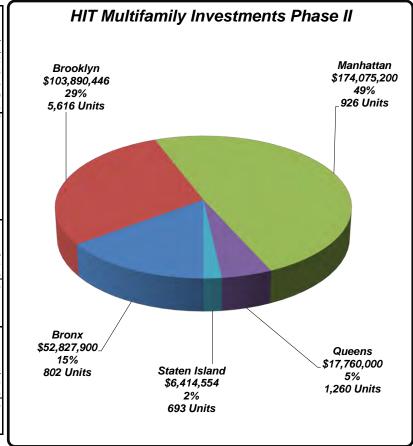


AFL-CIO Housing Investment Trust (HIT)

Market Value \$11.5 million\*

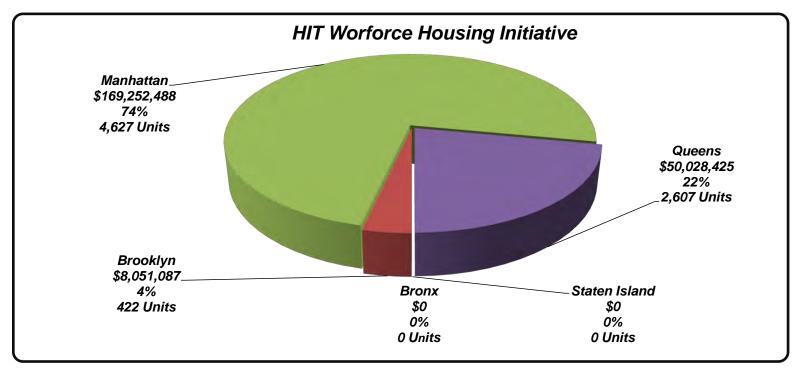
NYC Community Investment Initiative (NYCCII)

WTO Community investment initiativ	<del>0 (11.001.)</del>			
NYCCII Phase II 2006-2013				
Multifamily Investments Detail				
		Investments		Housing Units
<u>Borough</u>	4 Q Investments	Since Inception	<b>4Q Housing Units</b>	Since Inception
Bronx	\$0	\$52,827,900	0	802
Brooklyn	0	103,890,446	0	5,616
Manhattan	0	174,075,200	0	926
Queens	0	17,760,000	0	1,260
Staten Island	0	6,414,554	0	693
Total	\$0	\$354,968,100	0	9,297
Grand Total NYCCII Phase II	\$354,968,100			
NYCCII Phase I 2002 - 2005				
	<u>Dollars</u>	<u>Units</u>	Member Loans	Total All NYC PF's
Multifamily Investments	\$249,123,500	12,337	n/a	n/a
HIT Home Investments	348,300,563	n/a	12	446
Total NYCCII Phase I	\$597,424,063	12,337	12	446
NYCCII Phases I & II				
	Dollars	<u>Units</u>	Member Loans	Total All NYC PF's
Multifamily Investments	\$604,091,600	21,634	n/a	n/a
HIT Home Investments	2,899,899,500	n/a	12	446
Grand Total NYCCII Phases I & II	\$3,503,991,100	21,634	12	446



<sup>\*</sup>Interest is reinvested

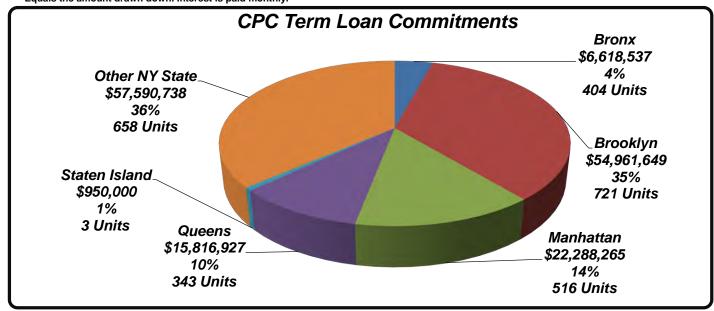
AFL-CIO Housing Investment Trust (HIT) NYC Workforce Housing Initiative 2009-2014								
Investments Thre	Investments Through 12/31/2013							
Workforce Inves	tments Detail							
		lavesta ente		Haveine Heita				
Porough	4Q Investments	Investments Since Inception	4Q Housing Units	Housing Units Since Inception				
<u>Borough</u>			4Q Housing Units	Since inception				
Bronx	\$0	\$0	0	O				
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				



CPC Term Loan	
Commitments All Lenders as of 3Q	\$116,445,065
4Q Paydown	-\$15,809,688
Commitments All Lenders as of 4Q	\$100,635,377
BERS Commitment Share/Market Value* as of 3Q 2013	\$582,267
4Q Paydown	-\$27,521
BERS Commitment Share/Market Value* as of 4Q 2013	\$554,746

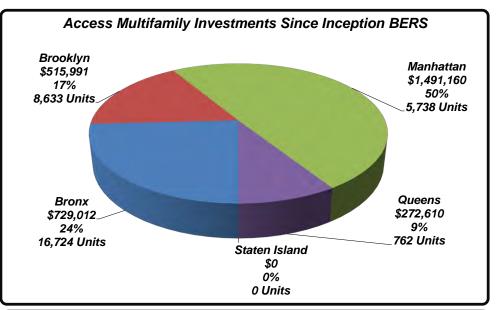
	# Loa	ns	\$ Committ	ed (MM)	# Res. Unit	# Comm. Units		
	3Q	4Q	3Q	4Q	3Q	4Q	3Q	4Q
Bronx	12	11	\$9.3	\$6.6	443	404	21	17
Brooklyn	29	23	71.9	55.0	871	721	22	19
Manhattan	24	22	17.9	22.3	548	516	20	17
Queens	5	4	16.4	15.8	78	343	3	3
Staten Island	1	1	1.0	1.0	3	3	0	0
Grand Total NYC	71	61	\$116.4	\$100.6	1,943	1,987	66	56
Other NY State	25	20	\$59.3	\$57.6	721	658	15	11

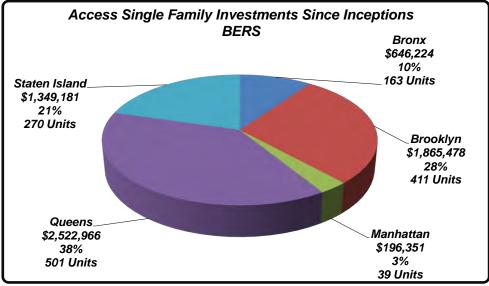
<sup>\*</sup>Equals the amount drawn down. Interest is paid monthly.



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

\$7.0 million Allocated (2.34% of total acco	unt)						
Market Value \$4.9 million							
Multifamily Investments Detail	4Q	Total	4Q	Total			
	\$ Invested	(MMs)	Total Uni	<u>ts</u>			
Bronx	\$0.0	\$0.7	0	16,724			
Brooklyn	0.0	0.5	0	8,633			
Manhattan	0.4	1.5	1,689	5,738			
Queens	0.0	0.3	0	762			
Staten Island	0.0	0.0	0	0			
Total BERS Multifamily Investments	\$0.4	\$3.0	1,689	31,857			
Multifermily Total All Contains	64.0	£400.6	4.000	24.057			
MultifamilyTotal All Systems	\$1.8	\$128.6	1,689	31,857			
Single Family Investments Detail	4Q	Total	4Q	Total			
	\$ Invested		Total Uni				
Bronx	0.12	\$0.6	32				
Brooklyn	0.24	1.9	50	411			
Manhattan	0.27	0.2	5	39			
Queens	0.45	2.5	86	501			
Staten Island	0.31	1.3	56	270			
Total BERS Single Family Investments	\$1.4	\$6.6	229	1,384			
Single Family Total All Systems	\$49.0	\$281.2	229	1,384			
Other Investments Detail	4Q	Total	40	Total			
Gara myodanomo Botan	\$ Invested		# of Loar				
Bronx	\$0.0	\$0.02	0	1			
Brooklyn	0.0	0.13	0	8			
Manhattan	0.0	0.06	0	5			
Queens	0.0	0.01	0	3			
Staten Island	0.0	0.00	0	0			
Total BERS Other Investments	\$0.0	\$0.21	0	0			
Other InvestmentsTotal All Systems	\$0.0	\$9.0	0	17			
outer invostments rotal All Oystellis	Ψ0.0	Ψ5.0		- ''			
Grand Total BERS	\$1.8	\$9.8					
Grand Total All Systems	\$50.8	\$418.8					
Orana rotal All Oyotomo	ψου.υ	ψ-10.0					





Private Equity Quarterly Report





**SEPTEMBER 30, 2013** 

ALTERNATIVE INVESTMENT REPORT

# NYC Board of Education Retirement System

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Third Quarter 2013 Report

Content
Section 1 – Market Update
Section 2 – Portfolio Update
Section 3 – Portfolio Assessment
Appendix A – Glossary of Terms
Appendix B – Disclosure Statements

### Section 1:

**Market Update** 

#### Third Quarter 2013 Report

#### The Private Equity Market

#### Introduction

Macroeconomic themes continue to meaningfully impact the private markets landscape. In the United States GDP has increased over each quarter, unemployment has slowly but steadily decreased to 7.0% as of November 2013, and the S&P 500 has risen over 25% year to date. There have been some issues along the way, such as the government shut down over the fiscal budget as well as what effects the impending tapering of the Federal Reserve's bond buying programs will have but overall, the economy has performed strongly through 2013. The Eurozone has been a different story. The region hasn't sustained any meaningful GDP growth in quite some time; 3Q13 GDP grew just 0.1% over the same period a year ago. Meanwhile, unemployment remains at its highest level in over a decade.

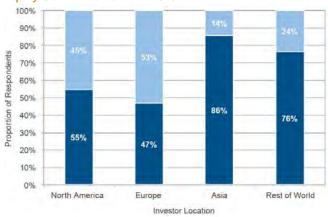
Private equity has had a very strong year. Fundraising, investor allocations, and distributions are all up. Though below the record levels just prior to the Global Financial Crisis, fundraising remains on pace to finish the year above the industry's ten year average. Investors are increasing allocations to the asset class, seeking above average returns over longer time horizons as uncertainty looms as to when the bull market in public equities will end. All the while, general partners are distributing some of the highest levels of cash on record.

In 3Q13, 187 funds held final closes for an aggregate total of \$89.0 billion, a decrease of \$52.0 billion relative to 2Q13. Despite the decrease, general partners have raised 21% more capital year to date than as of the same quarter end last year and are on pace to have the highest fundraising year following the Global Financial Crisis. Total buyout deal value decreased slightly from 2Q13, totaling \$60.6 billion for the quarter. The buyouts of Neiman Marcus Inc. and Hub International Limited were the largest deals completed during 3Q13 whose combined deal size totaled \$10.4 billion. Exit activity, after spiking during 2Q13, leveled off totaling \$63.0 billion for 3Q13.

#### Increasing Allocations

Investors have been increasing their allocations to private equity throughout 2013. Investors outside of North America and Europe have been driving these increases. According to a Preqin June 2013 Investor Survey, 86% of Asian investors and 76% of investors outside of North America, Europe, and Asia responded stating they have made new commitments during 2013. Furthermore, 38% of investors from Asia and regions outside of North America, Europe and Asia plan to increase their allocation to private equity in the next twelve months. 33% of North American investors and 25% of European investors plan on doing the same.

Chart 1: Proportion of Investors that made new Private Equity Commitments in H1 2013



■ Made New Commitments in H1 2013 ■ Did Not Make New Commitments in H1 2013

Source: Preqin Quarterly Update: Private Equity, Q3 2013

A key driver for the increase in investors' allocations has been the performance of the asset class. Investor sentiment toward private equity returns is the highest it's been in the last four years, with 86% surveyed by Preqin stating their private equity returns either met or exceeded their expectations. With uncertainty looming as to whether the strong performance of the public markets will carry over into 2014, investors are looking for above average long term gains. As a result, they have turned to private equity given its outperformance of public indices over the long term.

The current bull run of the public markets has also been a large driver of increased allocations. Many investors have experienced tremendous gains in the public equity portions of their portfolios over the one-year and three-year time horizons. With these gains, they have had to increase their allocations to other asset classes to maintain their planned levels of diversification. Consequently, private markets have benefited from this portfolio rebalancing.

#### **Private Equity Performance**

Over the longer time horizons, private equity has continued to provide above average returns with lesser volatility relative to other asset classes. As shown in Chart 2, over the one-year and three-year horizons, public equities have outperformed or been relatively equal given the current bull market the industry has experienced as part of the economic recovery. However, private equity has generated returns above that of the public indices over the five-year and ten-year periods.

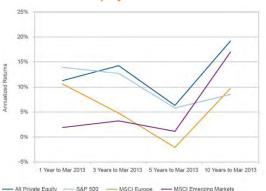
<sup>&</sup>lt;sup>1</sup> Bureau of Labor Statistics

<sup>&</sup>lt;sup>2</sup> Eurostat November 2013

<sup>&</sup>lt;sup>3</sup> Pregin Quarterly Update: Private Equity, Q3 2013

#### Third Quarter 2013 Report

Chart 2: Private Equity vs. Public Indices IRRs



Source: Preqin Quarterly Update: Private Equity, Q3 2013

According to the Hamilton Lane Fund Investment Database, private equity as a whole has outperformed the S&P 500 and MSCI World indices by 560 bps and 570 bps, respectively, over the ten-year time horizon. This outperformance has been accompanied with volatility levels 40 bps and 290 bps below that of both indices.

Chart 3: 10 Year Returns and Volatility

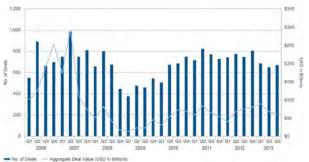
IRR	Volatility*
12.9%	17.6%
13.8%	16.9%
14.9%	23.4%
7.5%	13.6%
12.5%	19.9%
14.0%	28.7%
7.3%	18.0%
7.2%	20.5%
	12.9% 13.8% 14.9% 7.5% 12.5% 14.0%

\*Using desmoothing process correcting for 1-period autocorrelation Source: Hamilton Lane Fund Investment Database (October 2013) Note: All returns calculated in local fund currency

#### Deal Activity Remains Slow

The deployment of capital has been slower than the last several years as general partners are more cautious given increases in deal prices and their worry about the macro fundamentals. In 3Q13, 674 deals closed for a total of \$60.6 billion representing a slight increase in the number of deals closed, but a decline in total deal value.

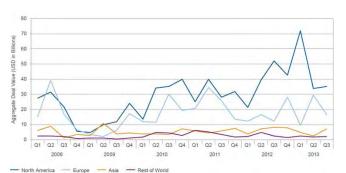
Chart 4: Quarterly Number and Aggregate Value of Private Equity-Backed Buyout Deals Globally



Source: Preqin Quarterly Update: Private Equity, Q3 2013

Geographically, North America has been the primary driver of global buyout deal value having closed on \$35.0 billion during 3Q13. However, excluding the large spike of \$52.4 billion in total deal value resulting from the buyouts of Dell Inc. and H.J. Heinz Company in 1Q13, North American aggregate buyout deal value has been well below deal value from 2012. Higher purchase multiples have been a big driver of this flat line in activity not only in North America, but globally. Multiples remain above long term averages and it appears that general partners are showing some discipline and trying to avoid overpriced deals.

Chart 5: Quarterly Aggregate Value of Private Equity-Backed Buyout Deals



Source: Pregin Quarterly Update: Private Equity, Q3 2013

Outside of North America, activity has been mixed. The Eurozone still faces great economic uncertainty, and as a result, European deal value has seemingly risen then fallen with each crisis that arises in the region, as displayed above. Asia experienced a slight increase in deal value from 2Q13, while deal value outside of North America, Europe, and Asia has been flat throughout the recovery.

#### **Private Equity Fundraising**

In 3Q13, 187 private equity funds reached a final close raising an aggregate \$89.0 billion in capital. Though this is the fewest number of funds to reach a final close in a quarter since 1Q10, 617 funds have held final closes year to date, raising \$314.0 billion in capital. This is about 21% greater than the \$260.0 billion raised as of the same quarter end in the previous year. The fundraising environment is improving for general partners, but remains challenging. There are a record 1,990 funds in market fundraising in a time where it takes managers an average of over 18 months to close, the longest duration of the recovery. Investors are increasing their allocations, but they are being very selective about which strategies and what markets they invest in. There were also fewer first time funds during the quarter; 35 first time funds closed on \$4.3 billion in capital compared to 41 first time funds who closed on \$6.9 billion in capital during 2Q13.4

The general partners who are fundraising have had better success in reaching their target fund size than in recent years. As shown in Chart 6, of the funds closed in Q3 2013, 76% either met or exceeded their targeted fund size. This is the highest

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<sup>&</sup>lt;sup>4</sup> Preqin Quarterly Update: Private Equity, Q3 2013

#### Third Quarter 2013 Report

percentage of funds to meet or exceed their targeted fund size in the last five years.

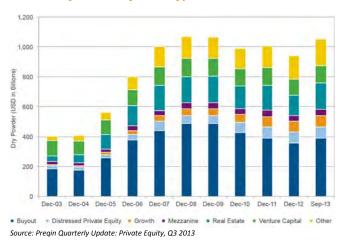
Chart 6: Fundraising Success of Closed Private Equity Funds



#### The Old Overhang Issue

During 3Q13, dry powder in the private industry has risen to levels not seen since the Global Financial Crisis. This is partly attributable to the increases in fundraising, but general partners are also deploying the lowest amounts of capital since the crisis. As shown below, buyout funds are the highest holders of dry powder as of September 30, 2013 having the ability to call \$389.0 billion in capital.

