

New York City  
Board of Education Retirement System  
Performance Overview as of June 30, 2015

# Total Fund Overview

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

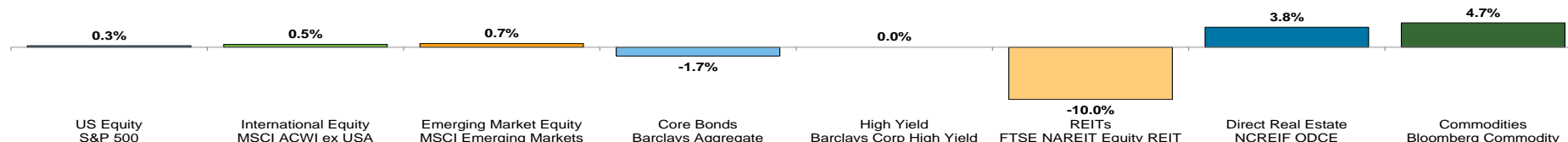
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Through June 30, 2015



## Market Commentary



### Market Themes

- International events dominated the financial headlines, including a worsening of the Greek fiscal situation and fears of an impending collapse in Chinese equities. Expectations increased for Federal Reserve action to tighten monetary policy in 2015, though at a gradual pace and potentially constrained by international events.
- The second estimate for Q2 GDP indicated 3.7% growth, which was largely driven by a rise in consumer spending and higher net exports. Final data for Q1 GDP indicated 0.6% growth, a significant revision from the -0.7% decline originally reported. Slower Q1 growth is widely seen due to transitory factors (cold weather, volatile currency/oil fluctuations). Current consensus forecasts are for 3% annualized growth for the remainder of 2015.
- Labor data for Q2 indicated further improvement, but it still fell short of rising market expectations. Non-farm payrolls averaged a gain of 221,000 each month during Q2. While the rate was greater compared to Q1, data for the month of June was below consensus and included downward revisions for previously reported April and May numbers. The unemployment rate declined to 5.3% as of June 30. Despite representing a 7-year low, enthusiasm was tempered by a corresponding drop in the labor participation rate, which effectively offset the lower unemployment rate.
- CPI for the 12 months ending in June rose to positive territory but still consisted of only a 0.1% gain. Supportive factors included a stabilization in energy prices and a recovery by quarter-end to the higher end of the \$50-\$60 range per barrel of crude oil. Core inflation (excluding volatile food and energy components) rose to 1.8%.
- The situation in Greece deteriorated as scheduled payments to the IMF at quarter-end were missed, and Greek banks were forced to close their doors to prevent a currency run. A Greek exit from the Eurozone became a realistic scenario.
- China created global uncertainty due to a steep decline in equity prices. Although Chinese equities recorded enormous gains for the year-to-date period through June 30, the final two weeks were marred by the largest declines in years. This created fears of a bursting asset bubble and a subsequent economic slowdown. Chinese authorities considered the situation serious enough to warrant equity-market intervention efforts. While Greece tended to occupy more headlines, consensus among market strategists was that developments in China were a greater long-term concern for the global economy.

### Domestic Equity



- Gains from the first two months of the quarter were erased in June as uncertainty from Greece and China filtered into the US equity market. Implied equity market volatility from option pricing also spiked higher. The S&P 500 returned 0.3% for the quarter, bringing the year-to-date return to 1.2%.
- Utilities suffered a noticeable -6.0% loss, given the rise in interest rates. Industrials, energy, and consumer staples declined about -2.0%. Health care did well returning about 3%. Consumer discretionary and financials returned about 2%.
- Mid-cap stocks declined, while large- and small-cap stocks remained positive. Weakness among specific companies in the technology and financial sectors resulted in poorer relative performance.

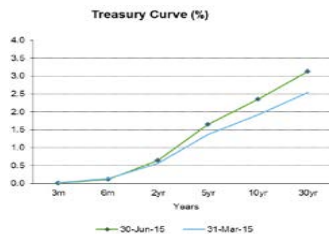
### International Equity

- International Equity** started the quarter off strong but pulled back on uncertainty related to Greece and China. The MSCI ACWI ex US Index returned 0.7%, only slightly more than US equities.
- Performance among the developed markets was mixed. Japan and the UK were among the better performers in USD terms and returned about 3% for the quarter. Broader continental Europe suffered as a result of the Greek debt impasse, and German equities lost -5% during the quarter. Energy-oriented markets also performed well due to the oil rebound. Norway, for example, returned 4%. Other commodities declined, however, adversely impacting markets sensitive to such conditions. Australia, for example, declined -6% for the quarter.

### Emerging Market Equities

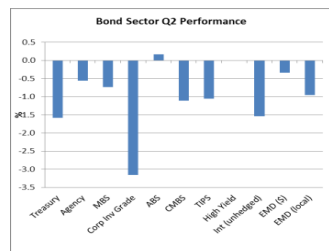
- Emerging Markets** gained 0.8% overall during the quarter. The MSCI China Index returned 6% for the quarter, but the strong return masked significant volatility. The locally denominated Shanghai Composite Index (which consists of both restricted class A shares as well as foreign-accessible Class B shares) gained 60% for the year-to-date period through June 12. But from June 12 through June 30, the index experienced a record -17% decline. Losses extended into Q3 prompting emergency government measures to stem the decline.

# Market Commentary



## Bond Markets – Interest Rates

- Interest rates rose, and the yield curve steepened as expectations increased for a hike in the Fed Funds rate before year-end. The yield on the 10-Year Note rose from under 2.0% at the beginning of the quarter to as high as 2.5% but finally settled at 2.3% as Greece and China concerns capped the rally on bond yields.



## Bond Markets – Sectors

- The **Barclays Aggregate Index** declined -1.7% as interest rates rose during the quarter. ABS and high yield were the only sectors to avoid losses with returns of 0.2% and 0.0%, respectively. A shorter duration for ABS indices versus other securitized sectors helped to prevent losses.
- Corporates lost -3.2%, while Treasuries lost -1.6%. Non-USD sovereign debt declined -1.5%, which given a pause in the USD rally, was not as severe as in previous quarters.

## Global Bond Markets

- Q2 saw a sell-off in Eurozone bonds and a corresponding spike in yields. Positive economic data and increased inflation expectations moved German Bund yields higher, though they ended off their highest levels of the quarter on Greece concerns.
- As in the case of the United States, international high yield outperformed investment grade corporates, though both sectors still produced losses.

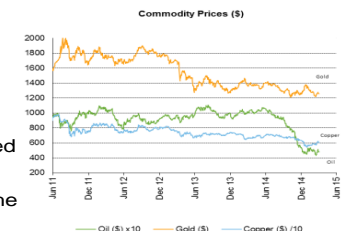


## Currency

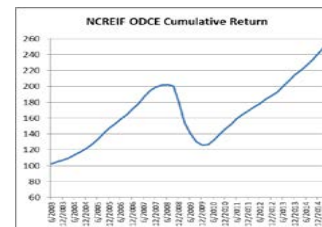
- Performance of the US dollar was mixed during the quarter. The euro gained, partially due to improved inflation expectations, and remained relatively resilient despite a deterioration in the Greek fiscal situation. In contrast, the dollar gained versus the Japanese yen.
- Commodity sensitive currencies moved in relation to commodity market movements. The Brazilian real and Norwegian krone gained on an oil price rebound, while the Australian dollar tumbled on weakening metals prices.

## Commodities

- Gold** prices fell marginally in Q2 and were largely flat over the year-to-date period. Despite investor demand for safe-haven assets amid market volatility, gold instead seemed to take its cue from the absence of inflationary pressures and the prospect of decreased global demand.
- Copper** prices ended the quarter down -5.5% on continued concerns over slowing growth in China.
- Oil** prices rebounded during the quarter, as WTI rose to the \$57/\$62 per barrel range versus the \$47 barrel price level from where it originally started the quarter.



## Real Estate



- The NCREIF Open-End Diversified Core (**ODCE**) Index, an index of open-end diversified core real estate funds that invest in **direct real estate**, returned 3.8% (gross) during the quarter. 262 basis points were derived from capital appreciation and the remainder from income. Leverage is 21%.
- REITs**, in contrast, declined nearly -10% (as measured by the FTSE NAREIT Equity Reit Index) and gave back some of the outsized gains from the previous two quarters. Rising bond yields had an adverse effect, and returns for all sectors were negative. Health care (-14%) and office (-11%) were the poorest performing REITs.