**Chart 7: Dry Powder by Fund Type** 



The significant NAV overhang of dry powder has not yet had any noticeable effect on returns thus far. General partners have been distributing record levels of cash to investors in 2013, but expressed as a percentage of NAV, distributions are at about

their historic average. Obviously, the record levels of distributions are a positive for investors. However, a potential issue may arise if general partners display an inability to turn NAV into cash. Median investment holding time is already at a record high of 5.95 years. <sup>6</sup> If general partners continue to lengthen the time between investment and realization, returns will diminish. As stated last quarter, we believe it's most likely too early to tell whether this will be a positive or negative for investors over the longer term.

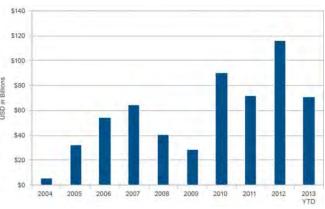
Chart 8: Quarterly Rate of Distributions as a percentage of NAV



Source: Hamilton Lane Fund Investment Database, Preqin (October 2013)
Note: Data is extrapolated up to the industry level based on Hamilton Lane's known sample

#### **Debt Markets**

Chart 9: Volume of Sponsored High-Yield Bond Issuances



Source: S&P Capital IQ September 2013/KKR September 2013

High-Yield bond issuances continued their pace toward one of the highest totaling years in the past decade. The majority of 3Q13 issuances went towards dividend recapitalizations, and refinancing as borrowers continued to push out the 2014 maturity wall. As of December 31, 2010, \$174.0 billion in loans were due in 2014. Over 93% of this amount has been refinanced to now where only \$11.0 billion is due in 2014. The maturities have been pushed out to the years 2017 through 2019 in which over \$124.0 billion in loans will be due in each of those years.<sup>7</sup>

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<sup>&</sup>lt;sup>5</sup> Hamilton Lane Investment Database (October 2013)

<sup>&</sup>lt;sup>6</sup> Pitchbook 2H2013

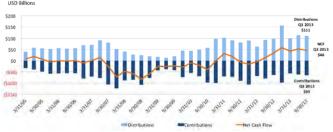
<sup>&</sup>lt;sup>7</sup> S&P Capital IQ September 2013/KKR September 2013

#### Third Quarter 2013 Report

#### **Drop Off in Exit Activity**

Exit activity during 3Q13 dropped off following the large spike during 2Q13. There were 293 private equity backed exits totaling \$63.0 billion during 3Q13, representing a 30% decrease in exit value quarter-over-quarter. Despite this fall off, general partners have continued to distribute record levels of cash to investors. Currently, this year's total distributions are on pace to be the highest in the history of the asset class. As shown below, private equity funds distributed \$111.0 billion in cash to investors, the third highest quarter ever.

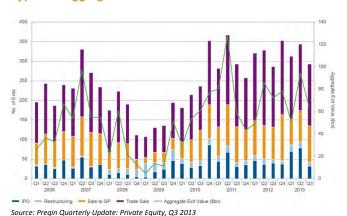
**Chart 10: Hamilton Lane Net Cash Flow Chart** 



Source: Hamilton Lane Fund Investment Database (October 2013) Note: Data is extrapolated up to the industry level based on Hamilton Lane's known sample

Trade sales and sales to general partners have been the dominant forms of exit for funds. IPOs have also been more popular compared to years past. Year to date, there have been 180 IPOs, which is on pace to be the most in any year following the Global Financial Crisis. The most high profile and anticipated IPO of the year was Twitter, Inc. Shares were first offered at \$26.00 a share and as of early December 2013 were trading closer to \$50.00 a share. As a result, the early venture capital investors have achieved in excess of a 30.0x return on their Twitter Inc. holdings alone.

Chart 11: Global Number of Private Equity Backed Exits by Type and Aggregate Exit Value

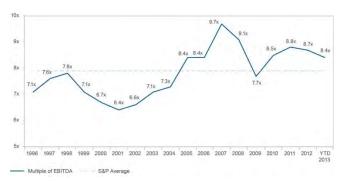


#### <sup>8</sup> Preqin Quarterly Update: Private Equity, Q3 2013

#### **GP Sentiment**

Purchase price multiples have continued to decline during the economic recovery, a trend we noted last quarter as rarely seen in private equity during economic recoveries. Despite the declines, purchase prices multiples still remain above their historical average creating an expensive environment for general partners to find attractive deals.

Chart 12: Average Purchase Price Multiples of All LBOS



Source: S&P LCD M&A Stats September 2013

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#### Third Quarter 2013 Report

#### Market Spotlight: Student Housing

#### **History and Ownership**

Student housing properties first originated as "mom and pop" local operations that were comprised of large houses and smaller apartments scattered in and around university campuses. In the late 1980's and early 1990's, multifamily and military housing developers started entering the market, creating the first "purpose built" off-campus student housing product. In the early 2000's, the industry matured, evolving into higher quality construction, "by the bed" leasing and the inclusion of services and amenities tailored towards students. In the early 2000's, the sector's first REITs started going public and student housing began to draw attention from capital markets. Despite the entrance of sophisticated institutional investors into the sector, it remains large and highly fragmented.

#### Types of Student Housing

On-campus student housing has traditionally been comprised of dormitory-style, university-owned and managed properties. However, given university budget constraints, some universities are entering into public-private partnerships ("PPPs") with private firms to develop purpose-built student housing properties on campus. For developers, such partnerships can reduce risk and provide access to otherwise unattainable locations. While for the university, a PPP allows it to leverage the developer's expertise and also reduce a project's impact on the university's debt capacity. Conversely, off-campus student housing is generally located no more than five miles away from campus. Properties that are not walking distance from campus often provide transportation to the student via a private or university shuttle. Each type of student housing property has a different price point. Ideally, a university has a variety of options that cater to different demographics and price points, rather than experiencing oversupply in a specific type.

#### Fundamentals and Unique Characteristics

Student housing units are leased on a per-bed basis, rather than a per-unit basis as with conventional multifamily properties, resulting in many more leases to execute and manage. Leases typically require parental cosigners to guarantee the lease payments and provide security deposits. Lease terms generally vary between 9 to 12 months, while conventional multifamily leases are 12 months. Typically, pre-leasing for the coming school year begins in October and most student housing is leased during a narrow window of time. Pre-leasing before the end of the academic year is crucial, as students are still on campus and un-leased space will likely not be leased until the following year. Therefore, for development projects, accurate delivery timing is very important, or else vacancies may exist until the following academic year. Although unit turnover during the year is low, generally only 30% to 40% of students renew leases. Therefore, constant marketing efforts to new tenants are of high importance.

In terms of location, each university campus has its own perception of what is and what is not close and convenient to campus. This can be based on natural barriers, neighborhood safety or other factors that may not be apparent on a map.

Some student housing types are able to have locations further away from campus and still attract residents with desirable amenities, provided that there are transportation options for getting to and from campus easily and safely.

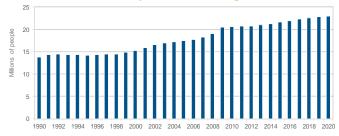
In addition to being fully furnished, many student housing facilities come with cable television, wireless, high-speed internet access, washers and dryers, security, fitness centers, computer centers, study rooms, etc. Typically, students prefer bed-bath-parity (a bathroom for each bed). In addition, ease of communication via technological means is important for things like paying rent and filing maintenance requests.

Student housing property management is often described as a cross between conventional multifamily and resort hotel management. Properties are often inspected monthly; issues must be identified quickly so that damages can be charged to the student's account. Managers also provide social and educational activities to students in order to create a residential and community feel in an off-campus setting. Other factors, such as the importance of pre-leasing / marketing and the high turnover rate, make this sector management-intensive.

#### **Demand and Supply**

Increasing university enrollment is helping to drive demand for student housing. In the next five years, a net 2.4 million students are projected to enroll in college. In 2020, a projected 23 million students will be enrolled in college, representing a 50% increase over 2000 and a 12% increase over 2010. The percentage of high school graduates who attend college is also increasing; in 2001 the percentage was 62%, versus 66% in 2012. Since 1990, this percentage has not dropped below 60%. U.S. higher education institutions continue to attract international students and this trend is expected to continue to increase by approximately 4% to 6% over the next few years (Clarion Partners, April 2012).

#### **Chart 1: Historic and Projected Total College Enrollment**



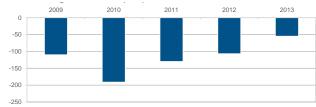
Source: Clarion Partners and the National Center for Education Statistics, May 2013

Public university budgets are constrained due to state budget deficits stemming from the loss of state tax revenues and many private universities experienced losses in their endowments during the financial crisis. This has affected the ability to renovate or expand student housing facilities to meet student needs given growing enrollment and changing expectations.

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#### Third Quarter 2013 Report

Chart 2: State Budget Shortfalls (\$bn)



Source: Center on Budget and Policy Priorities, December 2013

In addition, many universities lack available land to provide additional on-campus housing. It is estimated that university-owned housing facilities can accommodate only approximately 30% of today's total enrolled student population, leaving the remainder to seek alternative options (Harrison Street, 2012).

#### **Performance**

From a performance perspective, the student housing market has proven to be resilient and recession-resistant in nature. A student's choice to pursue higher education typically occurs regardless of the conditions impacting the greater economy; during a downturn or difficult job market, the importance of higher education is often reinforced. Average student housing "same-store" NOI growth since 2002 has exceeded that of conventional multifamily, with a lower standard deviation, implying lower volatility.

Chart 3: "Same-Store" NOI Growth

Year	Conventional Multifamily	Student Housing	Spread (Student Housing - Conventional Multifamily)
2002	-4.9%	-5.0%	-0.1%
2003	-6.4%	-1.9%	4.5%
2004	-0.8%	0.7%	1.5%
2005	4.3%	11.6%	7.3%
2006	7.8%	1.5%	-6.3%
2007	6.0%	6.7%	0.7%
2008	3.4%	2.2%	-1.2%
2009	-4.7%	3.8%	8.5%
2010	-1.7%	4.6%	6.3%
2011	7.0%	5.2%	-1.8%
2012	7.7%	4.0%	-3.7%
Average	1.6%	3.0%	1.4%
Standard Deviation	5.5%	4.4%	-1.1%

Source: Green Street Advisors, 2013

In addition, one-year, three-year, and five-year returns have exceeded multifamily returns as shown below.

**Chart 4: Total Return Comparison** 

Total Return Comparison							
	NAREIT Apartment Index	Student Housing Index <sup>1</sup>	Spread (Student Housing Index - NAREIT Apartment Index)				
One-Year	15.4%	36.4%	21.0%				
Three-Year	30.1%	35.1%	5.0%				
Five-Year	4.4%	10.3%	5.9%				

Constructed using weighted returns of two student housing REITS; American Campus Communities and Education Realty Trust

Source: Clarion Partners and NAREIT as of 12/31/11

#### **Potential Risks**

The student housing sector is exposed to several risks. The emergence of online education, or Massive Open Online Courses ("MOOCs"), provides an option to take courses online for a low cost thus potentially reducing the need for on campus accommodations. However, such courses provide a very narrow education and do not have a proven record of leading to enhanced employment opportunities. Thus far, such courses have gained popularity for working professionals who already have a university degree but are looking to learn or brush up on a specific skill. It is unlikely that such courses will replace the desire to receive a higher education degree and to have the university experience.

A weak economy also poses a risk to the sector, but a student's choice to pursue higher education typically occurs regardless of the conditions impacting the greater economy. Higher education degrees continue to enhance long term employment prospects; a lower unemployment rate and higher median weekly earnings are evident as the level of education attained increases. Furthermore, there is an increasing need for a university-level education in today's competitive job market. The unemployment rate for those over the age of 25 possessing a college degree is 3.4%, versus 7.3% for those with only a high school diploma (U.S. Department of Education, November 2013).

Oversupply presents potentially the largest risk to student housing. Private equity firms, REITs and private developers have increased their student housing development and investment activity significantly since 2010. A record 51,000 new off-campus beds are expected to be delivered throughout the U.S. this year (Axiometrics Inc., August 2013). However, it is important to note that much of this oversupply is concentrated in upscale communities. In addition, several developers failed to take into account planned construction activity, expected future enrollment trends and student demographics when building.

### Section 2:

Portfolio Update

#### Third 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 September 30, 2013, with highlights through December 31, 2013.

**Private Equity Allocation:** BERS has a target allocation of 6.0% to Private Equity. As of September 30, 2013, Private Equity constituted 3.1% of BERS total plan.

**Performance:** As of September 30, 2013, the Portfolio consists of 12 partnerships and 8 underlying fund managers. The Portfolio has generated a since inception internal rate of return ("IRR") of 7.57% and a total value multiple of 1.30x.

Portfolio Summary								
\$ millions	6/30/2013	9/30/2013	Change					
Active Partnerships	12	12	-					
Active GP Relationships	8	8	-					
Capital Committed <sup>(1)</sup>	\$273.2	\$274.0	\$0.8					
Unfunded Commitment	\$162.2	\$160.3	(\$1.9)					
Capital Contributed	\$112.4	\$116.0	\$3.6					
Capital Distributed	\$30.7	\$35.5	\$4.8					
Market Value	\$109.7	\$114.9	\$5.2					
Total Value Multiple	1.25x	1.30x	0.05x					
Since Inception IRR	6.71%	7.57%	86bps					
Avg. Age of Active Commitments	4.3 years	4.1 years	(0.2 years)					

 $^{(1)}$ The client made no new commitments during the quarter. The "change" in capital committed from the prior quarter reflects the currency adjustments from existing Non-USD dollar partnerships.

**Portfolio Exposures:** The Corporate Finance/Buyout strategy represents 50% of the Portfolio's total exposure, Venture Capital represents 14%, Distressed/Turnaround represents 11%, Growth Equity accounts for 11%, Secondary represents 7%, Other represents 4%, and Co-Investment represents 3%. Strategic exposure takes into account the strategies for each of the underlying partnerships in the funds-of-funds within the BERS Portfolio.

Third Quarter 2013 Report

#### **Portfolio Overview**

#### **Commitments**

The table below highlights the funds that closed during the first three quarters 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					
6/28/2013	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	\$20.8					
Total			\$65.8					

The four new investments, totaling \$65.8 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.

**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.

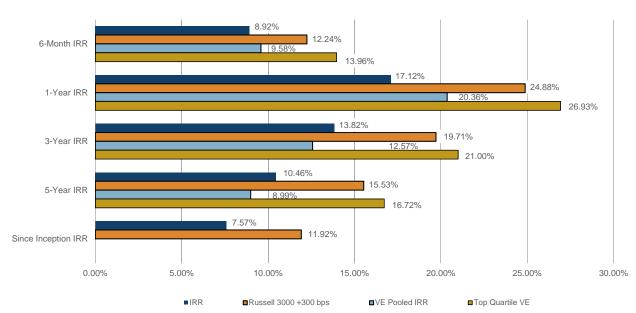
CVC Capital Partners VI, L.P. (\$20.8/€15.4 million) the fund predominantly targets businesses headquartered in Europe with global streams of revenue.

#### Third 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.

#### IRR Performance As of September 30, 2013



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 third quarter of 2013 increased 86 basis points from the prior quarter, with the Portfolio generating an IRR of 7.57%.
  - Relative to the benchmark, the since inception IRR is underperforming the Russell 3000 plus 300bps by 435 basis points.
- Performance on a one-year basis for the third quarter 2013 increased 536 basis points from the second quarter 2013, with the Portfolio generating an IRR of 17.12%.
  - Relative to the benchmarks, the one-year IRR is underperforming the VE Pooled IRR by 324 basis points, the Top Quartile VE by 981 basis points, and the Russell 3000 plus 300bps by 776 basis points.
    - Underperformance to the public benchmark can be attributed to the continued rally in the public markets, which began during the year 2012 and has carried over into the first three quarters of 2013.

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#### Third Quarter 2013 Report

The table below details quarterly performance of the Portfolio for the year ending September 30, 2013.

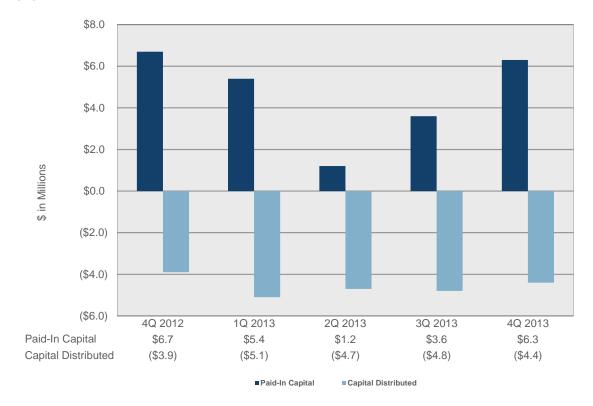
Portfolio Summary									
		Year Ending							
in \$ millions	12/31/2012	3/31/2013	6/30/2013	9/30/2013	9/30/2013				
Beginning Market Value	\$99.1	\$106.6	\$109.8	\$109.7	\$99.1				
Paid-in Capital	6.7	5.4	1.2	3.6	16.9				
Distributions	(3.9)	(5.1)	(4.7)	(4.8)	(18.5)				
Net Value Change	4.7	2.9	3.4	6.4	17.4				
Ending Market Value	\$106.6	\$109.8	\$109.7	\$114.9	\$114.9				
Unfunded Commitments	\$103.5	\$123.4	\$162.2	\$160.3	\$160.3				
Total Exposure	\$210.1	\$233.2	\$271.9	\$275.2	\$275.2				
Point to Point IRR	4.66%	2.76%	3.04%	5.73%	17.12%				
Since Inception IRR	6.05%	6.37%	6.71%	7.57%	7.57%				

- Over the past twelve months, the Portfolio has experienced a total of \$17.4 million in net value appreciation.
  - The one-year IRR of 17.12% represents a 1,008 basis point increase when compared to the one-year IRR as of September 30, 2012.
  - The since inception IRR of 7.57% represents a 239 basis point increase when compared to the since inception IRR as of September 30, 2012.

#### Third Quarter 2013 Report

#### **Cash Flow Drivers**

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



- Contribution activity increased significantly during the third quarter of 2013, with contributions totaling \$3.6 million. Distribution activity remained relatively constant during the third quarter of 2013, with distributions totaling \$4.8 million.
  - Mesirow Financial Private Equity Partnership Fund V, L.P. called the most capital during the third quarter of 2013, calling \$2.3 million to fund underlying investment obligations.
  - Mesirow Financial Private Equity Partnership Fund III, L.P. distributed the most capital during the third quarter of 2013, distributing \$2.9 million in proceeds from various underlying investments.
- Contribution activity continued to increase significantly during the fourth quarter of 2013, with contributions totaling \$6.3 million. Distribution activity decreased slightly during the fourth quarter of 2013, with distributions totaling \$4.4 million.
  - Landmark Equity Partners XV, L.P. called the most capital during the fourth quarter of 2013, calling \$2.0 million to fund initial investments in Project Wildcat and Project Sun.

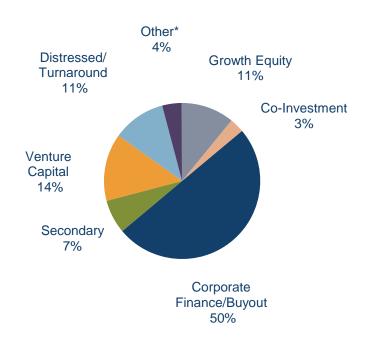
#### Third Quarter 2013 Report

Mesirow Financial Private Equity Partnership Fund III, L.P. distributed the most capital during the fourth quarter of 2013, distributing \$2.6 million in proceeds from various underlying investments.

#### **Portfolio Exposures**

The pie chart below represents the strategic diversification of the Portfolio as of September 30, 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 September 30, 2013



<sup>\*</sup>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 50% of the total exposure attributable to this strategy.

#### Third 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 September 30, 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 September 30, 2013								
Partnership Name	Funds-of-Funds	Exposed Valuation (\$ Millions)	%of Total Portfolio					
GenNx360 Capital Partners	New York Fairview Private Equity Fund, L.P.	\$4.0	3.5%					
Vicente Capital Partners Growth Equity Fund	New York Fairview Private Equity Fund, L.P.	\$3.0	2.7%					
DCM V, L.P.	Mesirow Financial Private Equity Partnership Fund III, L.P.	\$3.0	2.6%					
TSG5, L.P.	Mesirow Financial Private Equity Partnership Fund III, L.P. Mesirow Financial Private Equity Partnership Fund IV, L.P.	\$2.8	2.5%					
Sun Capital Partners V, L.P.	Mesirow Financial Private Equity Partnership Fund III, L.P. Mesirow Financial Private Equity Partnership Fund IV, L.P.	\$2.7	2.4%					
New Enterprise Associates 13, L.P.	Mesirow Financial Private Equity Partnership Fund IV, L.P. Mesirow Financial Private Equity Partnership Fund V, L.P.	\$2.6	2.3%					
Encore Consumer Capital Fund	New York Fairview Private Equity Fund, L.P.	\$2.6	2.3%					
Kelso Investment Associates VIII, L.P.	Mesirow Financial Private Equity Partnership Fund III, L.P. Mesirow Financial Private Equity Partnership Fund IV, L.P. Mesirow Financial Private Equity Partnership Fund V, L.P.	\$2.6	2.3%					
The Resolute Fund II, L.P.	Mesirow Financial Private Equity Partnership Fund III, L.P. Mesirow Financial Private Equity Partnership Fund IV, L.P.	\$2.5	2.2%					
Green Equity Investors V, L.P.	Mesirow Financial Private Equity Partnership Fund III, L.P. Mesirow Financial Private Equity Partnership Fund IV, L.P.	\$2.5	2.2%					
Total		\$28.3	25.0%					

- As of September 30, 2013, the top ten partnership holdings represent 25.0% of the total Portfolio's market value, or \$28.3 million of market value.
- Six 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:

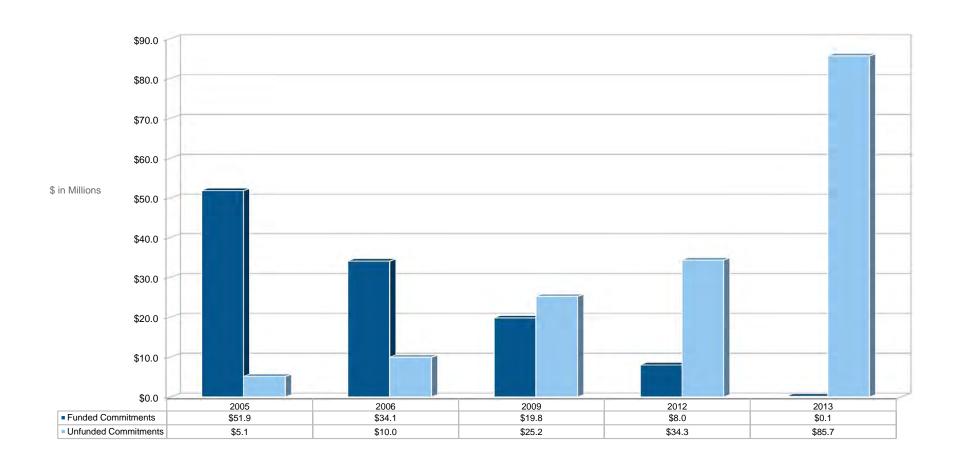
**Portfolio Assessment** 

### NYC Board of Education Retirement System Private Equity Portfolio As of September 30, 2013 (in USD)

Vintage Year	Investment	First Drawdown		Committed Capital	Pa	aid-In Capital	Distributed Capital		Market Value	Multiple	IRR
Active Inve	Active Investments										
2005	Mesirow Financial Private Equity Partnership Fund III, L.P.	7/20/2006	\$	57,000,000	\$	52,243,273	\$ 22,441,092	\$	51,578,461	1.42x	7.62%
2006	Mesirow Financial Private Equity Partnership Fund IV, L.P.	3/31/2008		25,000,000		18,467,233	3,128,759		19,772,115	1.24x	6.91%
2006	New York Fairview Private Equity Fund, L.P.	7/14/2006		19,000,000		15,814,680	5,221,393		13,996,463	1.22x	5.38%
2009	Mesirow Financial Private Equity Partnership Fund V, L.P.	3/7/2011		45,000,000		20,264,326	2,033,886		21,856,600	1.18x	11.79%
2012	Warburg Pincus Private Equity XI, L.P.	7/17/2012		25,000,000		5,010,550	116,250		5,418,058	1.10x	9.50%
2012	Platinum Equity Capital Partners III, L.P.	1/14/2013		15,000,000		4,055,087	2,556,083		2,192,819	1.17x	34.16%
2012	Carlyle Partners VI, L.P.	7/3/2013		20,000,000		137,685	-		53,488	0.39x	(61.15%)
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
2013	Apollo Investment Fund VIII, L.P.	N/A		20,000,000		-	-		-	0.00x	N/A
2013	CVC Capital Partners VI, L.P.	N/A		20,797,479		-	-		-	0.00x	N/A
Total Portf	olio		\$	273,997,479	\$	115,992,834	\$ 35,497,463	\$	114,868,004	1.30x	7.57%

Note: Where available, September 30, 2013 reported valuations were used. In the absense of September 30, 2013 reported values, market values have been adjusted forward using interim cashflows through September 30, 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 September 30, 2013.

# NYC Board of Education Retirement System Commitments By Vintage Year As of September 30, 2013



Funded Commitments exclude additional fees.
Unfunded Commitments include recallable returns of capital.

### Appendix A:

**Glossary of Terms** 

#### Third 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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#### Third Quarter 2013 Report

**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** 

### Third 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

Executive Summary: Third 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 (September 30, 2013)

Total Plan Assets \$3.7 billion
Target Real Assets Allocation (%) 7%
Target Real Assets Allocation (\$) \$258.3 million
Total Real Estate Market Value \$90.2 million
Real Estate Unfunded Commitments \$62.9 million
Total Real Estate Exposure \$153.0 million
Number of Investments 7

#### Net Returns (as of September 30, 2013)

3Q13 Time-Weighted Net Return:

1 Year Time Weighted Net Return:

9.99

3 Year Time Weighted Net Return:

Inception-to-Date (ITD) Time-Weighted: 5.6%
ITD Net IRR: 10.3%

ITD Net Equity Multiple: 1.2x

Target •40-60% Core/Core Plus

### **Investment Guidelines**

Style Sector:

**Number of Managers** 

•40-60% Non-Core

Benchmark NFI-ODCE Index +100 bps net over full market cycles

#### **Third Quarter Investment Activity**

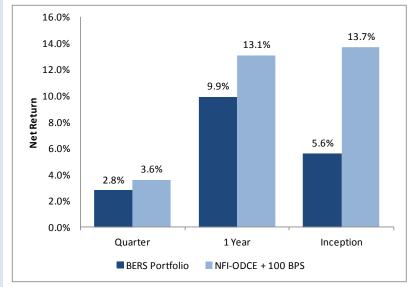
Several investment opportunities were reviewed during the Quarter and commitments to these opportunities are forthcoming.

### **OVERVIEW**

During the Third Quarter of 2013 the global real estate market experienced \$140 billion in transaction volume, 41% higher than the same period in 2012. Property markets continue to recover, although there still remains a gap between valuations of primary and secondary assets. However, yield compression for prime assets has compelled investors to target secondary market opportunities further along the risk spectrum.

\$3.7 billion
7%
\$258.3 million
\$90.2 million
\$62.9 million
\$153.0 million
\$153.0 million
\$258.3 million
\$258.3 million
\$258.3 million
\$3.7 billion
\$3.7 billion
\$40.2 million
\$40.2 million
\$40.2 million
\$40.2 million
\$50.2 million
\$50.2 million
\$50.2 million
\$50.3 million
\$50.4 million
\$50.5 mill

7 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 and has been an active investor in the most recent vintage years. At the end of the Third Quarter 2013, the Portfolio achieved a total gross return of 3.1% which was comprised of 1.7% income and 1.4% appreciation. The net return for the Quarter was 2.8%. A detailed analysis of the Portfolios real estate performance is found later in this Executive Summary.



Executive Summary: Third Quarter 2013 Performance Measurement Report
Real Estate

### FUNDING AND COMPOSITION

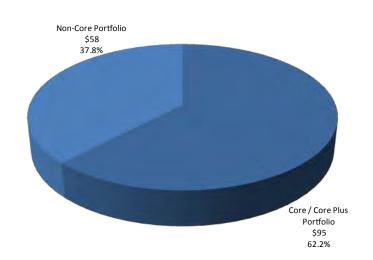
At the end of the Third Quarter, the Portfolio was funded at \$90.2 million, or 2.4% of total plan assets. A total of \$62.9 million in unfunded commitments are still outstanding. Unfunded commitments are up from just over \$50.0 million as of Second Quarter 2013. However, new commitment activity has accelerated over the past several months and the trend will continue 2014.

New contributions for the Quarter totaled \$6.8 million, offset by \$1.5 million in distributions. 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 62.2% of the Portfolio exposure during the Quarter. The Non-Core component accounts for 37.8% 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 Bo	ard of Education Retirement System									
Total Plan Assets	9/30/2013	\$3,689								
Real Asset Allocation (%)		7.0%								
Real Asset Allocation (\$)		\$258								
Style Sector Allocation										
Core / Core Plus Portfolio	40.0%	\$103								
Non-Core Portfolio	55.0%	\$142								
Emerging Managers Portfolio	5.0%	\$13								
Uncommitted Core / Core Plus Portfolio		\$8								
Uncommitted Non-Core Portfolio	ncommitted Non-Core Portfolio									
Uncommitted Emerging Managers Portfolio	\$13									
Funded (Marke	t Value) and Committed Statistics									
Core / Core Plus Portfolio		62.2%								
Non-Core Portfolio		37.8%								
Emerging Managers Portfolio		0.0%								
\$ Committed		\$153								
% Committed on Real Asset Allocation		59.3%								
% Committed on Total Plan Assets		4.1%								
Funded	(Market Value) Statistics									
% Funded (Market Value) of Total Plan Assets		2.4%								
% Funded (Market Value) of Total Real Asset Alloca	tion	34.9%								

Executive Summary: Third Quarter 2013 Performance Measurement Report

Real Estate

### **PERFORMANCE**

During the Quarter under review, the NYCBERS Real Estate Portfolio produced a 3.1% total gross return. The total net return for the Quarter was 2.8%. On a rolling one-year basis the total gross return of 11.2% was recorded. On a net basis the total return was 9.9%. 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

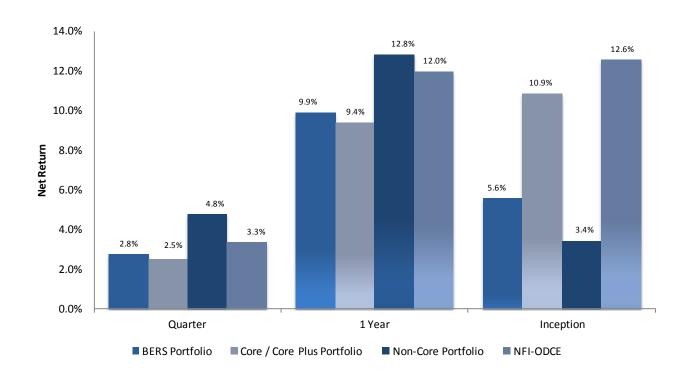
As of September 30, 2013 the market value of the Core/ Core Plus Portfolio was \$79.8 million, or 88.5% on an invested basis. On a funded and committed basis, the Core/ Core Plus Portfolio totaled \$95.1 million, or 62.2% of the total Portfolio. The Core/ Core plus Portfolio generated a 2.7% total gross return for the Quarter comprised of 1.3% in income and 1.4% in appreciation. The total net return for the Quarter was 2.5%.

The Core/Core Plus Portfolio achieved a 9.4% net return over the one-year period ending September 30, 2013 and has achieved a 10.9% net return since the inception of the Core/ Core Plus Portfolio in 2011.

#### Non-Core

As of September 30, 2013 the market value of the Non- Core Portfolio was \$10.3 million, or 11.5% on an invested basis. On a funded and committed basis, the Non-Core Portfolio totaled \$57.9 million, or 37.8% of the total Portfolio. The Non-Core Portfolio generated a 6.0% total gross return for the Quarter comprised of 4.6% in income and 1.4% in appreciation. The total net return for the Quarter was 4.8%.

The Non-Core Portfolio generated a one-year net return of 12.8%.



Executive Summary: Third Quarter 2013 Performance Measurement Report Real Estate

### **PERFORMANCE**

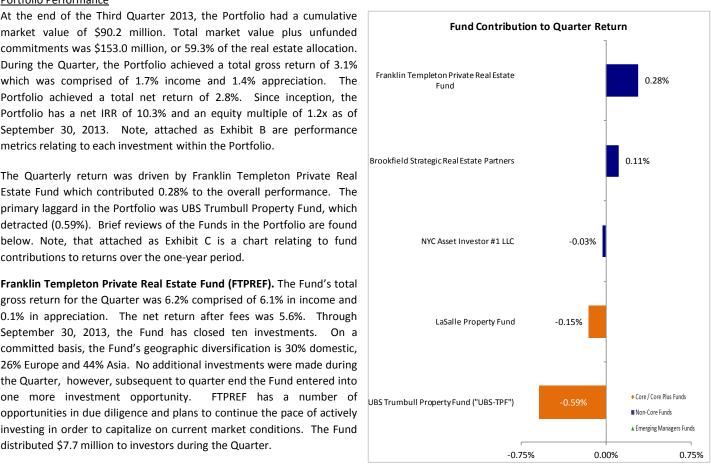
### Portfolio Performance

market value of \$90.2 million. Total market value plus unfunded commitments was \$153.0 million, or 59.3% of the real estate allocation. During the Quarter, the Portfolio achieved a total gross return of 3.1% which was comprised of 1.7% income and 1.4% appreciation. The Portfolio achieved a total net return of 2.8%. Since inception, the Portfolio has a net IRR of 10.3% and an equity multiple of 1.2x as of September 30, 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 0.28% to the overall performance. The primary laggard in the Portfolio was UBS Trumbull Property Fund, which detracted (0.59%). 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.

Franklin Templeton Private Real Estate Fund (FTPREF). The Fund's total gross return for the Quarter was 6.2% comprised of 6.1% in income and 0.1% in appreciation. The net return after fees was 5.6%. Through September 30, 2013, the Fund has closed ten investments. On a committed basis, the Fund's geographic diversification is 30% domestic, 26% Europe and 44% Asia. No additional investments were made during the Quarter, however, subsequent to quarter end the Fund entered into one more investment opportunity. FTPREF has a number of opportunities in due diligence and plans to continue the pace of actively investing in order to capitalize on current market conditions. The Fund

distributed \$7.7 million to investors during the Quarter.