## City of New York Board of Education Retirement System Pension Fund Summary

### Asset Allocation

- At June 30, 2015, the Board of Education Retirement System (BERS) Total Portfolio was \$4.4 billion, little changed from the previous quarter.
- The overall allocation is 71% equity (including Real Estate and Private Equity) and 29% fixed income versus a target allocation of 70% equity and 30% fixed income. Within the equity portfolio, the Plan is overweighted to US equity by approximately 5%, offsetting a combined underweight of approximately 5% in private equity and real estate (these underweights will be gradually reduced as these asset classes are slowly built up). Accounting for the public/private equity allocation, the Fund's broader asset allocation remains within allowable ranges.

### Manager Issues

- Daruma remained on watch during the quarter as the firm announced the departure of COO and co-founder Noreen McKee. In July, Daruma was terminated and proceeds were reinvested into Russell 1000 Value Index holdings.

## City of New York Board of Education Retirement System Pension Fund Summary

### Total Fund Performance

- The **Total Plan** returned 0.3% in the quarter versus 0.1% for the benchmark and slightly outperformed. The fund slightly lagged its median peer within the Public Master Trusts > \$ 1 billion Universe and ranked at the 57<sup>th</sup> percentile. For the trailing year, the Total Plan returned 3.4% and lagged the benchmark by about five basis points. The ranking was just slightly behind the median peer at the 51<sup>st</sup> percentile. The longer five year return is slightly behind benchmark, but the ten year return remains ahead. Rankings over both time periods are within the top quartile of the universe.
- Outperformance for the quarter came from the Plan's private equity and private real estate allocations. For the trailing year, a number of offsetting factors came into play. Contributors to relative return included outperformance from emerging market, private equity, private real estate managers. Offsetting detractors included cash drag, US equity manager underperformance, and slight overweight to international equity.

### U.S. Equity

- For the quarter, **Total Domestic Equity** returned 0.14%, basically inline with the Russell 3000 Index. Total active equity returned -0.02% for the quarter. Wellington outperformed, but Daruma and the emerging manager portfolios underperformed. Year to date, Total Domestic Equity returned 2.4% versus 1.9% for the Russell 3000. Active equity returned 4.4%.
- **Wellington** outperformed for the quarter, returning -0.02% vs. -1.06% for the S&P Midcap 400 Index. Stock selection in the health care and financial sectors was the primary contributor. The top contributor for the quarter was Universal Health Services, a large US hospital company that owns or operates 24 acute care hospitals and 217 behavioral health centers in 37 states. The company has benefited under the Affordable Care act as more Americans gain access to health insurance, a trend reinforced by a recent ruling by the US Supreme Court. Incyte, a biotech company focused on cancer and inflammation-related diseases, rose on strong results and reports on their drug development pipeline. Financial holdings, First Republic Bank and Northern Trust, also contributed to Wellington's outperformance. Detractors included Genesee & Wyoming and Genpact. The portfolio's largest sector overweight is healthcare, and the largest sector underweight is financials. The top 10 stocks comprise 21.3% of the portfolio. Recent additions include Zillow and Global Payments.

## City of New York Board of Education Retirement System Pension Fund Summary

### U.S. Equity (continued)

- **Daruma** continues to underperform. The portfolio returned -0.1% during the 2nd quarter, underperforming the 0.4% return of its Russell 2000 benchmark. Year to date, Daruma returned 0.3% vs. 4.8% for the index. The portfolio's top three losers detracted 229 bps, driven by branded handbags and accessories maker Vera Bradley (VRA), down 82 bps; satellite equipment provider DigitalGlobe (DGI), down 76 bps; and apparel & accessories retailer Francesca's (FRAN), down 71 bps. Daruma was further hurt by their zero exposure to biotech companies - biotechs contributed 89 bps to the benchmark for the quarter. The portfolio added three positions during the quarter, healthcare cost containment company HMS Holdings (HMSY), outdoor power equipment maker Briggs and Stratton (BGG) and logistics & LTL company Forward Air (FWRD).
- **Progress** returned -0.1% for the quarter versus 0.1% for its Russell 3000 benchmark. The five-year record remains slightly behind the benchmark, 17.1% versus 17.5%.
- **FIS** returned 0.1% during the quarter versus 0.4% for its Russell 2000 Index benchmark. FIS is slightly ahead year-to-date, 5.3% versus 4.8%. FIS maintains outperformance versus benchmark over the trailing three- and five-year periods.

## City of New York Board of Education Retirement System Pension Fund Summary

### International Equity

- The **Total Developed Market** portfolio slightly underperformed the MSCI EAFE (net dividend) Index during the quarter, 0.5% versus 0.6%. Total Developed Market lagged versus benchmark year-to-date, 4.6% versus 5.5%, but still maintains outperformance over the trailing five-year time period.
- **Baillie Gifford** outperformed during the quarter, returning 0.7% compared to 1.0% for the MSCI EAFE Growth(net) Index. Inditex, an international clothing retailer, was the portfolio's largest holding at 4.8%, and the top 10 holdings accounted for 36.5% of the portfolio. At quarter end, the portfolio had 14.8% invested in emerging markets. The portfolio continues to focus on stocks with substantial, but less predictable, growth potential.
- **Sprucegrove** returned -0.6% in the quarter versus 0.2% for the MSCI EAFE Value (net). Over the quarter, the Energy sector was the largest source of underperformance. The portfolio's underweight to Financials was also a detractor. Sprucegrove initiated one new holding, Woolworths, the largest supermarket chain in Australia. The top 10 holdings represent 24.2% of the portfolio.



## City of New York Board of Education Retirement System Pension Fund Summary

### International Equity (continued)

- **Acadian** returned 4.1% for the quarter compared to 4.7% for the S&P EPAC Small Cap Index. Gains from stock selection were more than offset by value lost from country allocations. Key sources of negative active return included opportunistic exposure Taiwan, along with a combination of stock selection and an underweight position in Korea and the UK. Stock selection in the Netherlands, Germany, and Switzerland proved more successful. At quarter end, the portfolio's emerging markets exposure was 11%. The portfolio held 856 stocks.

### Emerging Markets

- **Acadian** outperformed for the quarter, 1.3% versus 0.7% for the MSCI Emerging Markets Index and is ahead over the trailing one year period, -0.9% versus -5.1%. The outperformance was attributable to an underweight in China and an overweight in industrials. Less successful investments included an overweight in India and in information technology. The quantitatively-managed portfolio held 441 stocks as of quarter end, compared to 838 for the benchmark. While not specifically a value equity style portfolio, it exhibited many such characteristics including lower valuation metrics versus benchmark (P/E of 10.9x versus 14.2x). The market capitalization was also tilted smaller compared to the benchmark with a weighted average of \$42 billion compared to \$53 billion for the benchmark.

## City of New York Board of Education Retirement System Pension Fund Summary

### Fixed Income – Structured Manager Composite

- The **Total Structured** Portfolio returned -2.0% for the quarter, outperforming the NYC Core + 5 Index return of -2.2%. The Total Structured Portfolio performance for the year is slightly behind the benchmark at 2.0% vs 2.1%.
- **Taplin Canida** (credit) returned -2.9% during the quarter versus -2.6% for the customized Citigroup Credit Index. The portfolio fell behind for the trailing year, 0.6% versus 1.0%. Taplin found support in Q2 in quality selection and the portfolio's yield advantage. Yield curve positioning and sector selection detracted from performance during the quarter as higher quality securities outperformed.
- **Prudential** (credit) returned -2.5% during the quarter, just slightly ahead of the customized Citigroup Credit Index. For the year, Prudential returned 1.2% versus 1.0% for the index.
- **PRIVEST** (credit) returned -1.3% ahead of the -2.6% benchmark return. The portfolio outperformed during the trailing one year, returning 3.6% versus 1.0%. Management attributed the quarter's outperformance to relative spread tightening and its yield advantage. Credit migration for the quarter included nine upgrades and seven downgrades. PRIVEST committed to purchase \$161.4 million of private placements at a weighted average spread, coupon, credit quality and average life of 165 basis points, 3.90%, BBB+, and 13.07 years respectively. PRIVEST received \$32.7 million in optional prepayments during the quarter, resulting in market value gains of \$2.7 million.

## City of New York Board of Education Retirement System Pension Fund Summary

### Fixed Income – Structured Manager Composite (continued)

- **SSgA** (governments) returned -4.2% for the quarter, slightly behind the -4.0% benchmark return. For the trailing year, SSGA returned 4.0%, which was 16 basis points behind benchmark.
- **BlackRock** (mortgages) returned -0.6% for the quarter versus -0.8% for the Citigroup Mortgage Index. For the year, NYC BERS mortgages returned 2.3%, matching the benchmark. BlackRock completed its first full quarter with NYCBERS during Q2. .