Brookfield Strategic Real Estate Partners (BSREP). BSREP produced a total gross return of 7.5% comprised of 2.0% in income and 5.6% in appreciation. The net return after fees was 4.2%. The Fund held its final close in July 2013 with \$4.4 billion in commitments, including \$1.3 billion in commitments from Brookfield. To-date, the Fund has committed approximately 35% of its targeted equity to seven investments. In October, the Fund finalized its acquisition of Industrial Developments International ("IDI") for \$506.0 million. Subsequent to Quarter-end, BSREP committed an additional \$932.0 million to five investments which are expected to close in early 2014. With the addition of these new investments the fund will be 57.0% committed. The Fund's focus in the coming quarters will be the successful integration of the IDI and Verde platforms.

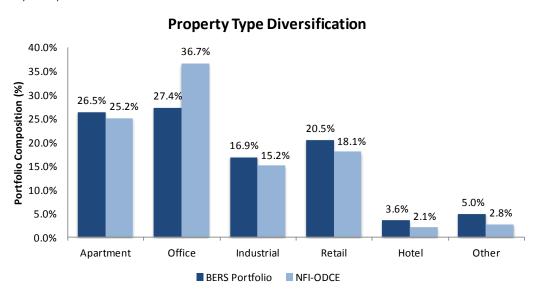
NYC Asset Investor #1 LLC (Emmes). The Fund's total gross return for the Quarter was (0.3)% comprised of (2.3)% in income a nd 2.0% in appreciation. The net return after fees was (1.3)%. The Fund currently consists of one asset, 833 Flatbush, which was valued at \$17.9 million as of September 30, 2013. Located in Brooklyn, New York, 833 Flatbush consists of eight retail units which are 91% leased. The Fund is expecting to benefit from the property's cash flows, appreciation, and further lease-up of the two vacant spaces.

LaSalle Property Fund (LaSalle). The Fund produced a 2.7% total gross return, comprised of 1.3% in income and 1.4% in appreciation. The net return after fees was 2.5%. The Fund closed on five new investments during the Quarter for a total value of \$348.1 million. Of noteworthy mention is the acquisition of Geneva Commons, a lifestyle center in Chicago which was purchased for \$124.5 million. The Fund disposed of four truck terminals during the Quarter for \$6.8 million, resulting in a gain of \$0.8 million. Subsequent to Quarter-end, the Fund closed on a parking garage in San Francisco for \$27.6 million. Due to the attractive income returns and inflation-hedging characteristics of parking investments the Fund expects to continue to pursue opportunities in this space. During the Quarter, the Fund entered the ODCE index.

Executive Summary: Third Quarter 2013 Performance Measurement Report
Real Estate

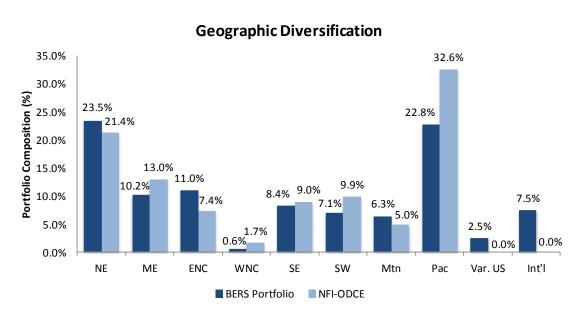
### PROPERTY TYPE DIVERSIFICATION

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, Industrial, Retail, 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 7.5% international exposure is appropriate for the risk and return profile of NYCBERS and consistent with our long-term target.



Executive Summary: Third Quarter 2013 Performance Measurement Report Real Estate

### **MARKET UPDATE**

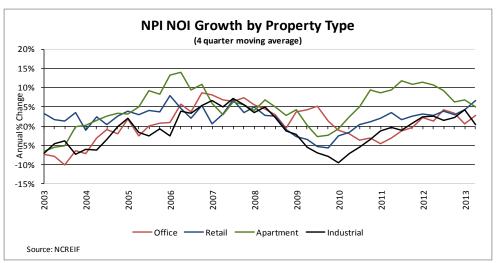
### **General Market Overview**

The commercial real estate market experienced transaction volume of \$140 billion during the third quarter, 16% higher than second quarter 2013, and 41% higher than third quarter 2012. Liquidity across all sectors seems to be improving, as sales volumes for the full-year are expected to be between 525-\$575 billion (20-25% lower than the peak in 2007). Albeit concerns regarding the U.S. government shutdown, the global commercial real estate outlook remains positive.



Across the world, increasing investor confidence and competition for core assets in prime markets is pushing yields down and driving investors up the risk spectrum. Investors who have been priced out of primary/CBD markets continue to search for yield in secondary/suburban markets. This theme ties to the macro trend of urbanization and the emergence of new CBD locations in secondary and suburban markets.

Real Estate NOI Growth has been healthy over the last few years, and is expected to do so until capped by macro-economic outlook and a resurgence of new supply. Of the main property types, apartments and retail have exhibited the most growth; however, growth rate differentials between all of the property types are expected to narrow over time. The chart below depicts property level NOI growth over the past ten years.



Executive Summary: Third Quarter 2013 Performance Measurement Report
Real Estate

### MARKET UPDATE cont.

### Direct Commercial Real Estate Volumes, 2012-2013

			% Change		% Change			% Change
\$ US			2Q13 -		3Q12 -			YTD 2012 -
Billions	2Q13	3Q13	3Q13	3Q12	3Q13	YTD 2012	YTD 2013	YTD 2013
Americas	52	63	21%	44	43%	129	153	18%
EMEA	36	47	31%	33	42%	100	123	23%
Asia Pacific	33	30	-8%	22	33%	72	90	25%
Total	121	140	16%	99	41%	301	366	21%

Source: Jones Lang LaSalle, October 2013

#### **The United States**

The Americas experienced \$63 billion in transaction volume during the Quarter, up 43% from Third Quarter 2012. Of these transactions, \$55.0 billion is attributable to the United States. This is the first time since 2007 that the US has seen transaction volumes surpass \$50.0 billion (ignoring 4Q12, which was driven by circumstances linked to changing tax rules for transactions). The government shutdown infused uncertainty into the recovery, pushed October consumer confidence to its lowest point in nine months, and is expected to temper GDP Growth. Furthermore, market uncertainty over when the Fed will taper its \$85 billion monthly bond buying program persists. Albeit uncertainties about domestic policy implications, the underlying outlook on the region has remained unchanged

Private sector balance sheets remain strong and growth is expected to continue into the foreseeable future, non-core investments remain attractive due to positive spreads over core assets, and investors priced out of primary/CBD markets continue to search for yield in secondary/suburban markets.

#### **Europe**

Townsend's view toward the European commercial real estate market has turned cautiously optimistic, given that the major issues in the region appear to have been identified. Recent interventions from European Central Bank have helped stabilize borrowing costs, and economic fundamentals are improving across the entire region. The United Kingdom is leading the region's economic recovery with other countries such as Sweden, Germany and even Spain exhibiting positive signs for growth.

The majority of the transactions that took place during the Quarter were core assets in primary cities; primarily within the United Kingdom, Germany, and France. However, investors have shown growing interest in secondary markets and value add opportunities which offer significantly higher yields than core assets in primary markets. As a result, markets such as Poland, Spain and the Netherlands, which have seen limited investment action over the past few years, are beginning to see an influx of capital from investors.

### <u>Asia</u>

The Asian Pacific real estate market experienced \$30 billion in transaction volume during the Quarter, up 33% from Third Quarter 2012. Transaction volume has slowed in the second half of the year as investors are becoming more concerned that rising interest rates will lead to higher property yields, resulting in reduced property values. Nonetheless, 2013 is set to become a record year for transaction volumes in the region. It is important to note that although the region has exhibited positive signs in terms of growth, investors should remain cautious regarding the regions interest rate environment and longer-term cap rate outlook.

In Japan, logistics development opportunities continue to generate solid risk-adjusted returns due to the shortage of quality supply in the region. Chinese retail and logistics sectors continue to be of interest due to strong fundamental trends such as urbanization, income growth and supportive government policies. India continues to battle with macro-economic issues that present a less attractive investment environment. The Australian market presents attractive core opportunities with high absolute unleveraged yields (6.25% to 8.0%) and with spreads to government bonds that are at, or near, historic highs.

Executive Summary: Third 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					
	Core/Core Plus (minimum of 40%)						
		The portfolio is funded (market value) and committed at 59.3% of real asset allocation					
Portfolio Composition	Non Core (minimum of 60%)	with a portfolio composition of 62.2% core and 37.8% non-core.					
Real Asset Allocation	Target of 7.0%	Funded (market value) and committed dollars place the portfolio at 4.1% of total					
Real Asset Allocation	Currently Funded at 2.4%	plan assets.					
Property Type Diversification	Up to 40% Mutlifamily 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 (24.2 %).					
Manager Exposure	15% of real estate allocation	N/A					

Executive Summary: Third Quarter 2013 Performance Measurement Report Real Estate

### **EXHIBIT B: FOIL**

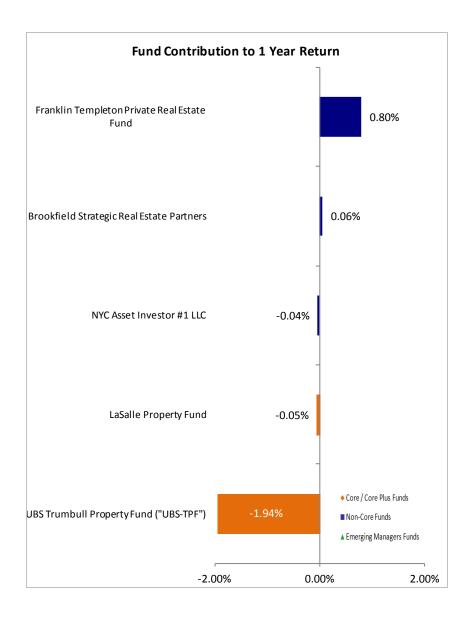
### The Townsend Group

	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	UBS Trumbull Property Fund ("UBS-TPF")	4/1/2011	\$41,400,000	\$46,808,224	(\$4,294,057)	\$53,886,134	1.2	10.1%						
2011	LaSalle Property Fund	12/13/2010	\$27,600,000	\$23,139,430	(\$1,419,944)	\$25,784,356	1.2	12.5%						
2013	NYC Asset Investor #2 LLC	7/9/2013	\$11,000,000	\$187,710	\$0	\$174,425	0.9	-27.6%						
	Core/Core Plus Portfolio		\$80,000,000	\$70,135,364	(\$5,714,000)	\$79,844,914	1.2	10.6%						
2011	Franklin Templeton Private Real Estate Fund	3/31/2011	\$30,000,000	\$7,206,523	(\$985,834)	\$6,781,197	1.1	5.6%						
2012	Brookfield Strategic Real Estate Partners	9/20/2012	\$10,000,000	\$2,514,535	\$0	\$2,736,603	1.1	15.6%						
2013	NYC Asset Investor #1 LLC	6/25/2013	\$10,000,000	\$758,428	\$0	\$748,285	1.0	-4.9%						
2013	NYC Asset Investor #3 LLC	9/20/2013	\$8,000,000	\$62,475	\$0	\$61,686	1.0	-37.1%						
	Non-Core Portfolio		\$58,000,000	\$10,541,961	(\$985,834)	\$10,327,771	1.1	6.6%						
	New York City Board of Education Retirement System		\$138,000,000	\$80,677,325	(\$6,699,834)	\$90.172.685	1.2	10.3%						

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 September 30, 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.

Executive Summary: Third Quarter 2013 Performance Measurement Report Real Estate

### **EXHIBIT C: ATTRIBUTION**

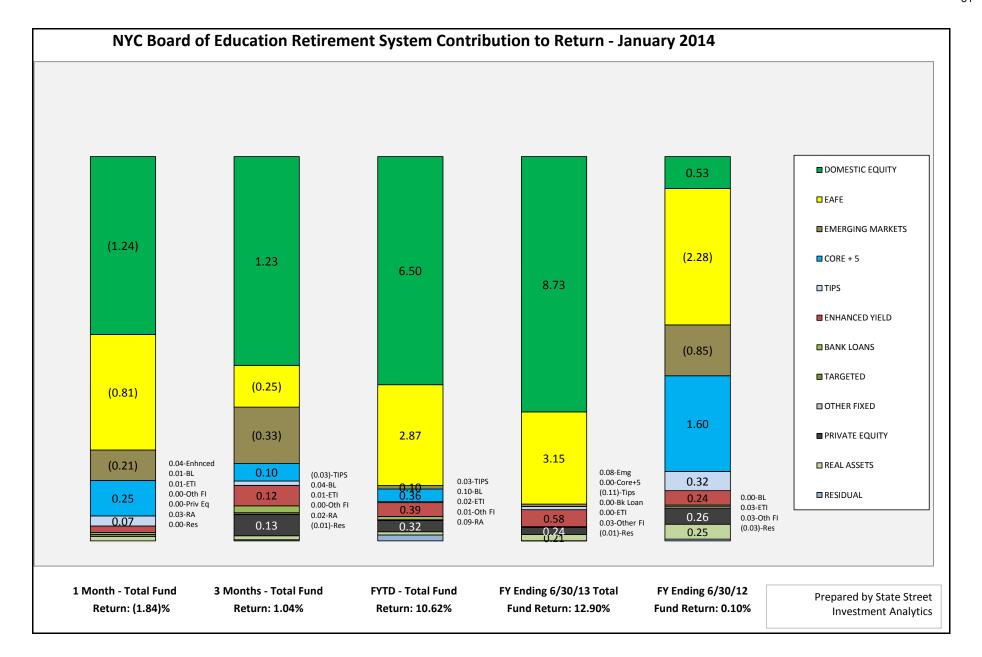


II. January Monthly Performance Review:

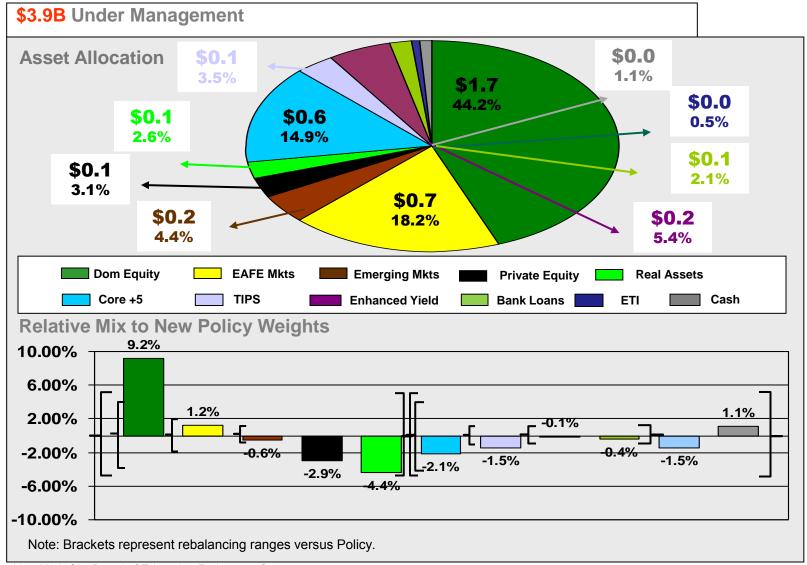
# CITY OF NEW YORK Market Indicator Page \*NYC Board of Education Retirement System January 31, 2014



MARKET INDICATORS								
MARKET INDICATORS	1 Month	3 Month	Fiscal YTD	1 Year	2 Year	3 Year	5 Year	10 Year
S&P 500	(3.46)	2.00	12.29	21.52	19.12	13.93	19.19	6.83
S&P 400 MIDCAP	(2.12)	2.23	14.03	21.87	20.20	14.06	23.21	9.89
RUSSELL 1000	(3.19)	2.21	13.13	22.23	19.60	14.14	19.84	7.23
RUSSELL 2000	(2.77)	3.12	16.50	27.03	21.11	14.69	22.26	8.31
RUSSELL 3000	(3.16)	2.28	13.39	22.60	19.72	14.18	20.03	7.32
RUSSELL 3000 GROWTH	(2.76)	2.88	16.30	24.95	19.06	14.53	21.13	7.41
RUSSELL 3000 VALUE	(3.58)	1.66	10.50	20.18	20.25	13.75	18.83	7.07
MSCI EAFE NET	(4.03)	(1.84)	13.19	11.93	14.56	5.87	13.84	6.32
MSCI EMF NET	(6.49)	(9.19)	0.71	(10.17)	(1.66)	(3.35)	14.78	10.05
MSCI WORLD NET	(3.70)	0.08	12.50	16.07	15.99	9.28	16.27	6.40
MSCI EUROPE SMID CAP NET	(1.79)	2.68	24.98	24.73	23.46	9.54	20.72	9.52
MSCI AC WORLD ex US NET	(4.54)	(3.54)	10.10	5.75	9.73	3.19	13.86	6.90
NYC - TREASURY AGENCY PLUS FIVE	2.94	(0.06)	0.31	(2.80)	(0.84)	5.60	4.64	5.67
CITIGROUP MORTGAGE	1.66	0.45	2.17	0.61	1.13	2.93	4.01	4.76
NYC - INVESTMENT GRADE CREDIT	1.32	0.81	3.03	0.36	3.32	5.42	8.03	5.14
NYC - CORE PLUS FIVE	1.68	0.46	2.13	(0.19)	1.56	4.45	5.55	5.19
CITIGROUP BROAD INVESTMENT GRADE	1.45	0.48	1.87	0.10	1.34	3.72	4.71	4.73
BARCLAYS AGGREGATE	1.48	0.53	1.91	0.12	1.35	3.73	4.93	4.62
CITIGROUP BB & B	0.68	1.47	6.04	5.84	9.20	8.49	14.23	6.98
BofA ML HIGH YIELD MASTER II	0.74	1.76	6.61	6.74	10.25	8.54	17.60	8.36
CSFB LEVERAGED LOAN	0.71	1.73	3.98	5.72	7.10	5.32	12.40	5.03
BARCLAYS GLOBAL US TIPS	1.98	(0.61)	0.64	(6.17)	(1.27)	4.16	5.69	4.93
BofA ML ALL CONVERTIBLES EX MANDATORY	1.89	5.87	16.02	22.58	17.58	11.26	19.25	7.19
DJ US SELECT REAL ESTATE	4.00	(1.17)	(0.30)	1.90	7.63	9.08	22.15	8.27
NCREIF NFI - ODCE NET	0.00	2.94	6.38	12.90	11.34	12.53	2.71	6.16
91 DAY TREASURY BILL	0.01	0.03	0.04	0.08	0.10	0.10	0.13	1.69



# Portfolio Asset Allocation: January 31, 2014



New York City Board of Education Retirement System Performance Overview as of January 31, 2014
Prepared by State Street Investment Analytics

# NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM CLASSIFICATION OF INVESTMENTS

(as of January 31st, 2014)

SSET CLASS ALLOCATIONS	In \$MM	Actual	Policy Target	Adjustment	Adjusted Policy	Adjusted Target Range ***
TOTAL EQUITIES	\$2,796.2	72.5%	70.0%	NA	70.0%	65.0% - 75.0%
TOTAL FIXED INCOME	\$1,058.5	27.5%	30.0%	NA	30.0%	25.0% - 35.0%
TOTAL ASSETS	\$3,854.7	100.0%	100.0%	NA	100.0%	

	In \$MM	Actual	Policy Target	Adjustment	Adjusted Policy	Adjusted Target Range ***
US Equities	\$1,704.1	44.2%	35.0%	7.3%	42.3%	38.3% - 46.3%
Non-US Equities/EAFE	\$703.1	18.2%	17.0%	NA	17.0%	15.0% - 19.0%
Emerging Markets	\$171.1	4.4%	5.0%	NA	5.0%	4.0% - 6.0%
TOTAL PUBLIC EQUITY	\$2,578.3	66.9%	57.0%	NA	64.3%	
*REAL ASSETS	\$99.8	2.6%	7.0%	NA	2.6%	6.0% - 8.0%
* PRIVATE EQUITY	\$118.1	3.1%	6.0%	NA	3.1%	5.0% - 7.0%
TOTAL EQUITIES	\$2,796.2	72.5%	70.0%	NA	70.0%	65.0% - 75.0%

	In \$MM	Actual	Policy Target	Adjustment	Adjusted Policy	Adjusted Target Range****
Ψ US - Government	\$88.3	2.3%		NA		
US - Mortgage US - Investment Grade Credit	\$242.5	6.3%	17.0%	NA	17.0%	13.0% - 21.0%
ပီ US - Investment Grade Credit	\$242.8	6.3%		NA		
TOTAL CORE + 5	\$573.6	14.9%	17.0%	NA	17.0%	13.0% - 21.0%
High Yield	\$207.1	5.4%	5.5%	NA	5.5%	7.0% - 9.0%
Bank Loans	\$81.8	2.1%	2.5%	NA	2.5%	1.0% - 9.0%
Total High Yield & Bank Loans	\$288.9	7.5%	8.0%	NA	8.0%	7.0% - 9.0%
TIPS	\$136.2	3.5%	5.0%	NA	5.0%	4.0% - 6.0%
**ETI	\$18.5	0.5%	**2.0%	NA	** 0.5%	** 0.5%
Cash	\$41.3	1.1%	0.0%	NA	0.0%	0.0% - 5.0%
TOTAL PUBLIC FIXED INCOME	\$1,058.5	27.5%	30.0%	NA	30.0%	
TOTAL FIXED INCOME	\$1,058.5	27.5%	30.0%	NA	30.0%	25.0% - 35.0%

<sup>\*</sup> 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.

<sup>\*\*</sup> 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.

<sup>\*\*\*</sup> 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 Assets: +/-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 January 31st, 2014)

#### Adjustments to Long-Term Asset Allocation

### 1) Private Equity

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

#### 2) Real Assets

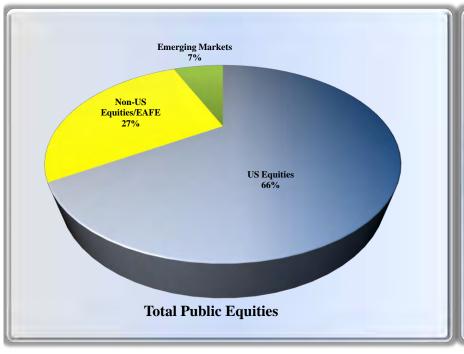
100% of uninvested commitments will be invested in Domestic Equity.

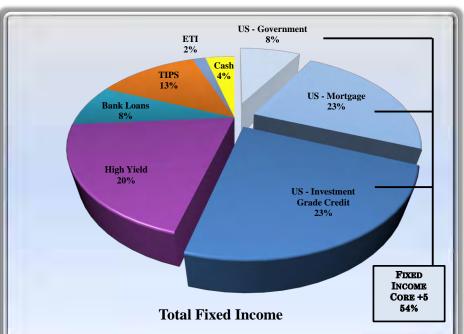
#### **Impact of Adjustments**

1) Domestic Equity Policy Target %	35.0%
Adjustment: 100% of uninvested Private Equity	2.9%
Adjustment: 100% of uninvested Real Assets	4.4%
Adjusted Domestic Equity Policy Target %	42.3%

# NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM CLASSIFICATION OF INVESTMENTS

(as of January 31st, 2014)





Note: Totals may not equal 100% due to rounding



	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	FYTD	CYTD	FYE 06/30/13	CYE 12/31/13	CYE 12/31/12	CYE 12/31/11	CYE 12/31/10	Trailing 1 Year	Trailing 3 Year	Trailing 5 Year	Trailing 10 Year	ITD	Inception Date
ASSET CLASS SUMMARY																	
BERS-TOTAL DOM EQUITY	1,704.1	44.21	-2.78	2.79	14.90	-2.78	23.09	35.96	16.62	-0.72	17.27	24.72	14.46	20.26	7.57	9.63	Sep-01-91
BERS-TOTAL ACTIVE EAFE EQUITY	703.1	18.24	-4.31	-1.32	15.65	-4.31	16.54	24.21	18.40	-10.35	17.92	13.26	8.08	17.95	8.78	8.49	Nov-01-92
BERS-TOTAL EMERGING (INTL)	171.1	4.44	-4.66	-7.11	2.11	-4.66	1.83	-4.27	18.15	-18.03	19.85	-10.09	-2.99	14.52	10.01	8.26	Nov-01-97
BERS-TOTAL STRUCTURED	573.6	14.88	1.72	0.70	2.37	1.72	-0.01	-2.38	6.68	9.23	8.36	0.01	4.93	6.60	5.37	8.19	Jan-01-85
BERS-TOTAL ACTIVE TIPS MANAGERS	136.2	3.53	2.08	-0.73	0.74	2.08	-4.30	-8.52	7.67	13.34	6.57	-6.09	4.45	5.95		4.80	Jun-01-05
BERS-TOTAL HIGH YIELD	207.1	5.37	0.86	2.28	7.32	0.86	9.75	8.39	15.68	6.25	15.01	7.73	9.41	16.02	8.40	6.32	Aug-01-97
BERS-TOTAL BANK LOANS	81.8	2.12	0.69	1.97	4.41	0.69		6.33				5.86				6.69	Dec-01-12
BERS-TOTAL TARGETED	18.5	0.48	3.14	2.15	3.47	3.14	-0.38	-1.73	4.34	7.13	5.80	1.82	4.16	5.06			Dec-01-84
BERS-TOTAL PRIVATE EQUITY	118.1	3.06	0.00	4.19	10.61	0.00	7.31	15.34	7.70	19.15	13.64	14.87	13.97	8.66		1.69	Jul-01-06
BERS-TOTAL REAL ASSETS	99.8	2.59	1.21	0.94	3.74	1.21	9.79	8.57	14.30	9.43		9.90	11.18			10.55	Dec-01-10
BERS-TOTAL CASH	41.5	1.08	0.02	0.05	0.67	0.02	-0.09	0.29	0.54	0.59	0.47	0.34	0.46	0.64		2.37	Apr-01-04
SECURITY LENDING	-0.2	-0.01															Apr-01-04
BERS-TOTAL BOARD OF ED.	3,854.6	100.00	-1.84	1.04	10.62	-1.84	12.90	18.78	13.50	-0.42	14.95	12.91	9.31	14.88	7.28	8.94	Jul-01-87
BERS-TOTAL EQUITY	2,578.3	66.89	-3.33	0.93	14.18	-3.33	19.79	29.23	17.29	-5.27	17.69	18.63	11.16	19.05		7.91	Apr-01-04
BERS-TOTAL FIXED INCOME	1,017.2	26.39	1.54	0.95	3.30	1.54	1.65	-0.57	8.55	9.42	9.39	1.09	6.03	8.34		5.92	Apr-01-04
BERS-TOTAL PRIVATE EQUITY	118.1	3.06	0.00	4.19	10.61	0.00	7.31	15.34	7.70	19.15	13.64	14.87	13.97	8.66		1.69	Jul-01-06
BERS-TOTAL REAL ASSETS	99.8	2.59	1.21	0.94	3.74	1.21	9.79	8.57	14.30	9.43		9.90	11.18			10.55	Dec-01-10
BERS-TOTAL CASH	41.5	1.08	0.02	0.05	0.67	0.02	-0.09	0.29	0.54	0.59	0.47	0.34	0.46	0.64		2.37	Apr-01-04
SECURITY LENDING	-0.2	-0.01															Apr-01-04
BERS-TOTAL BOARD OF ED.	3,854.6	100.00	-1.84	1.04	10.62	-1.84	12.90	18.78	13.50	-0.42	14.95	12.91	9.31	14.88	7.28	8.94	Jul-01-87
Board of Education Policy Benchmark			-1.76	0.65	9.24	-1.76	13.70	17.90	14.05	0.47	13.04	12.07	9.35	15.03	6.96		Jun-01-94



	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	FYTD	CYTD	FYE 06/30/13	CYE 12/31/13	CYE 12/31/12	CYE 12/31/11	CYE 12/31/10	Trailing 1 Year	Trailing 3 Year	Trailing 5 Year	Trailing 10 Year	ITD	Inception Date
EQUITY ASSET CLASS SUMMARY																	
BERS-TOTAL DOM EQUITY	1,704.1	44.21	-2.78	2.79	14.90	-2.78	23.09	35.96	16.62	-0.72	17.27	24.72	14.46	20.26	7.57	9.63	1991-09-01
BERS-TOTAL PASSIVE DOM EQUITY	1,329.4	34.49	-3.10	2.34	13.46	-3.10	21.69	33.59	16.50	0.69	16.99	22.60	14.15	20.00	7.33	9.28	1993-09-01
RUSSELL 3000 (DAILY)			-3.16	2.28	13.39	-3.16	21.46	33.55	16.42	1.03	16.93	22.60	14.18	20.03	7.32	9.04	1993-09-01
Excess			0.06	0.06	0.07	0.06	0.23	0.04	0.08	-0.33	0.06	0.00	-0.03	-0.04	0.02	0.24	
BERS-TOTAL SMALL CAP PASSIVE	102.1	2.65	-2.76	3.27		-2.76										5.94	2013-10-01
RUSSELL 2000 (DAILY)			-2.77	3.12		-2.77										5.71	2013-10-01
Excess			0.00	0.16		0.00										0.23	
BERS-TOTAL MID CAP PASSIVE	70.3	1.82	-2.12	2.23	13.98	-2.12	25.17	33.46	17.89			21.85	14.08			14.08	2011-02-01
S&P 400 MIDCAP INDEX (DAILY)			-2.12	2.23	14.03	-2.12	25.18	33.50	17.88			21.87	14.06			14.06	2011-02-01
Excess			0.01	0.00	-0.05	0.01	-0.01	-0.04	0.01			-0.02	0.02			0.02	
BERS-RUSSELL 1000 PASSIVE	1,157.0	30.02	-3.19	2.26		-3.19										6.73	2013-10-01
RUSSELL 1000 GROWTH - DAILY			-2.85	2.74		-2.85										7.29	2013-10-01
Excess			-0.34	-0.48		-0.34										-0.56	
BERS-TOTAL ACTIVE DOM EQUITY	374.6	9.72	-1.64	4.46	20.32	-1.64	27.60	44.80	16.91	-3.63	17.87	32.89	16.32	21.58	8.46	8.82	1993-02-01
RUSSELL 3000 (DAILY)			-3.16	2.28	13.39	-3.16	21.46	33.55	16.42	1.03	16.93	22.60	14.18	20.03	7.32	9.18	1993-02-01
Excess			1.52	2.18	6.93	1.52	6.14	11.25	0.49	-4.66	0.94	10.29	2.14	1.55	1.14	-0.35	
BERS-TOTAL SMALL CAP ACTIVE	32.2	0.83	-3.49	3.08	17.02	-3.49	33.60	44.54	19.91	-10.17	21.37	30.31	14.15	21.95		6.79	2004-04-01
RUSSELL 2000 (DAILY)			-2.77	3.12	16.50	-2.77	24.21	38.82	16.35	-4.18	26.85	27.03	14.69	22.26		8.25	2004-04-01
Excess			-0.72	-0.04	0.52	-0.72	9.39	5.72	3.56	-5.99	-5.48	3.28	-0.54	-0.31		-1.46	
BERS-TOTAL MID CAP ACTIVE	121.0	3.14	-0.31	5.96	19.17	-0.31	25.66	40.05	19.88	-6.79		29.64	15.33			18.50	2010-10-01
RUSSELL MIDCAP (DAILY)			-1.95	2.65	14.45	-1.95	25.41	34.76	17.28	-1.55		23.68	14.32			17.76	2010-10-01
Excess			1.63	3.31	4.72	1.63	0.26	5.28	2.60	-5.25		5.96	1.01			0.74	
BERS-TOTAL RUSSELL 1000 ACTIVE	78.1	2.03	0.35	4.87	30.73	0.35	27.71	60.88	8.41	-10.02	23.05	48.75	16.12	25.80		11.33	2004-04-01
RUSSELL 3000 (DAILY)			-3.16	2.28	13.39	-3.16	21.46	33.55	16.42	1.03	16.93	22.60	14.18	20.03		7.43	2004-04-01
Excess			3.51	2.59	17.34	3.51	6.24	27.33	-8.01	-11.04	6.12	26.15	1.94	5.77		3.90	