### Fixed Income - TIPS

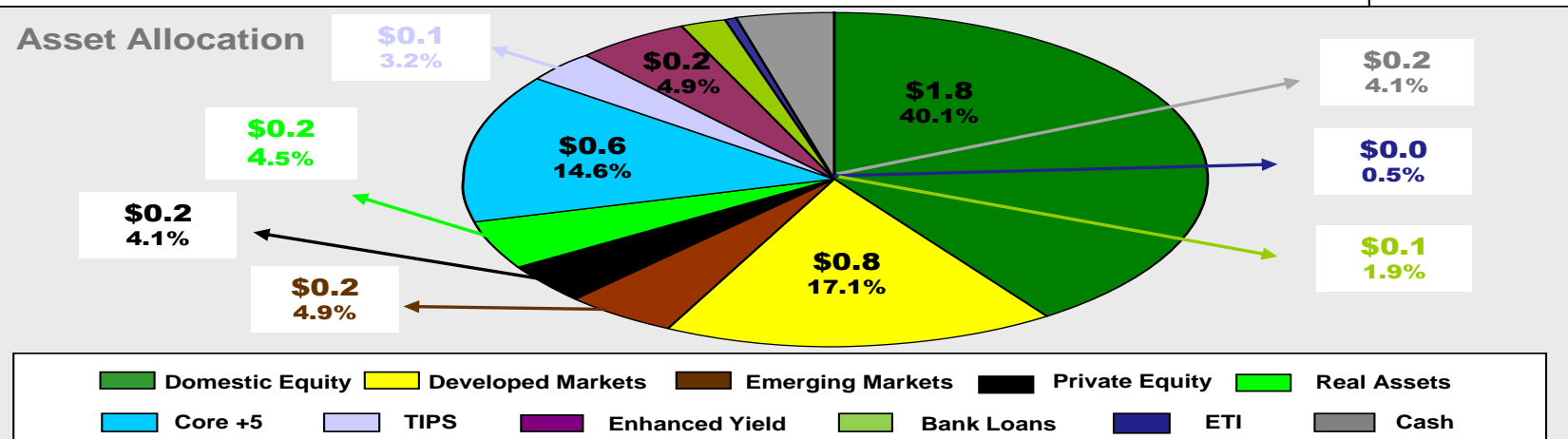
- **SSgA (TIPS)** completed its first full quarter with NYCBERS and the passively managed strategy returned -1.0%, in line with the Barclays TIPS Index return.

## City of New York Board of Education Retirement System Pension Fund Summary

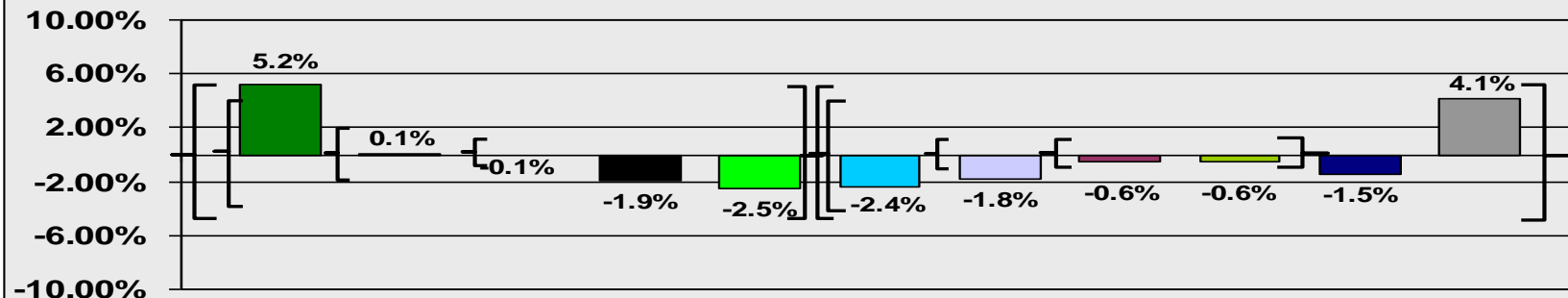
### Enhanced Yield Fixed Income

- **Total High Yield** returned 0.3% for the quarter, eight basis points ahead of the return of the Citigroup BB & B Index. All high yield funds outperformed their benchmarks. Both high yield and bank loans beat or performed in line with their benchmark for the trailing year.
- **Loomis Sayles** returned 0.3% for the quarter versus 0.0% for the Merrill Lynch High Yield Master II Index. The portfolio lags its benchmark for the trailing year, -0.7% versus -0.5%. Security selection in high yield added to performance during the quarter, including lower-rated B and CCC rated issues. Energy-sector holdings also did well as oil prices appeared to stabilize during the quarter. Convertibles were also a contributor (9% of the fund). Duration was 6.4 years as of quarter end. Average credit quality is B1, which is in line with the benchmark.
- **Shenkman** returned 0.4%, outperforming the 0.3% return for its Citigroup BB & B Index benchmark. For the trailing year, the portfolio remains ahead of benchmark, 2.0% versus 0.3%. The portfolio is structured with a zero weight in 10+ year maturities and duration of 3.8 years, which added to performance. Duration is up from 3.4 last quarter. In terms of industry positioning, the combination of poor security selection and an overweight in media and telecom hurt relative return, while an underweight in mining added to performance. Average credit quality increased slightly from B2/B+ to B1/B+.
- **Babson** returned 1.1% during the quarter, outperforming the 0.8% return of the Credit Suisse Leveraged Loan Index. Individual credit selection was the primary contributor to the portfolio during the quarter. The top ten performers contributed 26 bps, which was somewhat offset by the -19.5 bps underperformance in the bottom ten performers.

**\$4.4B Under Management**



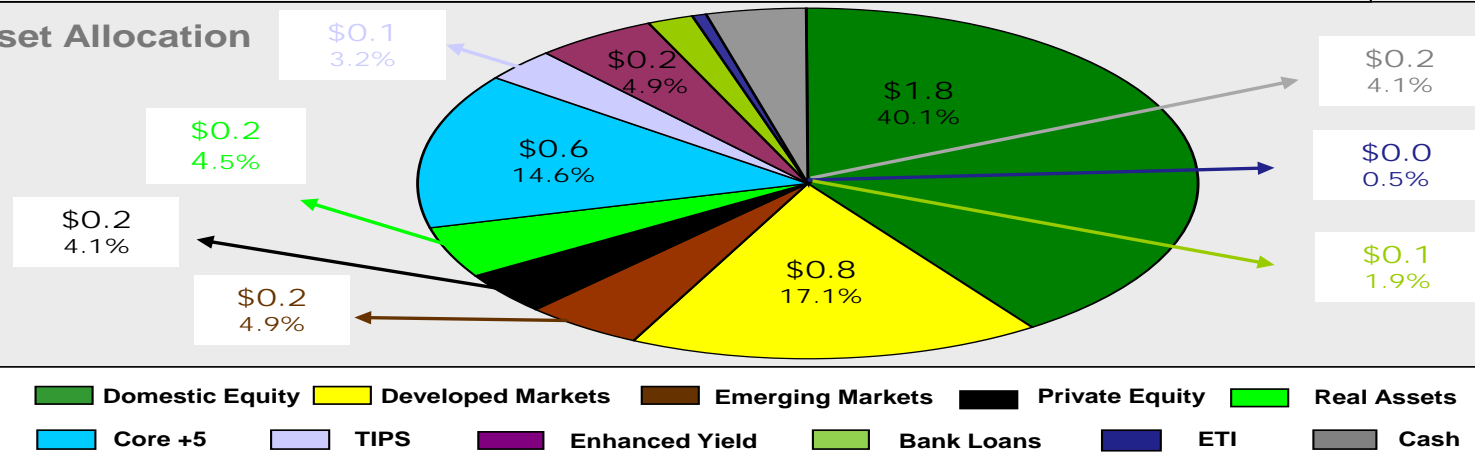
**Relative Mix to New Policy Weights**



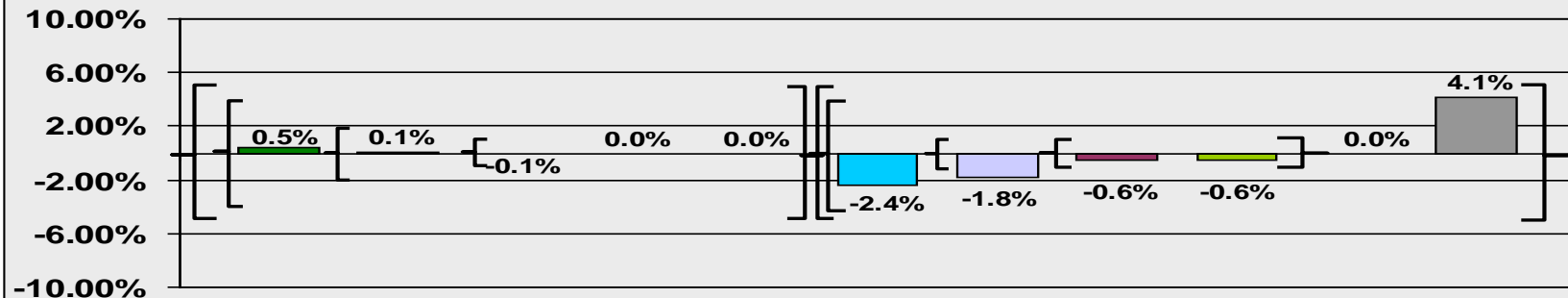
Note: Brackets represent rebalancing ranges versus Policy.

**\$4.4B Under Management**

**Asset Allocation**



**Relative Mix to Adjusted New Policy Weights**



Note: Brackets represent rebalancing ranges versus Policy.

Note: On June 30, 2015 the New York City Board of Education Retirement System' Fund's combined Core Fixed Income and Cash portfolios have a duration of 6.1 years. The duration of the Barclays US Aggregate Index was 5.6 years on that date.

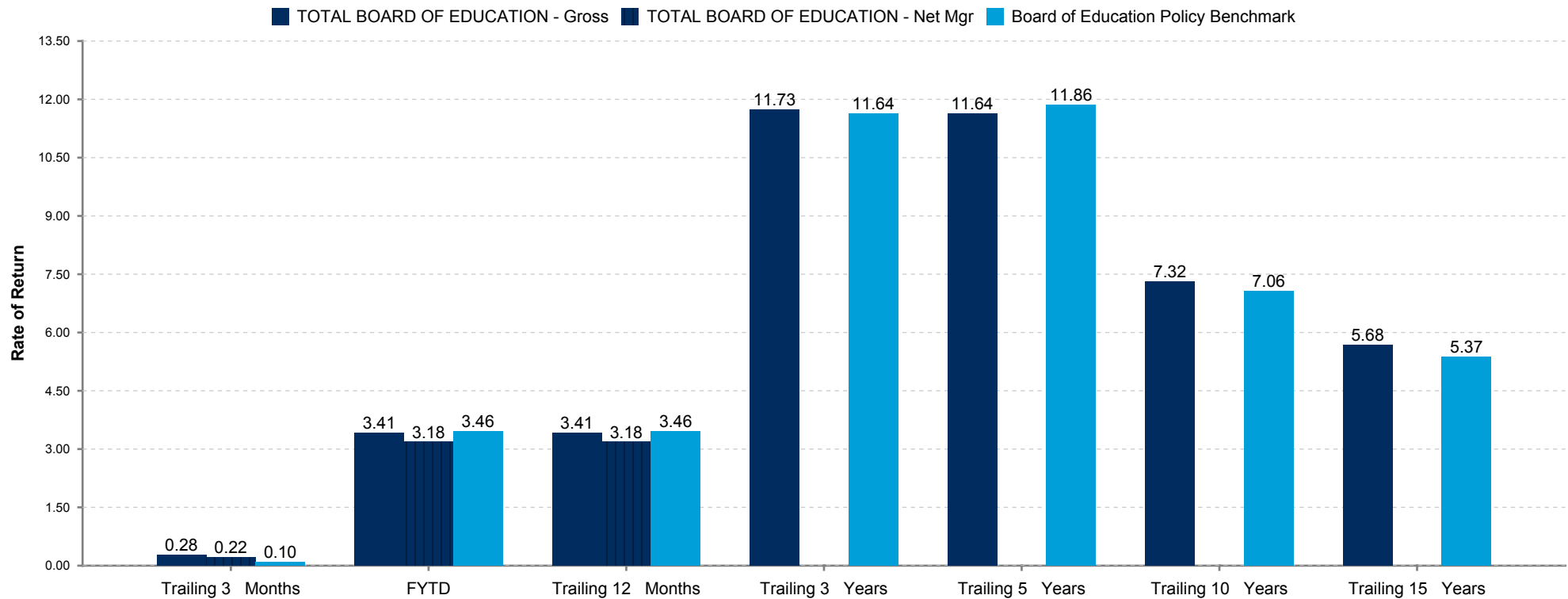
## Total Portfolio Returns: June 30, 2015