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



	Assets (\$MM)	% of Total		Trailing 3 Month	FYTD	CYTD	FYE 06/30/13	CYE 12/31/13	CYE 12/31/12	CYE 12/31/11	CYE 12/31/10	Trailing 1 Year	Trailing 3 Year	Trailing 5 Year	Trailing 10 Year	ITD	Inception Date
BERS-TOTAL EMERGING MANAGER PROGRAM	143.3	3.72	-3.35	3.32	16.94	-3.35	26.59	40.84	17.00	-1.75	18.99	28.71	15.28	21.08		8.30	2004-04-01
RUSSELL 3000 (DAILY)			-3.16	2.28	13.39	-3.16	21.46	33.55	16.42	1.03	16.93	22.60	14.18	20.03		7.43	2004-04-01
Excess			-0.19	1.04	3.54	-0.19	5.13	7.29	0.58	-2.78	2.06	6.11	1.10	1.04		0.87	
BERS-TOTAL INTL EQUITY	874.3	22.68	-4.38	-2.51	12.80	-4.38	13.52	17.99	18.36	-11.84	18.25	8.18	5.80	17.17	8.98	8.18	1992-11-01
MSCI AC WORLD ex US (NET)			-4.54	-3.54	10.10	-4.54	13.63	15.29	16.83	-13.71	11.15	5.75	3.19	13.86	6.90		1992-11-01
Excess			0.17	1.03	2.70	0.17	-0.11	2.70	1.52	1.87	7.09	2.43	2.62	3.31	2.08		
BERS-TOTAL EAFE EQUITY ACTIVE	703.1	18.24	-4.31	-1.32	15.65	-4.31	16.54	24.21	18.40	-10.35	17.92	13.26	8.08	17.95	8.77	8.20	1992-11-01
MSCI EAFE NET (DAILY)			-4.03	-1.84	13.19	-4.03	18.62	22.78	17.32	-12.14	7.75	11.93	5.87	13.84	6.32	6.61	1992-11-01
Excess			-0.28	0.53	2.46	-0.28	-2.09	1.43	1.09	1.79	10.17	1.33	2.21	4.11	2.44	1.58	
BERS-TOTAL ACTIVE EMERGING MARKETS	171.1	4.44	-4.66	-7.11	1.98	-4.66	1.53	-4.70	18.12	-17.86	19.85	-10.51	-3.07	14.46		9.62	2004-04-01
MSCI EMERGING MARKETS			-6.49	-9.19	0.71	-6.49	2.87	-2.60	18.22	-18.42	18.88	-10.17	-3.35	14.78		9.58	2004-04-01
Excess			1.84	2.08	1.27	1.84	-1.33	-2.10	-0.11	0.57	0.97	-0.35	0.28	-0.32		0.04	
FIXED INCOME ASSET CLASS SUMMARY																	
BERS-TOTAL FIXED INCOME	1,017.2	26.39	1.54	0.95	3.30	1.54	1.65	-0.57	8.55	9.42	9.39	1.09	6.03	8.34		5.92	2004-04-01
BERS-TOTAL STRUCTURED	573.6	14.88	1.72	0.70	2.37	1.72	-0.01	-2.38	6.68	9.23	8.36	0.01	4.93	6.60	5.37	8.19	1985-01-01
NYC - Core Plus Five			1.68	0.46	2.13	1.68	-0.95	-2.79	5.41	9.40	7.13	-0.19	4.45	5.55	5.19		1985-01-01
Excess			0.04	0.25	0.25	0.04	0.93	0.41	1.27	-0.17	1.23	0.20	0.48	1.05	0.18		
BERS-TOTAL MORTGAGE	242.5	6.29	1.47	0.31	1.81	1.47	-0.24	-1.73	4.48	6.30	7.84	-0.01	3.32	5.33	5.16		1987-04-01
CITIGROUP MORTGAGE INDEX			1.66	0.45	2.17	1.66	-1.15	-1.52	2.60	6.38	5.50	0.61	2.93	4.01	4.76		1987-04-01
Excess			-0.18	-0.14	-0.36	-0.18	0.91	-0.21	1.88	-0.08	2.35	-0.62	0.39	1.32	0.40		
BERS-TOTAL INVESTMENT GRADE CREDIT	242.8	6.30	1.49	1.21	3.53	1.49	2.29	-1.07	10.36	8.34	9.02	1.03	6.21	9.71	5.10	7.75	1987-04-01
NYC - Investment Grade Credit			1.32	0.81	3.03	1.32	1.19	-1.85	9.52	7.79	8.36	0.36	5.42	8.03	5.14		1987-04-01
Excess			0.17	0.40	0.51	0.17	1.10	0.78	0.83	0.55	0.66	0.67	0.79	1.68	-0.04		
BERS-TOTAL GOVERNMENT	88.3	2.29	3.09	0.39	0.79	3.09	-4.81	-7.49	3.95	18.52	8.93	-2.63	5.70	4.81	5.67	7.81	1987-05-01
NYC - Treasury Agency Plus Five			2.94	-0.06	0.31	2.94	-4.52	-7.48	3.84	18.44	9.24	-2.80	5.60	4.64	5.67		1987-05-01
Excess			0.15	0.44	0.48	0.15	-0.29	-0.01	0.11	0.08	-0.32	0.17	0.10	0.17	0.00		



	Assets (\$MM)	% of Total		Trailing 3 Month	FYTD	CYTD	FYE 06/30/13	CYE 12/31/13	CYE 12/31/12	CYE 12/31/11	CYE 12/31/10	Trailing 1 Year	Trailing 3 Year	Trailing 5 Year	Trailing 10 Year	ITD	Inception Date
BERS-TOTAL HIGH YIELD	207.1	5.37	0.86	2.28	7.32	0.86	9.75	8.39	15.68	6.25	15.01	7.73	9.41	16.02	8.40	6.32	1997-08-01
CITIGROUP BB & B			0.68	1.47	6.04	0.68	8.11	6.17	14.45	6.58	13.35	5.84	8.49	14.23	6.98	6.38	1997-08-01
Excess			0.17	0.81	1.28	0.17	1.64	2.22	1.23	-0.33	1.66	1.89	0.92	1.79	1.42	-0.07	
BERS-TOTAL BANK LOANS	81.8	2.12	0.69	1.97	4.41	0.69		6.33				5.86				6.69	2012-12-01
CSFB LEVERAGED LOAN INDEX			0.71	1.73	3.98	0.71		6.15				5.72				6.53	2012-12-01
Excess			-0.01	0.24	0.43	-0.01		0.18				0.14				0.15	
BERS-TOTAL ACTIVE TIPS MANAGERS	136.2	3.53	2.08	-0.73	0.74	2.08	-4.30	-8.52	7.67	13.34	6.57	-6.09	4.45	5.95		4.80	2005-06-01
Barclays Global Inflation Linked: US TIPS (Daily)			1.98	-0.61	0.64	1.98	-4.78	-8.61	6.98	13.56	6.31	-6.17	4.16	5.69		4.59	2005-06-01
Excess			0.10	-0.12	0.11	0.10	0.47	0.09	0.69	-0.22	0.26	0.08	0.29	0.26		0.20	
BERS-TOTAL TARGETED	18.5	0.48	3.14	2.15	3.47	3.14	-0.38	-1.73	4.34	7.13	5.80	1.82	4.16	5.06			1984-12-01
BERS Custom Benchmark (No Cash)							-0.60	-1.71	3.74	7.09	5.98						
Excess							0.21	-0.02	0.60	0.04	-0.18						
CASH ASSET CLASS SUMMARY																	
BERS-TOTAL CASH	41.5	1.08	0.02	0.05	0.67	0.02	-0.09	0.29	0.54	0.59	0.47	0.34	0.46	0.64		2.37	2004-04-01
91 DAY TREASURY BILL (DAILY)			0.01	0.03	0.04	0.01	0.11	0.07	0.11	0.10	0.13	0.08	0.10	0.13		1.70	2004-04-01
Excess			0.01	0.02	0.63	0.01	-0.20	0.22	0.43	0.49	0.34	0.26	0.36	0.51		0.67	
US EQUITY																	
BERS-TOTAL SMALL CAP	134.2	3.48	-2.94	3.23	17.85	-2.94	33.60	44.74	19.91	-10.17	21.37	31.23	14.42	22.12	6.78	9.31	2002-09-01
RUSSELL 2000 (DAILY)			-2.77	3.12	16.50	-2.77	24.21	38.82	16.35	-4.18	26.85	27.03	14.69	22.26	8.31	11.20	2002-09-01
Excess			-0.17	0.11	1.35	-0.17	9.39	5.92	3.56	-5.99	-5.48	4.20	-0.27	-0.14	-1.53	-1.89	
BERS-TOTAL SMALL CAP PASSIVE	102.1	2.65	-2.76	3.27		-2.76										5.94	2013-10-01
RUSSELL 2000 (DAILY)			-2.77	3.12		-2.77										5.71	2013-10-01
Excess			0.00	0.16		0.00										0.23	
NYC BERS BLACKROCK R2000 GROWTH	52.7	1.37	-1.72	4.62		-1.72										6.65	2013-10-01
RUSSELL 2000 GROWTH DAILY			-1.73	4.40		-1.73										6.30	2013-10-01
Excess			0.01	0.22		0.01										0.34	



	Assets (\$MM)	% of Total		Trailing 3 Month	FYTD	CYTD	FYE 06/30/13	CYE 12/31/13	CYE 12/31/12	CYE 12/31/11	CYE 12/31/10	Trailing 1 Year	Trailing 3 Year	Trailing 5 Year	Trailing 10 Year	ITD	Inception Date
NYC BERS BLACKROCK R2000 VALUE	49.4	1.28	-3.85	1.87		-3.85										5.19	2013-10-01
RUSSELL 2000 VALUE DAILY			-3.87	1.77		-3.87										5.07	2013-10-01
Excess			0.02	0.11		0.02										0.12	
BERS-TOTAL SMALL CAP ACTIVE	32.2	0.83	-3.49	3.08	17.02	-3.49	33.60	44.54	19.91	-10.17	21.37	30.31	14.15	21.95		6.79	2004-04-01
RUSSELL 2000 (DAILY)			-2.77	3.12	16.50	-2.77	24.21	38.82	16.35	-4.18	26.85	27.03	14.69	22.26		8.25	2004-04-01
Excess			-0.72	-0.04	0.52	-0.72	9.39	5.72	3.56	-5.99	-5.48	3.28	-0.54	-0.31		-1.46	
BERS-TOTAL SMALL CAP CORE	32.2	0.83	-3.49	3.08	17.02	-3.49	33.60	44.54	19.91	-10.17		30.31	14.15			16.24	2010-04-01
RUSSELL 2000 (DAILY)			-2.77	3.12	16.50	-2.77	24.21	38.82	16.35	-4.18		27.03	14.69			15.77	2010-04-01
Excess			-0.72	-0.04	0.52	-0.72	9.39	5.72	3.56	-5.99		3.28	-0.54			0.47	
Daruma Small Cap-Core	32.2	0.83	-3.49	3.08	17.02	-3.49	33.60	44.54	19.91	-10.17		30.31	14.15			16.24	2010-04-01
RUSSELL 2000 (DAILY)			-2.77	3.12	16.50	-2.77	24.21	38.82	16.35	-4.18		27.03	14.69			15.77	2010-04-01
Excess			-0.72	-0.04	0.52	-0.72	9.39	5.72	3.56	-5.99		3.28	-0.54			0.47	
BERS-TOTAL MID CAP	191.3	4.96	-0.98	4.55	17.21	-0.98	25.48	37.52	19.12	-5.53		26.67	14.86			17.87	2010-10-01
RUSSELL MIDCAP (DAILY)			-1.95	2.65	14.45	-1.95	25.41	34.76	17.28	-1.55		23.68	14.32			17.76	2010-10-01
Excess			0.96	1.91	2.75	0.96	0.07	2.76	1.84	-3.98		2.99	0.54			0.11	
State St GA S7P 400	70.3	1.82	-2.12	2.23	13.98	-2.12	25.17	33.46	17.89			21.85	14.08			14.08	2011-02-01
S&P 400 MIDCAP INDEX (DAILY)			-2.12	2.23	14.03	-2.12	25.18	33.50	17.88			21.87	14.06			14.06	2011-02-01
Excess			0.01	0.00	-0.05	0.01	-0.01	-0.04	0.01			-0.02	0.02			0.02	
BERS-TOTAL MID CAP ACTIVE	121.0	3.14	-0.31	5.96	19.17	-0.31	25.66	40.05	19.88	-6.79		29.64	15.33			18.50	2010-10-01
RUSSELL MIDCAP (DAILY)			-1.95	2.65	14.45	-1.95	25.41	34.76	17.28	-1.55		23.68	14.32			17.76	2010-10-01
Excess			1.63	3.31	4.72	1.63	0.26	5.28	2.60	-5.25		5.96	1.01			0.74	
BERS-TOTAL MID CAP CORE	121.0	3.14	-0.31	5.96	19.17	-0.31	25.66	40.05	19.88	-6.79		29.64	15.33			18.50	2010-10-01
S&P 400 MIDCAP INDEX (DAILY)			-2.12	2.23	14.03	-2.12	25.18	33.50	17.88	-1.73		21.87	14.06			17.61	2010-10-01
Excess			1.81	3.72	5.14	1.81	0.48	6.54	2.00	-5.06		7.78	1.27			0.89	
Wellington Mgmt MCC	121.0	3.14	-0.31	5.96	19.17	-0.31	25.66	40.05	19.88	-6.79		29.64	15.33			18.50	2010-10-01
S&P 400 MIDCAP INDEX (DAILY)			-2.12	2.23	14.03	-2.12	25.18	33.50	17.88	-1.73		21.87	14.06			17.61	2010-10-01
Excess			1.81	3.72	5.14	1.81	0.48	6.54	2.00	-5.06		7.78	1.27			0.89	
BERS-TOTAL RUSSELL 1000	1,235.2	32.04	-2.97	2.42	27.51	-2.97	31.80	62.18	14.87	-1.64	16.72	45.08	20.27	23.79	9.90	10.01	1993-09-01



	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	FYTD	CYTD	FYE 06/30/13	CYE 12/31/13	CYE 12/31/12	CYE 12/31/11	CYE 12/31/10	Trailing 1 Year	Trailing 3 Year	Trailing 5 Year	Trailing 10 Year	ITD	Inception Date
RUSSELL 1000 (DAILY)			-3.19	2.21	13.13	-3.19	21.24	33.11	16.42	1.50	16.10	22.23	14.14	19.84	7.23	9.08	1993-09-01
Excess			0.22	0.22	14.38	0.22	10.57	29.07	-1.56	-3.14	0.62	22.85	6.13	3.95	2.66	0.93	
BERS-RUSSELL 1000 PASSIVE	1,157.0	30.02	-3.19	2.26		-3.19										6.73	2013-10-01
RUSSELL 1000 GROWTH - DAILY			-2.85	2.74		-2.85										7.29	2013-10-01
Excess			-0.34	-0.48		-0.34										-0.56	
NYC BERS BLACKROCK R1000 GROWTH	590.9	15.33	-2.85	2.80		-2.85										7.40	2013-10-01
RUSSELL 1000 GROWTH - DAILY			-2.85	2.74		-2.85										7.29	2013-10-01
Excess			0.01	0.05		0.01										0.11	
NYC BERS BLACKROCK R1000 VALUE	566.1	14.69	-3.54	1.71		-3.54										6.05	2013-10-01
RUSSELL 1000 VALUE (DAILY)			-3.55	1.65		-3.55										6.10	2013-10-01
Excess			0.01	0.06		0.01										-0.05	
BERS-TOTAL RUSSELL 1000 GROWTH	78.1	2.03	0.35	4.87	30.73	0.35	27.71	60.88	8.41	-8.93	17.52	48.75	16.12	23.16	9.17	9.65	1993-09-01
RUSSELL 1000 GROWTH - DAILY			-2.85	2.74	15.99	-2.85	17.07	33.48	15.26	2.64	16.71	24.35	14.37	20.88	7.30	8.34	1993-09-01
Excess			3.20	2.12	14.75	3.20	10.64	27.40	-6.85	-11.57	0.81	24.40	1.74	2.28	1.87	1.31	
Zevenbergen ACG	78.1	2.03	0.35	4.87	30.73	0.35	27.71	60.88	8.41	-10.02	23.05	48.75	16.12	25.80	10.96	11.07	1993-03-01
RUSSELL 3000 GROWTH (DAILY)			-2.76	2.88	16.30	-2.76	17.56	34.23	15.21	2.18	17.64	24.95	14.53	21.13	7.41	8.19	1993-03-01
Excess			3.11	1.99	14.43	3.11	10.15	26.65	-6.80	-12.20	5.41	23.80	1.59	4.68	3.55	2.89	
BERS-TOTAL EMERGING MANAGER PROGRAM	143.3	3.72	-3.35	3.32	16.94	-3.35	26.59	40.84	17.00	-1.75	18.99	28.71	15.28	21.08		8.30	2004-04-01
RUSSELL 3000 (DAILY)			-3.16	2.28	13.39	-3.16	21.46	33.55	16.42	1.03	16.93	22.60	14.18	20.03		7.43	2004-04-01
Excess			-0.19	1.04	3.54	-0.19	5.13	7.29	0.58	-2.78	2.06	6.11	1.10	1.04		0.87	
BERS-TOTAL FIS	73.3	1.90	-3.36	2.82	17.03	-3.36	31.34	43.42	17.35	-2.62	27.68	30.65	16.35	22.73		7.19	2008-01-01
RUSSELL 2000 (DAILY)			-2.77	3.12	16.50	-2.77	24.21	38.82	16.35	-4.18	26.85	27.03	14.69	22.26		8.11	2008-01-01
Excess			-0.60	-0.30	0.53	-0.60	7.14	4.60	1.00	1.55	0.83	3.62	1.66	0.47		-0.93	
BERS-TOTAL PROGRESS	70.0	1.82	-3.34	3.85	16.84	-3.34	22.95	37.64	16.87	-1.43	16.04	25.96	14.28	20.10	7.93	5.53	1999-05-01
RUSSELL 3000 (DAILY)			-3.16	2.28	13.39	-3.16	21.46	33.55	16.42	1.03	16.93	22.60	14.18	20.03	7.32	4.63	1999-05-01
Excess			-0.18	1.57	3.45	-0.18	1.49	4.09	0.45	-2.45	-0.89	3.35	0.10	0.07	0.61	0.90	
NON - US EQUITY																	