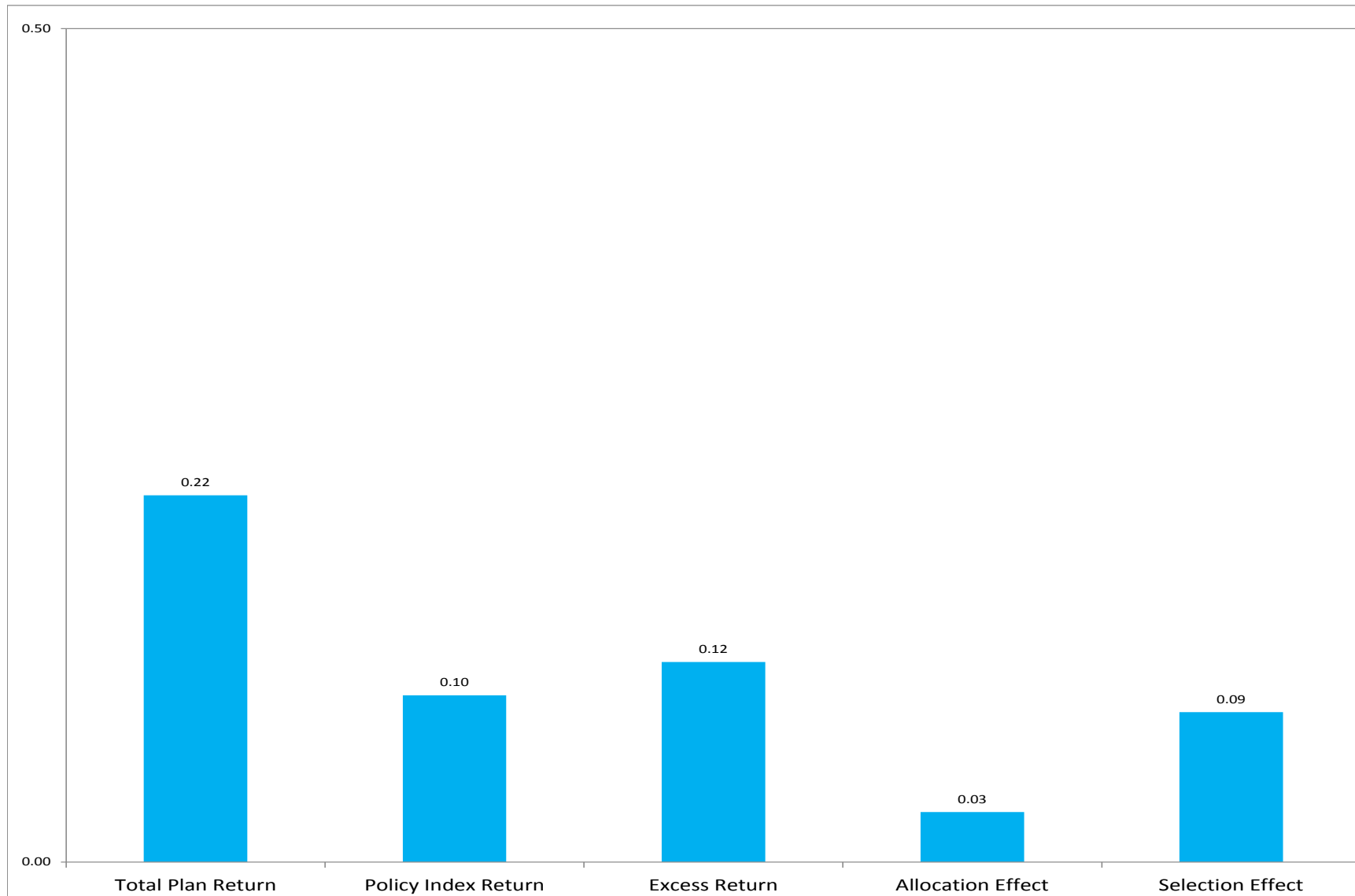
TOTAL BOARD OF EDUCATION

**Market Value (Billions)**

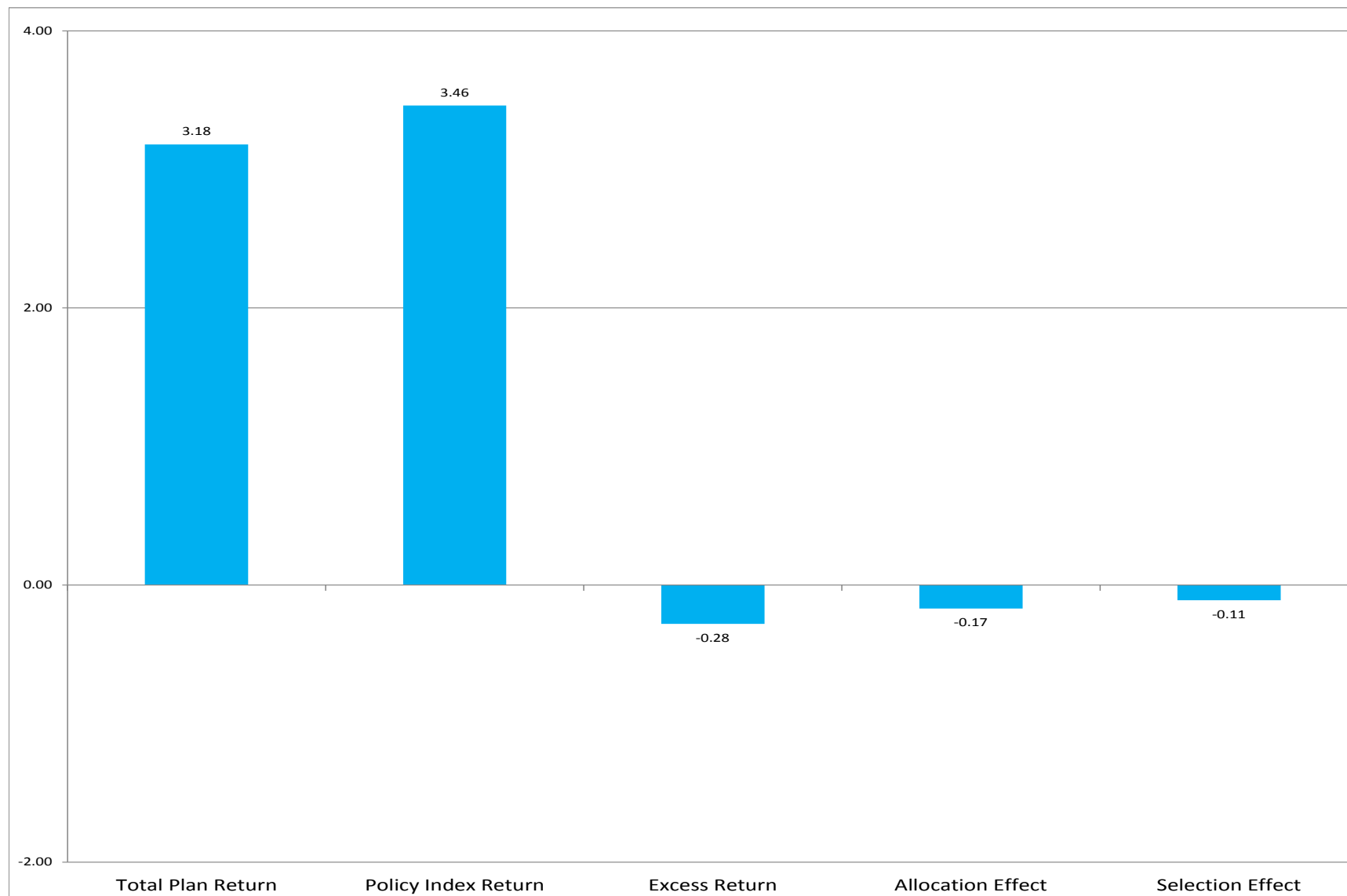
\$4.4

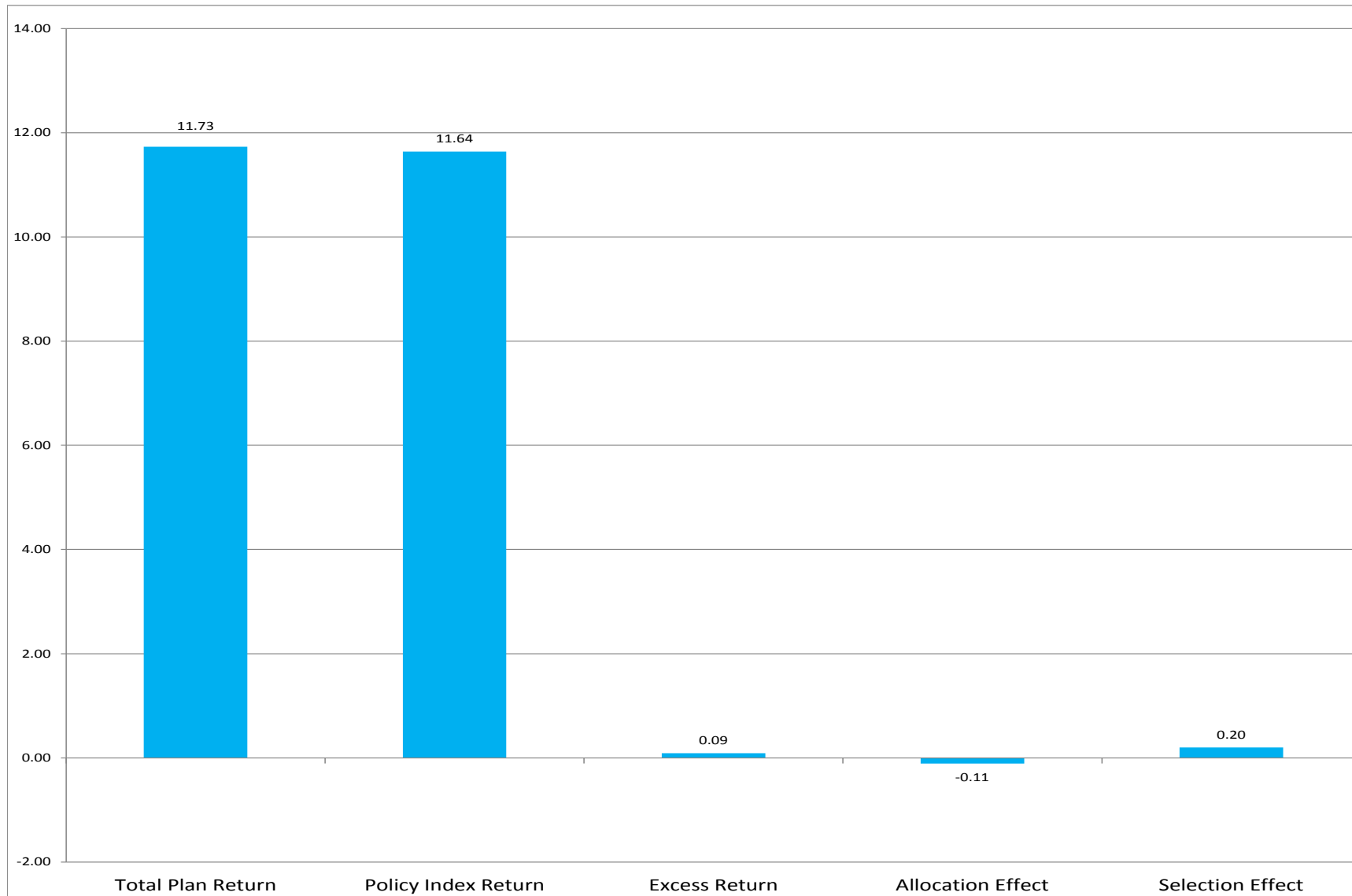


	Plan 3 Years	Benchmark 3 Years	Plan 5 Years	Benchmark 5 Years	Plan 10 Years	Benchmark 10 Years
Standard Deviation						
TOTAL BOARD OF EDUCATION	6.1	5.8	11.6	9.0	11.1	11.5









Allocation Effect - Asset Class Breakdown				
	<u>Quarter</u>	<u>12 Months</u>	<u>3 Years*</u>	<u>Benchmark</u>
TOTAL BOARD OF EDUCATION	0.03	-0.17	-0.11	Board of Education Policy Benchmark
TOTAL DOMESTIC EQUITY	-0.01	0.01	-0.03	RUSSELL 3000
TOTAL DEVELOPED EQUITY	-0.01	-0.08	0.02	MSCI EAFE NET
TOTAL EMERGING MARKETS	-0.01	-0.06	-0.01	MSCI EMERGING MARKETS
TOTAL PRIVATE EQUITY	0.00	0.01	0.01	NYC R3000 +3% Lagged
TOTAL PRIVATE REAL ESTATE	0.00	0.01	0.00	NCREIF NFI-ODCE NET + 1%
TOTAL INFRASTRUCTURE	0.00	0.00	0.00	CPI + 4%
TOTAL STRUCTURED	0.05	-0.01	0.03	NYC - CORE PLUS FIVE
TOTAL TIPS MANAGERS	0.02	0.08	0.11	BARCLAYS U.S TIPS INDEX
TOTAL HIGH YIELD	0.00	0.01	0.00	CITIGROUP BB & B
TOTAL BANK LOANS	0.00	0.00	0.02	CSFB LEVERAGED LOAN INDEX
TOTAL CASH	-0.01	-0.15	-0.22	

Selection Effect - Asset Class Breakdown				
	<u>Quarter</u>	<u>12 Months</u>	<u>3 Years*</u>	<u>Benchmark</u>
TOTAL BOARD OF EDUCATION	0.09	-0.11	0.20	Board of Education Policy Benchmark
TOTAL DOMESTIC EQUITY	-0.01	-0.26	0.20	RUSSELL 3000
TOTAL DEVELOPED EQUITY	-0.03	-0.03	-0.02	MSCI EAFE NET
TOTAL EMERGING MARKETS	0.02	0.21	0.09	MSCI EMERGING MARKETS
TOTAL PRIVATE EQUITY	0.17	0.03	-0.08	NYC R3000 +3% Lagged
TOTAL PRIVATE REAL ESTATE	-0.09	-0.12	0.02	NCREIF NFI-ODCE NET + 1%
TOTAL INFRASTRUCTURE	-0.01	0.00	0.00	CPI + 4%
TOTAL STRUCTURED	0.02	-0.02	0.07	NYC - CORE PLUS FIVE
TOTAL TIPS MANAGERS	0.00	0.05	0.01	BARCLAYS U.S TIPS INDEX
TOTAL HIGH YIELD	0.00	-0.01	0.06	CITIGROUP BB & B
TOTAL BANK LOANS	0.00	0.01	0.01	CSFB LEVERAGED LOAN INDEX
TOTAL CASH	0.00	0.01	0.01	

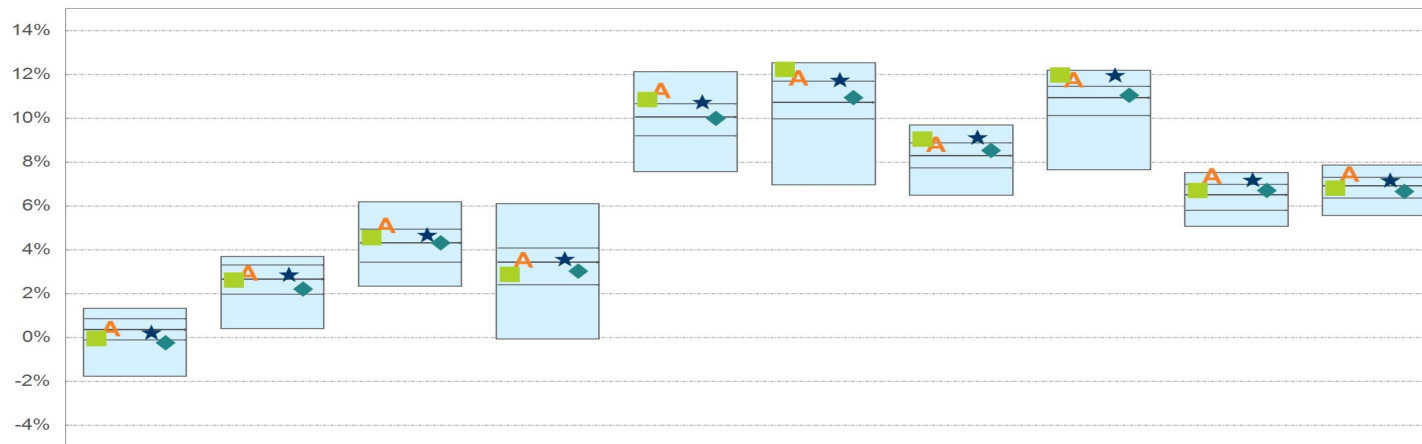
\*Returns are Gross of Investment Advisory Fees

Through June 30, 2015



## City of New York Performance Comparison

Total Returns of Master Trusts - Public : Plans > \$1 Billion  
Cumulative Periods Ending : June 30, 2015



Percentile Rankings	1 Qtr	2 Qtrs	3 Qtrs	1 Year	2 Years	3 Years	4 Years	5 Years	7 Years	10 Years
5th	1.34	3.69	6.20	6.10	12.13	12.55	9.71	12.21	7.53	7.88
25th	0.86	3.31	4.95	4.09	10.67	11.71	8.89	11.48	7.00	7.31
50th	0.35	2.67	4.33	3.43	10.06	10.74	8.31	10.95	6.51	6.93
75th	-0.12	1.98	3.43	2.41	9.20	9.98	7.74	10.14	5.81	6.36
95th	-1.76	0.41	2.35	-0.06	7.58	6.98	6.49	7.66	5.08	5.57
No. Of Obs	68	68	68	68	68	68	68	65	63	59
▲ Total System - BOE	0.28 (57)	2.81 (45)	4.98 (23)	3.41 (51)	11.15 (14)	11.73 (22)	8.70 (32)	11.64 (22)	7.25 (13)	7.33 (21)
★ Board of Ed Policy Ben	0.10 (61)	2.76 (47)	4.56 (38)	3.46 (47)	10.63 (29)	11.64 (25)	9.02 (20)	11.86 (17)	7.07 (20)	7.06 (35)
■ Public Mkt Equiv 25	-0.17 (78)	2.50 (57)	4.42 (41)	2.74 (66)	10.74 (22)	12.11 (11)	8.93 (22)	11.86 (17)	6.58 (46)	6.69 (64)
◆ Public Mkt Equiv 35	-0.38 (82)	2.09 (72)	4.20 (55)	2.91 (63)	9.88 (57)	10.83 (47)	8.41 (45)	10.93 (51)	6.59 (46)	6.54 (66)

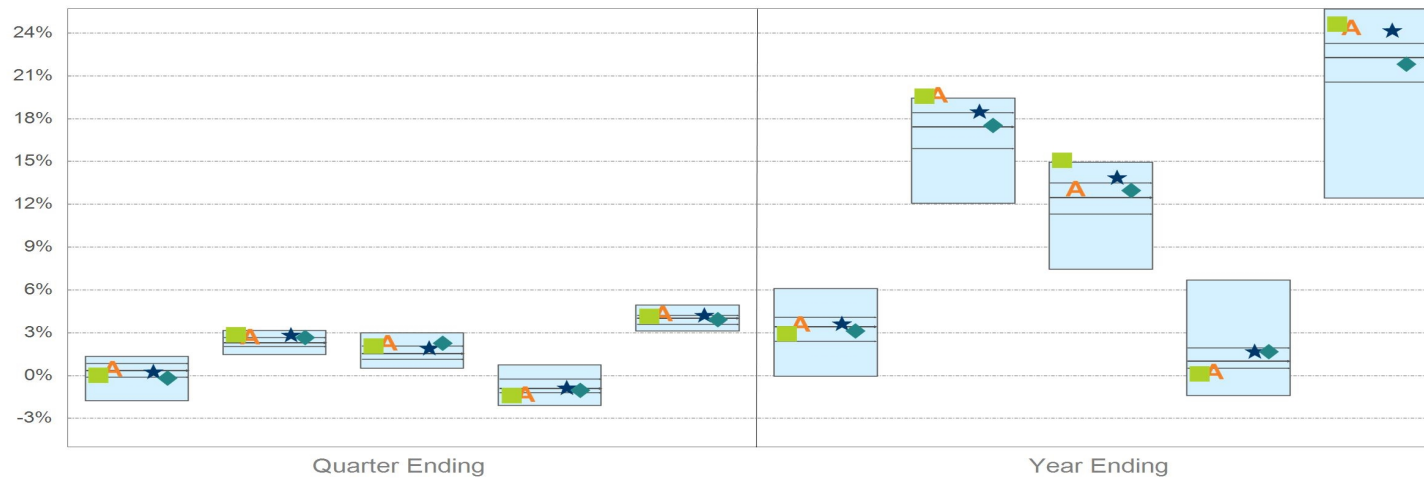
Wilshire Trust Universe Comparison Service® (TUCS®)

Through June 30, 2015



## City of New York Performance Comparison

Total Returns of Master Trusts - Public : Plans > \$1 Billion  
Consecutive Time Periods: June 30, 2015