	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	FYTD	CYTD	FYE 06/30/13	CYE 12/31/13	CYE 12/31/12	CYE 12/31/11	CYE 12/31/10	Trailing 1 Year	Trailing 3 Year	Trailing 5 Year	Trailing 10 Year	ITD	Inception Date
BERS-TOTAL INTERNATIONAL VALUE	290.0	7.52	-4.39	-2.96	10.05	-4.39	14.07	16.94	17.84	-9.92	18.56	8.26	5.90	15.71		7.81	2004-08-01
MSCI EAFE VALUE NET (DAILY)			-3.57	-1.61	15.40	-3.57	18.56	22.95	17.69	-12.17	3.25	11.97	5.45	13.83		6.29	2004-08-01
Excess			-0.82	-1.35	-5.35	-0.82	-4.49	-6.01	0.15	2.26	15.31	-3.71	0.45	1.88		1.52	
Sprucegrove MTA (BOE)	290.0	7.52	-4.39	-2.96	10.05	-4.39	14.07	16.94	17.84	-9.92	18.56	8.26	5.90	15.71		7.81	2004-08-01
MSCI EAFE VALUE NET (DAILY)			-3.57	-1.61	15.40	-3.57	18.56	22.95	17.69	-12.17	3.25	11.97	5.45	13.83		6.29	2004-08-01
Excess			-0.82	-1.35	-5.35	-0.82	-4.49	-6.01	0.15	2.26	15.31	-3.71	0.45	1.88		1.52	
BERS-TOTAL INTERNATIONAL GROWTH	334.5	8.68	-4.99	-0.81	19.36	-4.99	17.89	29.53	18.88	-10.71	17.36	15.75	9.34	19.54		5.05	2007-08-01
MSCI EAFE GROWTH NET (DAILY)			-4.48	-2.08	10.99	-4.48	18.67	22.55	16.86	-12.11	12.25	11.84	6.23	13.81		0.74	2007-08-01
Excess			-0.51	1.27	8.37	-0.51	-0.78	6.98	2.02	1.40	5.12	3.92	3.11	5.73		4.30	
Baillie Gifford MTA	334.5	8.68	-4.99	-0.81	19.36	-4.99	17.89	29.53	18.88	-10.71	17.36	15.75	9.34	19.54		5.05	2007-08-01
MSCI EAFE GROWTH NET (DAILY)			-4.48	-2.08	10.99	-4.48	18.67	22.55	16.86	-12.11	12.25	11.84	6.23	13.81		0.74	2007-08-01
Excess			-0.51	1.27	8.37	-0.51	-0.78	6.98	2.02	1.40	5.12	3.92	3.11	5.73		4.30	
BERS-TOTAL EAFE SMALL CAP	78.6	2.04	-0.99	2.89	22.51	-0.99										14.91	2013-05-01
S&P EPAC Small Cap Index			-1.38	1.33	20.09	-1.38										13.51	2013-05-01
Excess			0.39	1.56	2.43	0.39										1.40	
Acadian	78.6	2.04	-0.99	2.89	22.51	-0.99										14.91	2013-05-01
S&P EPAC Small Cap Index			-1.38	1.33	20.09	-1.38										13.51	2013-05-01
Excess			0.39	1.56	2.43	0.39										1.40	
BERS-TOTAL ACTIVE EAFE EQUITY	703.1	18.24	-4.31	-1.32	15.65	-4.31	16.54	24.21	18.40	-10.35	17.92	13.26	8.08	17.95	8.78	8.49	1992-11-01
MSCI EAFE NET (DAILY)			-4.03	-1.84	13.19	-4.03	18.62	22.78	17.32	-12.14	7.75	11.93	5.87	13.84	6.32	6.61	1992-11-01
Excess			-0.28	0.53	2.46	-0.28	-2.09	1.43	1.09	1.79	10.17	1.33	2.21	4.11	2.46	1.88	
EMERGING MARKETS																	
BERS-TOTAL EMERGING (INTL)	171.1	4.44	-4.66	-7.11	2.11	-4.66	1.83	-4.27	18.15	-18.03	19.85	-10.09	-2.99	14.52	10.01	8.26	1997-11-01
BERS-TOTAL ACTIVE EMERGING MARKETS	171.1	4.44	-4.66	-7.11	1.98	-4.66	1.53	-4.70	18.12	-17.86	19.85	-10.51	-3.07	14.46		9.62	2004-04-01
MSCI EMERGING MARKETS			-6.49	-9.19	0.71	-6.49	2.87	-2.60	18.22	-18.42	18.88	-10.17	-3.35	14.78		9.58	2004-04-01
Excess			1.84	2.08	1.27	1.84	-1.33	-2.10	-0.11	0.57	0.97	-0.35	0.28	-0.32		0.04	
ACADIAN	171.1	4.44	-4.66	-7.11	1.98	-4.66										-7.79	2013-03-01
MSCI EMERGING MARKETS			-6.49	-9.19	0.71	-6.49										-9.02	2013-03-01
Excess			1.84	2.08	1.27	1.84										1.23	



	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	FYTD	CYTD	FYE 06/30/13	CYE 12/31/13	CYE 12/31/12	CYE 12/31/11	CYE 12/31/10	Trailing 1 Year	Trailing 3 Year	Trailing 5 Year	Trailing 10 Year	ITD	Inception Date
BERS-TOTAL INTL EQUITY	874.3	22.68	-4.38	-2.51	12.80	-4.38	13.52	17.99	18.36	-11.84	18.25	8.18	5.80	17.17	8.98	8.18	1992-11-01
MSCI AC WORLD ex US (NET)			-4.54	-3.54	10.10	-4.54	13.63	15.29	16.83	-13.71	11.15	5.75	3.19	13.86	6.90		1992-11-01
Excess			0.17	1.03	2.70	0.17	-0.11	2.70	1.52	1.87	7.09	2.43	2.62	3.31	2.08		
FIXED INCOME																	
BERS-TOTAL STRUCTURED	573.6	14.88	1.72	0.70	2.37	1.72	-0.01	-2.38	6.68	9.23	8.36	0.01	4.93	6.60	5.37	8.19	1985-01-01
NYC - Core Plus Five			1.68	0.46	2.13	1.68	-0.95	-2.79	5.41	9.40	7.13	-0.19	4.45	5.55	5.19		1985-01-01
Excess			0.04	0.25	0.25	0.04	0.93	0.41	1.27	-0.17	1.23	0.20	0.48	1.05	0.18		
BERS-TOTAL MORTGAGE	242.5	6.29	1.47	0.31	1.81	1.47	-0.24	-1.73	4.48	6.30	7.84	-0.01	3.32	5.33	5.16	7.31	1987-04-01
CITIGROUP MORTGAGE INDEX			1.66	0.45	2.17	1.66	-1.15	-1.52	2.60	6.38	5.50	0.61	2.93	4.01	4.76	6.82	1987-04-01
Excess			-0.18	-0.14	-0.36	-0.18	0.91	-0.21	1.88	-0.08	2.35	-0.62	0.39	1.32	0.40	0.49	
PIMCO - Mortgage	242.5	6.29	1.47	0.31	1.81	1.47	-0.24	-1.73	4.48	6.30	7.84	-0.01	3.32	5.33	5.16	7.31	1987-04-01
CITIGROUP MORTGAGE INDEX			1.66	0.45	2.17	1.66	-1.15	-1.52	2.60	6.38	5.50	0.61	2.93	4.01	4.76	6.82	1987-04-01
Excess			-0.18	-0.14	-0.36	-0.18	0.91	-0.21	1.88	-0.08	2.35	-0.62	0.39	1.32	0.40	0.49	
BERS-TOTAL INVESTMENT GRADE CREDIT	242.8	6.30	1.49	1.21	3.53	1.49	2.29	-1.07	10.36	8.34	9.02	1.03	6.21	9.71	5.10	7.75	1987-04-01
NYC - Investment Grade Credit			1.32	0.81	3.03	1.32	1.19	-1.85	9.52	7.79	8.36	0.36	5.42	8.03	5.14		1987-04-01
Excess			0.17	0.40	0.51	0.17	1.10	0.78	0.83	0.55	0.66	0.67	0.79	1.68	-0.04		
Prudential - Credit	130.6	3.39	1.64	1.26	3.64	1.64	1.44	-1.21	9.51	8.00	8.72	1.22	5.86			6.88	2009-08-01
NYC - Investment Grade Credit			1.32	0.81	3.03	1.32	1.19	-1.85	9.52	7.79	8.36	0.36	5.42			6.53	2009-08-01
Excess			0.32	0.45	0.62	0.32	0.25	0.64	-0.01	0.20	0.36	0.86	0.44			0.35	
Taplin Canida Habacht - Credit	97.3	2.52	1.51	1.50	3.72	1.51	3.19	-1.04	11.51	8.83	9.43	0.87	6.70	10.10	5.29	7.06	1993-01-01
NYC - Investment Grade Credit			1.32	0.81	3.03	1.32	1.19	-1.85	9.52	7.79	8.36	0.36	5.42	8.03	5.14	6.54	1993-01-01
Excess			0.19	0.69	0.69	0.19	2.00	0.81	1.99	1.04	1.07	0.51	1.29	2.07	0.15	0.52	
Prudential-Privest - Credit	15.0	0.39	0.00	-0.99	1.41	0.00		0.00				0.34				0.00	2013-01-01
NYC - Investment Grade Credit			1.32	0.81	3.03	1.32		-1.85				0.36				-0.51	2013-01-01
Excess			-1.32	-1.81	-1.62	-1.32		1.85				-0.02				0.51	
BERS-TOTAL GOVERNMENT	88.3	2.29	3.09	0.39	0.79	3.09	-4.81	-7.49	3.95	18.52	8.93	-2.63	5.70	4.81	5.67	7.81	1987-05-01
NYC - Treasury Agency Plus Five			2.94	-0.06	0.31	2.94	-4.52	-7.48	3.84	18.44	9.24	-2.80	5.60	4.64	5.67		1987-05-01
Excess			0.15	0.44	0.48	0.15	-0.29	-0.01	0.11	0.08	-0.32	0.17	0.10	0.17	0.00		
State Street Govt	88.3	2.29	3.09	0.39	0.79	3.09	-4.81	-7.49	3.95	18.52	8.93	-2.63	5.70	4.81	5.81	7.20	1993-01-01
NYC - Treasury Agency Plus Five			2.94	-0.06	0.31	2.94	-4.52	-7.48	3.84	18.44	9.24	-2.80	5.60	4.64	5.67	7.09	1993-01-01



	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	FYTD	CYTD	FYE 06/30/13	CYE 12/31/13	CYE 12/31/12	CYE 12/31/11	CYE 12/31/10	Trailing 1 Year	Trailing 3 Year	Trailing 5 Year	Trailing 10 Year	ITD	Inception Date
Excess			0.15	0.44	0.48	0.15	-0.29	-0.01	0.11	0.08	-0.32	0.17	0.10	0.17	0.15	0.12	
HIGH YIELD																	
BERS-TOTAL HIGH YIELD	207.1	5.37	0.86	2.28	7.32	0.86	9.75	8.39	15.68	6.25	15.01	7.73	9.41	16.02	8.40	6.32	1997-08-01
CITIGROUP BB & B	201.1	3.57	0.68	1.47	6.04	0.68	8.11	6.17	14.45	6.58	13.35	5.84	8.49	14.23	6.98	6.38	1997-08-01
Excess			0.17	0.81	1.28	0.17	1.64	2.22	1.23	-0.33	1.66	1.89	0.92	1.79	1.42	-0.07	
Loomis Sayles - High Yield	111.5	2.89	1.04	2.08	7.42	1.04	12.38	9.95	17.52	7.14	15.79	8.74	10.89	18.68	9.50	8.07	1997-08-01
NYC-Loomis (BoA MLMSTII 7-03/BB&B PRIOR)			0.74	1.76	6.61	0.74	9.57	7.42	15.58	4.38	15.19	6.74	8.54	17.60	8.36	7.26	1997-08-01
Excess			0.30	0.32	0.80	0.30	2.82	2.54	1.94	2.75	0.60	1.99	2.35	1.08	1.14	0.81	
Shenkman - High Yield	95.5	2.48	0.65	2.52	7.21	0.65		6.63				6.58				8.05	2012-09-01
CITIGROUP BB & B			0.68	1.47	6.04	0.68		6.17				5.84				7.87	2012-09-01
Excess			-0.04	1.05	1.17	-0.04		0.46				0.74				0.18	
BANK LOANS																	
BERS-TOTAL BANK LOANS	81.8	2.12	0.69	1.97	4.41	0.69		6.33				5.86				6.69	2012-12-01
CSFB LEVERAGED LOAN INDEX			0.71	1.73	3.98	0.71		6.15				5.72				6.53	2012-12-01
Excess			-0.01	0.24	0.43	-0.01		0.18				0.14				0.15	
Babson BL	81.8	2.12	0.69	1.97	4.41	0.69		6.33				5.86				6.69	2012-12-01
CSFB LEVERAGED LOAN INDEX			0.71	1.73	3.98	0.71		6.15				5.72				6.53	2012-12-01
Excess			-0.01	0.24	0.43	-0.01		0.18				0.14				0.15	
BERS-TOTAL ACTIVE TIPS MANAGERS	136.2	3.53	2.08	-0.73	0.74	2.08	-4.30	-8.52	7.67	13.34	6.57	-6.09	4.45	5.95		4.80	2005-06-01
Barclays Global Inflation Linked: US TIPS (Daily)			1.98	-0.61	0.64	1.98	-4.78	-8.61	6.98	13.56	6.31	-6.17	4.16	5.69		4.59	2005-06-01
Excess			0.10	-0.12	0.11	0.10	0.47	0.09	0.69	-0.22	0.26	80.0	0.29	0.26		0.20	
PIMCO TIPS MTA	136.2	3.53	2.08	-0.73	0.74	2.08	-4.30	-8.52	7.67	13.34	6.57	-6.09	4.45	5.95		4.80	2005-06-01
Barclays Global Inflation Linked: US TIPS (Daily)			1.98	-0.61	0.64	1.98	-4.78	-8.61	6.98	13.56	6.31	-6.17	4.16	5.69		4.59	2005-06-01
Excess			0.10	-0.12	0.11	0.10	0.47	0.09	0.69	-0.22	0.26	0.08	0.29	0.26		0.20	
OTHER FIXED INCOME																	
BERS-TOTAL TARGETED	18.5	0.48	3.14	2.15	3.47	3.14	-0.38	-1.73	4.34	7.13	5.80	1.82	4.16	5.06			1984-12-01
BERS Custom Benchmark (No Cash)							-0.60	-1.71	3.74	7.09	5.98						

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



	Assets (\$MM)	% of Total	Trailing 1 Month	Trailing 3 Month	FYTD	CYTD	FYE 06/30/13	CYE 12/31/13	CYE 12/31/12	CYE 12/31/11	CYE 12/31/10	Trailing 1 Year	Trailing 3 Year	Trailing 5 Year	Trailing 10 Year	ITD	Inception Date
Excess							0.21	-0.02	0.60	0.04	-0.18						
AFL-CIO Hsg Inv Trust	11.7	0.30	1.50	0.60	1.75	1.50	-1.06	-2.37	4.27	7.86	6.16	-0.34	3.58	4.71		4.84	2006-12-01
Barclays Aggregate (Daily)			1.48	0.53	1.91	1.48	-0.69	-2.02	4.21	7.84	6.54	0.12	3.73	4.93		4.92	2006-12-01
Excess			0.02	0.08	-0.16	0.02	-0.37	-0.35	0.06	0.02	-0.39	-0.46	-0.15	-0.23		-0.08	
Access RBC	5.2	0.14	1.69	0.11	1.59	1.69	-0.31	-2.09	4.43	6.99	5.72	0.05	3.58	5.26		5.67	2007-03-01
Access RBC Benchmark			1.40	0.24	1.62	1.40	-0.90	-1.50	2.38	6.32	5.52	0.38	2.76	3.46		4.72	2007-03-01
Excess			0.28	-0.13	-0.03	0.28	0.59	-0.58	2.06	0.66	0.20	-0.34	0.81	1.80		0.94	
CPC Term Loan	0.6	0.01	0.18	0.60	1.42	0.18	2.45	2.45	2.51	2.09	2.06	2.44	2.35	2.26		3.24	2007-03-01
CPC Term Loan Index			0.18	0.53	1.36	0.18	2.50	2.44	2.47	2.03	2.08	2.41	2.31	2.23		3.19	2007-03-01
Excess			0.01	0.07	0.06	0.01	-0.05	0.01	0.05	0.05	-0.01	0.03	0.04	0.03		0.04	
BERS-TOTAL PPAR	1.0	0.03	6.15	5.78	9.00	6.15	8.70	6.94	9.28	4.97	8.51	12.72	9.07	9.30		8.78	2006-10-01
GNMA Plus 65bps			2.02	0.73	2.96	2.02	-1.53	-1.56	2.89	8.70	7.32	0.99	3.88	4.98		5.83	2006-10-01
Excess			4.13	5.05	6.04	4.13	10.23	8.50	6.39	-3.73	1.19	11.72	5.19	4.32		2.94	
CFSB-PPAR	0.1	0.00	3.60	3.53	6.10	3.60	5.55	4.28	8.16	3.29	12.80	7.51	6.40	8.23		7.50	2006-10-01
CCD-PPAR	0.3	0.01	3.00	3.29	6.55	3.00	10.30	8.64	11.40	5.59	11.58	10.95	9.40	10.41		9.33	2006-12-01
CPC-PPAR	0.2	0.00	2.45	9.93		2.45										12.30	2013-08-01
JPMC-PPAR	0.0	0.00	4.41	6.68		4.41										7.35	2013-09-01
LIIF-PPAR	0.2	0.00	2.27	2.90	5.78	2.27	8.12	7.82	6.84	4.96	4.34	9.59	7.22			6.68	2009-08-01
NCBCI-PPAR	0.1	0.00	3.67	-12.49	-8.91	3.67	10.42	-7.92	9.46	8.50	4.10	-5.26	4.15			4.38	2009-08-01
NYC BERS LIIF-PPAR ETI MTA 2013	0.1	0.00	3.49	6.73		3.49											2013-07-16
NYC BERS NCB-CI PPAR ETI MTA 2013	0.0	0.00	3.71	15.24		3.71											2013-07-16
CASH																	
BERS-TOTAL CASH	41.5	1.08	0.02	0.05	0.67	0.02	-0.09	0.29	0.54	0.59	0.47	0.34	0.46	0.64		2.37	2004-04-01
91 DAY TREASURY BILL (DAILY)			0.01	0.03	0.04	0.01	0.11	0.07	0.11	0.10	0.13	0.08	0.10	0.13		1.70	2004-04-01
Excess			0.01	0.02	0.63	0.01	-0.20	0.22	0.43	0.49	0.34	0.26	0.36	0.51		0.67	
BERS-TOTAL CASH	41.4	1.08	0.02	0.05		0.02	-0.10	0.29	0.53	0.62	0.47	0.34	0.47	0.65		2.29	2004-04-01
C/D - Fail Float Earnings	0.1	0.00	0.00	0.01		0.00	0.10		0.11	0.06	0.38						2004-04-01
SECURITY LENDING	-0.2	-0.01															2004-04-01
								_	_						_		