Percentile Rankings	Jun 15	Mar 15	Dec 14	Sep 14	Jun 14	Jun 15	Jun 14	Jun 13	Jun 12	Jun 11
5th	1.34	3.17	2.99	0.76	4.93	6.10	19.45	14.96	6.68	25.68
25th	0.86	2.66	2.07	-0.25	4.22	4.09	18.43	13.48	1.92	23.26
50th	0.35	2.31	1.53	-0.90	4.00	3.43	17.42	12.46	1.00	22.29
75th	-0.12	2.03	1.14	-1.21	3.59	2.41	15.89	11.31	0.52	20.57
95th	-1.76	1.47	0.50	-2.11	3.14	-0.06	12.08	7.44	-1.41	12.45
No. Of Obs	68	68	68	68	68	68	68	68	68	65
▲ Total System - BOE	0.28 (57)	2.53 (29)	2.11 (23)	-1.49 (85)	4.14 (33)	3.41 (51)	19.47 (4)	12.90 (38)	0.10 (82)	24.19 (19)
★ Board of Ed Policy Ben	0.10 (61)	2.66 (25)	1.75 (39)	-1.05 (55)	4.05 (44)	3.46 (47)	18.30 (29)	13.70 (22)	1.52 (33)	23.99 (20)
■ Public Mkt Equiv 25	-0.17 (78)	2.67 (22)	1.87 (35)	-1.61 (87)	3.95 (51)	2.74 (66)	19.36 (5)	14.88 (7)	-0.08 (88)	24.43 (13)
◆ Public Mkt Equiv 35	-0.38 (82)	2.48 (32)	2.07 (25)	-1.24 (76)	3.71 (69)	2.91 (63)	17.33 (51)	12.76 (38)	1.46 (36)	21.62 (60)

Wilshire Trust Universe Comparison Service® (TUCS®)

# Actual and Estimated Fees

Through June 30, 2015



NEW YORK CITY BERS RETIREMENT SYSTEMS					
ACTUAL FEES FOR FISCAL YEAR ENDING JUNE 30, 2014 AND ESTIMATED FEES FOR FY 2015 UPDATED THROUGH SEPTEMBER 2014					
		Actual 2014		Estimates 2015	
INVESTMENT STYLE (EQUITIES)		MARKET VALUE 06-30-14 (\$MM)	FEES IN BASIS POINTS	MARKET VALUE 09-30-14 (\$MM)	FEES IN BASIS POINTS
<b>US Equities</b>		<b>1,869</b>	<b>9.42</b>	<b>1,771</b>	<b>12.09</b>
Small Cap Active		34	49.08	31	61.27
Small Cap Growth		-	-	-	-
Small Cap Value		-	-	-	-
Small Cap core		34	49.08	31	61.27
Small Cap Fundamental Index		-	-	-	-
Small/Mid Cap Active		-	-	-	-
Small/Mid Cap Growth		-	-	-	-
Small/Mid Cap Value		-	-	-	-
Mid Cap Active		134	42.52	128	56.76
Mid Cap Growth		-	-	-	-
Mid Cap Value		-	-	-	-
Mid Cap core		134	42.52	128	56.76
Russell 1000 Active		81	16.73	-	-
Russell 1000 Growth		81	16.73	-	-
Russell 1000Core		-	-	-	-
Russell 1000 Fundamental Index		-	-	-	-
Active Emerging Managers (U.S. Equities)		153	54.99	147	79.13
Total US Active Equities		402	42.61	307	67.97
Total US Passive Equities		1,467	0.33	1,464	0.39
Opportunistic US Equity Strategies		-	-	-	-
<b>International Equities</b>		<b>959</b>	<b>24.99</b>	<b>932</b>	<b>27.69</b>
Active EAFE Equities		764	22.96	716	25.39
Growth		354	24.29	332	25.90
Value		323	19.58	304	22.75
Core		-	-	-	-
Small Cap		87	30.09	79	33.37
Environmental-Non US E. Strategies		-	-	-	-
Active Emerging Markets		195	32.95	216	35.30
Total Int'l Active Equities		959	24.99	932	27.69
Total Int'l Passive Equities		-	-	-	-
<b>REITS Passive Index</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

Information provided by New York City Comptroller

# Actual and Estimated Fees

Through June 30, 2015



NEW YORK CITY BERS RETIREMENT SYSTEMS					
ACTUAL FEES FOR FISCAL YEAR ENDING JUNE 30, 2014 AND					
ESTIMATED FEES FOR FY 2015 UPDATED THROUGH SEPTEMBER 2014					
		Actual 2014		Estimates 2015	
INVESTMENT STYLE (FIXED INCOME)		MARKET VALUE 06-30-14 (\$MM)	FEES IN BASIS POINTS	MARKET VALUE 09-30-14 (\$MM)	FEES IN BASIS POINTS
<b>Fixed Income</b>		<b>1,097</b>	<b>14.71</b>	<b>757</b>	<b>19.58</b>
Structured Program		594	6.96	346	7.54
Government Sector		91	4.76	92	5.00
Mortgage Sector		249	6.28	-	-
Investment Grade Credit Sector		254	8.42	254	8.46
Global Fixed Income		-	-	-	-
Progress Fixed Emerging Managers		-	-	-	-
TIPS		141	9.18	-	10.00
Active TIPS		141	9.18	-	10.00
Passive TIPS		-	-	-	-
Opportunistic Fixed Income		-	-	-	-
Enhanced Yield		217	31.86	213	40.51
Bank Loans		83	37.86	83	34.85
Convertible Bonds		-	-	-	-
ETI - Access - RBC		7	19.48	7	22.92
ETI - AFL-CIO HIT		12	42.82	12	44.00
Other ETI Programs		2	-	3	-
In-House Short Term		42	0.00	93	0.00
<b>Total Public Markets</b>		<b>3,925</b>	<b>14.71</b>	<b>3,460</b>	<b>17.93</b>
<b>INVESTMENT STYLE (PRIVATE)</b>					
Hedge Funds		-	-	-	-
Private Equity Investments **		134	143.65	146	182.67
Real Assets**		114	86.24	131	101.34
Private Real Estate **		111	78.74	127	96.70
Infrastructure**		3	399.48	4	258.75
<b>Total Private Markets</b>		<b>248</b>	<b>117.23</b>	<b>277</b>	<b>144.16</b>
<b>Total Overall</b>		<b>4,173</b>	<b>20.80</b>	<b>3,737</b>	<b>27.29</b>
* 10 bps placeholder					
** Private Equity & Real Assets Investments exclude GP CARRY & Incentive Fees					

Information provided by New York City Comptroller

# Securities Lending Income

Through June 30, 2015



## NYC BOARD OF EDUCATION RETIREMENT SYSTEM SECURITIES LENDING INCOME June 30, 2015

	U.S. <u>FIXED INCOME</u>	U.S. <u>EQUITY</u>	<u>INTERNATIONAL EQUITY</u>	
1989*	\$70,000	--	--	
1990	79,000	--	--	
1991	111,000	--	--	
1992	122,000	\$11,000	--	
1993	79,000	32,000	\$15,000	
1994	93,000	77,000	20,000	
1995	112,000	93,000	12,000	
1996	99,000	76,000	27,000	
1997	101,000	126,000	40,000	
1998	111,000	170,000	60,000	
1999	159,000	263,000	100,000	
2000	193,000	310,000	97,000	
2001	295,000	208,000	159,000	
2002	209,000	143,000	152,000	
2003	153,000	158,000	195,000	
2004	226,000	255,000	174,000	
2005	384,000	479,000	217,000	
2006	303,000	734,000	246,000	
2007	593,000	1,208,000	272,000	
2008	2,514,000	2,266,000	451,000	
2009	698,000	1,416,000	367,000	
2010	246,000	729,000	326,000	
2011	340,000	943,000	599,000	
2012	516,000	1,144,000	495,000	
2013	349,000	1,325,000	446,000	
2014	287,000	512,000	1,387,000	
2015 (6 Months)	179,000	236,000	953,000	
Since Inception	<u>\$8,621,000</u>	<u>\$12,914,000</u>	<u>\$6,810,000</u>	*Inception 4/89