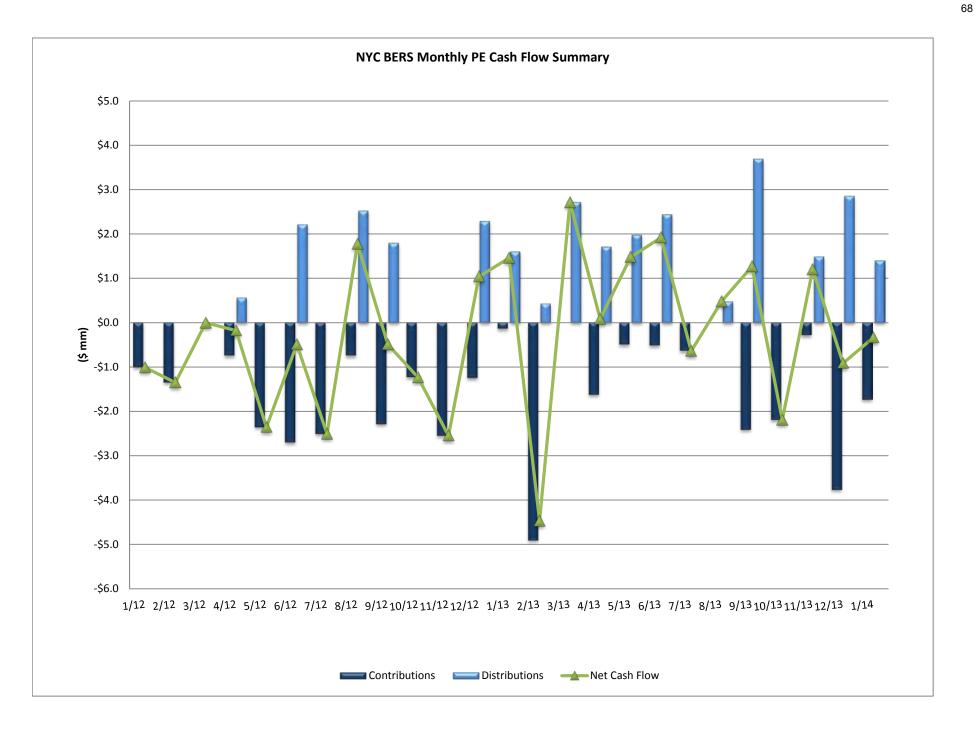


	Assets (\$MM)	% of Total	-		FYTD	CYTD	FYE 06/30/13	CYE 12/31/13	CYE 12/31/12	CYE 12/31/11	CYE 12/31/10	Trailing 1 Year	Trailing 3 Year	Trailing 5 Year	Trailing 10 Year	ITD	Inception Date
PRIVATE EQUITY																	
BERS-TOTAL PRIVATE EQUITY	118.1	3.06	0.00	4.19	10.61	0.00	7.31	15.34	7.70	19.15	13.64	14.87	13.97	8.66		1.69	2006-07-01
NYC R3000 +3% Lagged			4.49	5.87	14.91	4.49	18.29	24.53	35.20	5.55	15.96	30.13	22.91	16.25		11.33	2006-07-01
Excess			-4.49	-1.69	-4.30	-4.49	-10.98	-9.19	-27.50	13.60	-2.32	-15.25	-8.95	-7.59		-9.64	
REAL ASSETS																	
BERS-TOTAL REAL ASSETS	99.8	2.59	1.21	0.94	3.74	1.21	9.79	8.57	14.30	9.43		9.90	11.18			10.55	2010-12-01
BERS-TOTAL PRIVATE REAL ESTATE	99.1	2.57	1.22	1.01	3.81	1.22	9.79	8.64	14.30	9.43		9.97	11.21			10.58	2010-12-01
NCREIF NFI-ODCE NET + 100 BP			0.08	3.19	7.00	0.08	12.18	14.02	10.88	16.09		14.02	13.65			14.57	2010-12-01
Excess			1.14	-2.18	-3.19	1.14	-2.39	-5.39	3.41	-6.66		-4.05	-2.44			-4.00	
BERS-TOTAL INFRASTRUCTURE	0.7	0.02	0.00	-10.06		0.00										-10.06	2013-11-01
BERS-TOTAL BOARD OF ED.	3,854.6	100.00	-1.84	1.04	10.62	-1.84	12.90	18.78	13.50	-0.42	14.95	12.91	9.31	14.88	7.28	8.94	1987-07-01
Board of Education Policy Benchmark			-1.76	0.65	9.24	-1.76	13.70	17.90	14.05	0.47	13.04	12.07	9.35	15.03	6.96		1987-07-01
Excess			-0.07	0.39	1.38	-0.07	-0.80	0.88	-0.55	-0.89	1.91	0.84	-0.04	-0.15	0.33		

# NYC Board of Education Retirement System Private Equity Portfolio As of September 30, 2013 (in USD)

Vintage Year	Investment	First Drawdown	Committed Capital	Pa	aid-In Capital	Distributed Capital	Market Value	Multiple	IRR
Active Inve	estments								
2005	Mesirow Financial Private Equity Partnership Fund III, L.P.	7/20/2006	\$ 57,000,000	\$	52,243,273	\$ 22,441,092	\$ 51,578,461	1.42x	7.62%
2006	Mesirow Financial Private Equity Partnership Fund IV, L.P.	3/31/2008	25,000,000		18,467,233	3,128,759	19,772,115	1.24x	6.91%
2006	New York Fairview Private Equity Fund, L.P.	7/14/2006	19,000,000		15,814,680	5,221,393	13,996,463	1.22x	5.38%
2009	Mesirow Financial Private Equity Partnership Fund V, L.P.	3/7/2011	45,000,000		20,264,326	2,033,886	21,856,600	1.18x	11.79%
2012	Warburg Pincus Private Equity XI, L.P.	7/17/2012	25,000,000		5,010,550	116,250	5,418,058	1.10x	9.50%
2012	Platinum Equity Capital Partners III, L.P.	1/14/2013	15,000,000		4,055,087	2,556,083	2,192,819	1.17x	34.16%
2012	Carlyle Partners VI, L.P.	7/3/2013	20,000,000		137,685	-	53,488	0.39x	(61.15%)
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
2013	Apollo Investment Fund VIII, L.P.	N/A	20,000,000		-	-	-	0.00x	N/A
2013	CVC Capital Partners VI, L.P.	N/A	20,797,479		-	-	-	0.00x	N/A
Total Portf	olio		\$ 273,997,479	\$	115,992,834	\$ 35,497,463	\$ 114,868,004	1.30x	7.57%

Note: Where available, September 30, 2013 reported valuations were used. In the absense of September 30, 2013 reported values, market values have been adjusted forward using interim cashflows through September 30, 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 September 30, 2013.



# The Townsend Group

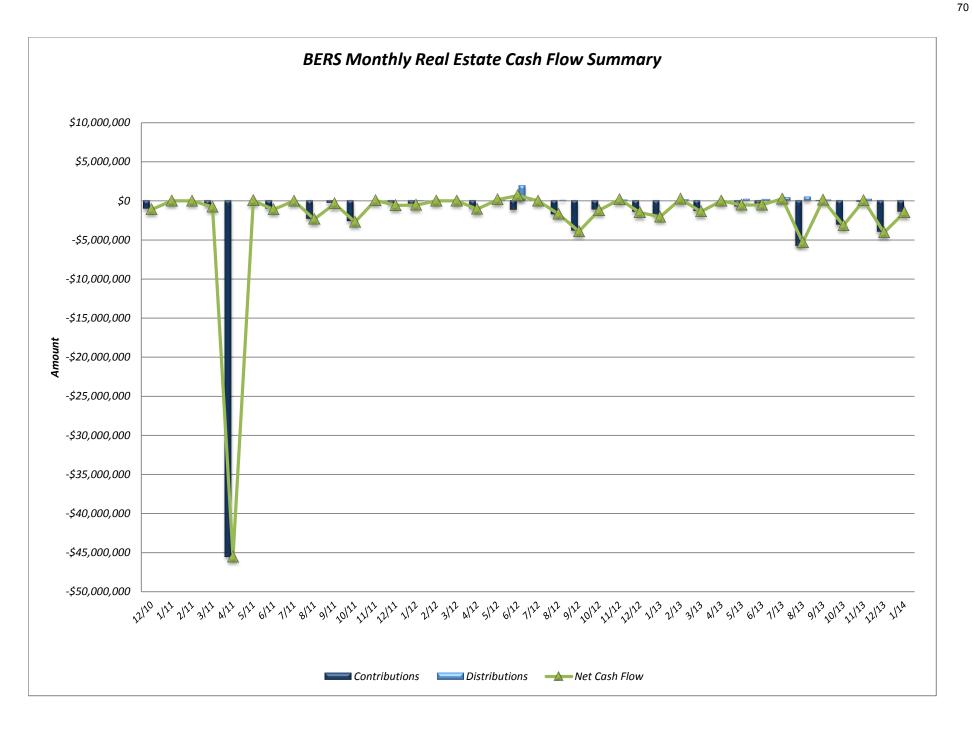
#### **New York City Board of Education Retirement System**

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	\$46,808,224	(\$4,294,057)	\$53,886,134	1.2	10.1%
2011	LaSalle Property Fund	12/13/2010	\$27,600,000	\$23,139,430	(\$1,419,944)	\$25,784,356	1.2	12.5%
2013	NYC Asset Investor #2 LLC - Related	7/9/2013	\$11,000,000	\$187,710	\$0	\$174,425	0.9	-27.6%
	Core/Core Plus Portfolio		\$80,000,000	\$70,135,364	(\$5,714,000)	\$79,844,914	1.2	10.6%
2011	Franklin Templeton Private Real Estate Fund	3/31/2011	\$30,000,000	\$7,206,523	(\$985,834)	\$6,781,197	1.1	5.6%
2012	Brookfield Strategic Real Estate Partners	9/20/2012	\$10,000,000	\$2,514,535	\$0	\$2,736,603	1.1	15.6%
2013	NYC Asset Investor #1 LLC - Emmes	6/25/2013	\$10,000,000	\$758,428	\$0	\$748,285	1.0	-4.9%
2013	NYC Asset Investor #3 LLC - Hudson	9/20/2013	\$8,000,000	\$62,475	\$0	\$61,686	1.0	-37.1%
	Non-Core Portfolio		\$58,000,000	\$10,541,961	(\$985,834)	\$10,327,771	1.1	6.6%
	New York City Board of Education Retirement System		\$138,000,000	\$80,677,325	(\$6,699,834)	\$90,172,685	1.2	10.3%

#### **Funds Closed Subsequent to Quarter**

Vintage	Fund Name	First Draw Down	Capital Committed	Contributions				
2013	Blackstone Real Estate Partners Europe IV		\$25,000,000	-	-	-	-	-
<b>Grand Total</b>			\$25,000,000					

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 September 30, 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.



III. Risk Presentation:

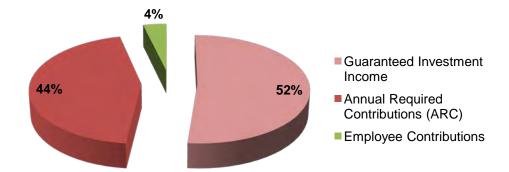
# The Pension Balance Sheet: A Risk Manager's Perspective



THE CITY OF NEW YORK OFFICE OF THE COMPTROLLER BAM Risk Management February 19, 2014

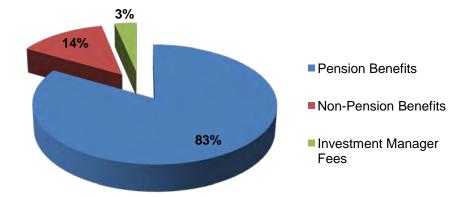
# Annual Income

- \$11.0B Guaranteed Annual Investment Income
- \$9.5B Annual Required Contributions (ARC)
- \$0.8B Employee Contributions
- \$21.3B Total Income



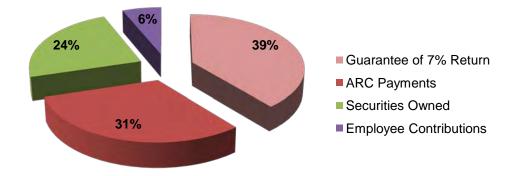
# Annual Disbursements

- \$10.0B Pension Benefits
- \$1.6B Non-Pension Benefits
- \$0.4B Investment Management Fees
- \$12.0B Total Disbursements



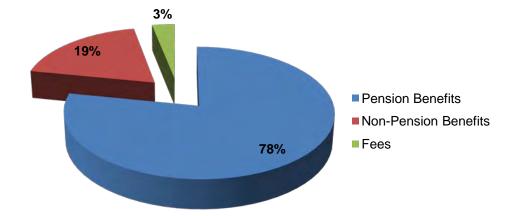
# Market Value of Assets

- \$250B Guarantee of 7% Return
- \$200B ARC Payments
- \$150B Securities Owned
- \$40B Employee Contributions
- \$640B Total Assets



# Market Value of Liabilities

- \$500B Pension Benefits
- \$120B Non-Pension Benefits
- \$20B Investment Management Fees
- \$640B Total Liabilities



**APPENDICES**:

Basket Clause

### **BERS- BASKET/NON BASKET SUMMARY**

As of January 31st, 2014	Adj	usted Fund Po	licy		ctual (PE & l	
·	Non			Non		•
<b>Equity</b>	Basket*	Basket*	Total	Basket*	Basket*	Total
Domestic Equity	42.3%	0.0%	42.3%	44.2%	0.0%	44.2%
Non-U.S. Equity	10.0%	12.0%	22.0%	10.0%	12.7%	22.7%
Private Equity	0.0%	3.1%	3.1%	0.0%	3.1%	3.1%
Real Assets	2.6%	0.0%	2.6%	2.6%	0.0%	2.6%
<b>Total Equity</b>	54.9%	15.1%	70.0%	56.8%	15.7%	72.5%
Fixed Income						
Core+5	16.5%	0.5%	17.0%	14.4%	0.5%	14.9%
U.S. Gov't Sector	3.1%	0.0%	3.1%	2.3%	0.0%	2.3%
Mortgage Sector	6.6%	0.0%	6.6%	6.3%	0.0%	6.3%
Credit Sector	6.8%	0.5%	7.3%	6.3%	0.5%	6.8%
High Yield	4.4%	1.1%	5.5%	4.3%	1.1%	5.4%
Bank Loans	0.0%	2.5%	2.5%	0.0%	2.1%	2.1%
TIPS	4.5%	0.5%	5.0%	3.2%	0.4%	3.5%
Other Fixed Income	0.0%	0.0%	0.0%	1.6%	0.0%	1.6%
Total Fixed Income	25.4%	4.6%	30.0%	23.4%	4.0%	27.5%
Total Fund	80.4%	19.6%	100.0%	80.2%	19.8%	100.0%

### **Remaining Capacity**

5.4%

5.2%

<sup>\*</sup> Note: Basket amounts are estimates

Liquidity Analysis

3/13/14

# BERS Liquidity Profile - Static Analysis

AUM as of January 31, 2014

			Liquid Assets		
	Current MV	Today	1 Year	2 Years	
Domestic Equity	\$1,704	\$1,704	\$1,704	\$1,704	
International Equity	703	703	703	703	
Emerging Markets	171	171	171	171	
Private Equity	118	0	0	0	
Private Real Estate	100	0	0	0	
Core + 5	574	574	574	574	
TIPS	136	136	136	136	
Enhanced Yield	207	207	207	207	
Bank Loans	82	82	82	82	
ETI	19	5	17	17	
Cash	41	41	41	41	
Total Assets	\$3,855	\$3,624	\$3,635	\$3,635	
Total Illiquid \$ Total Illiquid %		\$231 6.0%	\$219 5.7%	\$219 5.7%	
Unfunded PE Commitments Unfunded RE Commitments Total commitments \$ Total commitments %	\$152 55 \$207 5.4%				

### **BERS Liquidity Profile - Static Analysis**

3/13/14

AUM as of January 31, 2014

**Total Illiquid %** 

 Total Illiquid \$
 \$231
 \$219

 Total Illiquid %
 9.0%
 8.5%
 8.5%

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

		Liquid Assets		
	Current MV	Today	1 Year	2 Years
Total Assets	\$3,855	\$3,624	\$3,635	\$3,635
Private Equity, Real Estate and Opp	oortunistic Fixed	Income Stress		<b>C</b> C4
Unfunded PE Commitments Drawn			\$30	\$61
Unfunded RE Commitments Drawn			11	22
Total commitments \$			<u>\$41</u>	\$83
Total commitments %			1.1%	2.2%
Total Illiquid \$			\$261	\$302
Total Illiquid %			6.8%	7.8%
Note: Assumes zero realizations, no new comm	mitments and a five-ye	ar investment period	; funded out of liquids	
Denominator Effect - Decrease AUI Total Illiquid \$	մ by One-Third	\$231	\$261	\$302

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

9.0%

10.2%

11.8%