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

# **Appendix A**

## **Consolidated Performance Report**

# Consolidated Performance Report

Through June 30, 2015



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2014	2013	2012	2011	2010	5 Year	10 Year	ITD	Inception Date
<b>SYSTEM RETURN SUMMARY</b>														
6 BERS-TOTAL PORTFOLIO - GROSS	4,408	100.00	0.28	3.41	2.81	6.64	18.78	13.50	(0.42)	14.95	11.64	7.32	8.90	07/01/1987
BERS - ESTIMATED INVESTMENT FEES			(0.06)	(0.23)	(0.11)	(0.25)								
EST MANAGEMENT FEES - PUBLIC MARKET (ACCRUAL)			(0.04)	(0.15)	(0.07)	(0.15)								
EST MANAGEMENT FEES - ALTERNATIVE MARKETS (CASH)			(0.02)	(0.08)	(0.04)	(0.10)								
EST INCENTIVE FEES														
EST OTHER FEES														
EST FEE OFFSETS														
BERS-TOTAL PORTFOLIO - NET MGR			0.22	3.18	2.70	6.39								
BOARD OF EDUCATION POLICY BENCHMARK			0.10	3.46	2.76	6.93	18.10	14.05	0.47	13.04	11.86	7.06		
EXCESS RETURN			0.12	(0.28)	(0.06)	(0.54)	0.68	(0.55)	(0.89)	1.91	(0.22)	0.26		
<b>EQUITY RETURN DETAIL</b>														
19 BERS-TOTAL EQUITY (INCLUDES PE & RA) - GROSS	3,116	70.69	0.83	4.33	3.63	7.08	27.83	16.72	(4.01)	17.52	14.71	7.98	9.17	08/01/1993
ESTIMATED INVESTMENT FEES			(0.07)	(0.28)	(0.14)	(0.27)								
EST MANAGEMENT FEES			(0.07)	(0.28)	(0.14)	(0.27)								
EST INCENTIVE FEES														
EST OTHER FEES														
EST FEE OFFSETS														
BERS-TOTAL EQUITY (INCL PE & RA) - NET MGR			0.76	4.05	3.49	6.81								
27 BERS-TOTAL DOMESTIC EQUITY - GROSS	1,770	40.15	0.14	6.85	2.43	11.27	35.96	16.62	(0.72)	17.27	17.51	8.23	9.76	09/01/1991
ESTIMATED INVESTMENT FEES			(0.03)	(0.13)	(0.06)	(0.13)								
BERS-TOTAL DOMESTIC EQUITY - NET MGR			0.11	6.72	2.37	11.14								
RUSSELL 3000 (DAILY)			0.14	7.29	1.94	12.56	33.55	16.42	1.03	16.93	17.54	8.15	9.62	
EXCESS RETURN			(0.03)	(0.57)	0.43	(1.42)	2.41	0.20	(1.75)	0.34	(0.03)	0.08	0.14	
37 BERS-TOTAL SMALL CAP - GROSS	110	2.50	0.33	4.02	3.44	3.20	44.74	19.91	(10.17)	21.37	17.23	6.86	6.88	04/01/2004
ESTIMATED INVESTMENT FEES			(0.04)	(0.17)	(0.09)	(0.15)								
BERS-TOTAL SMALL CAP - NET MGR			0.29	3.85	3.35	3.05								
RUSSELL 2000 (DAILY)			0.42	6.49	4.75	4.89	38.82	16.35	(4.18)	26.85	17.08	8.40	8.35	
EXCESS RETURN			(0.13)	(2.64)	(1.40)	(1.84)	5.92	3.56	(5.99)	(5.48)	0.15	(1.54)	(1.47)	
47 BERS-TOTAL MID CAP - GROSS	143	3.23	0.34	7.23	6.22	10.77	37.52	19.12	(5.53)				16.40	10/01/2010
ESTIMATED INVESTMENT FEES			(0.14)	(0.47)	(0.26)	(0.41)								
BERS-TOTAL MID CAP - NET MGR			0.20	6.76	5.96	10.36								
RUSSELL MIDCAP (DAILY)			(1.54)	6.63	2.35	13.22	34.76	17.28	(1.55)				16.19	
EXCESS RETURN			1.74	0.13	3.61	(2.86)	2.76	1.84	(3.98)				0.21	

# Consolidated Performance Report

Through June 30, 2015



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2014	2013	2012	2011	2010	5 Year	10 Year	ITD	Inception Date
<b>EQUITY RETURN DETAIL</b>														
59 BERS-TOTAL RUSSELL 1000 - GROSS	1,355	30.73	0.14	7.29	1.71	12.92	62.18	14.87	(1.64)	16.72	21.33	10.61	10.18	09/01/1993
ESTIMATED INVESTMENT FEES			0.00	(0.01)	0.00	(0.01)								
BERS-TOTAL RUSSELL 1000 - NET MGR			0.14	7.28	1.71	12.91								
RUSSELL 1000 (DAILY)			0.11	7.37	1.71	13.24	33.11	16.42	1.50	16.10	17.58	8.13	9.34	
EXCESS RETURN			0.03	(0.09)	0.00	(0.33)	29.07	(1.55)	(3.14)	0.62	3.75	2.48	0.84	
69 BERS-TOTAL FUND OF FUNDS - GROSS	162	3.68	(0.01)	6.16	3.94	5.43	40.84	17.00	(1.75)	18.99	17.39	8.54	8.42	04/01/2004
ESTIMATED INVESTMENT FEES			(0.17)	(0.71)	(0.35)	(0.71)								
BERS-TOTAL FUND OF FUNDS - NET MGR			(0.18)	5.45	3.59	4.72								
RUSSELL 3000 (DAILY)			0.14	7.29	1.94	12.56	33.55	16.42	1.03	16.93	17.54	8.15	8.08	
EXCESS RETURN			(0.32)	(1.84)	1.65	(7.84)	7.29	0.58	(2.78)	2.06	(0.15)	0.39	0.34	

# Consolidated Performance Report

Through June 30, 2015



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2014	2013	2012	2011	2010	5 Year	10 Year	ITD	Inception Date
<b>EQUITY RETURN DETAIL</b>														
81 BERS-TOTAL INTERNATIONAL EQUITY - GROSS	970	22.00	0.69	(3.47)	4.38	(3.03)	17.99	18.36	(11.84)	18.25	9.58	7.62	7.92	11/01/1992
ESTIMATED INVESTMENT FEES			(0.07)	(0.26)	(0.14)	(0.27)								
BERS-TOTAL INTERNATIONAL EQUITY - NET MGR			0.62	(3.73)	4.24	(3.30)								
MSCI AC WORLD EX US (NET)			0.53	(5.26)	4.03	(3.87)	15.29	16.83	(13.71)	11.15	7.76	5.54		
EXCESS RETURN			0.09	1.53	0.21	0.57	2.70	1.53	1.87	7.10	1.82	2.08		
91 BERS-TOTAL DEVELOPED GROWTH ACTIVE - GROSS	361	8.19	0.68	(0.93)	6.54	(6.42)	29.53	18.88	(10.71)	17.36	11.83		4.77	08/01/2007
ESTIMATED INVESTMENT FEES			(0.06)	(0.26)	(0.13)	(0.24)								
BERS-TOTAL DEVELOPED GROWTH ACTIVE - NET MGR			0.62	(1.19)	6.41	(6.66)								
MSCI EAFE GROWTH			1.01	(1.33)	6.91	(4.43)	22.55	16.86	(12.11)	12.25	10.09		1.47	
EXCESS RETURN			(0.39)	0.14	(0.50)	(2.23)	6.98	2.02	1.40	5.11	1.74		3.30	
101 BERS-TOTAL DEVELOPED VALUE ACTIVE - GROSS	308	6.99	(0.60)	(7.58)	1.34	(2.98)	16.94	17.84	(9.92)	18.56	8.88	5.81	7.04	08/01/2004
ESTIMATED INVESTMENT FEES			(0.06)	(0.19)	(0.10)	(0.21)								
BERS-TOTAL DEVELOPED VALUE ACTIVE - NET MGR			(0.66)	(7.77)	1.24	(3.19)								
MSCI EAFE VALUE NET (DAILY)			0.22	(7.09)	4.11	(5.39)	22.95	17.69	(12.17)	3.25	8.93	4.37	5.66	
EXCESS RETURN			(0.88)	(0.68)	(2.87)	2.20	(6.01)	0.15	2.25	15.31	(0.05)	1.44	1.38	
111 BERS-TOTAL DEVELOPED SMALL CAP ACTIVE - GROSS	83	1.88	4.14	(4.22)	9.36	(4.60)							9.23	05/01/2013
ESTIMATED INVESTMENT FEES			(0.08)	(0.32)	(0.18)	(0.32)								
BERS-TOTAL DEVELOPED SMALL CAP ACTIVE - NET MGR			4.06	(4.54)	9.18	(4.92)								
S&P EPAC SMALL CAP INDEX			4.74	0.67	10.57	(3.10)							10.16	
EXCESS RETURN			(0.68)	(5.21)	(1.39)	(1.82)							(0.93)	
121 BERS-TOTAL ACTIVE EMERGING MARKETS - GROSS	218	4.94	1.30	(0.87)	3.47	4.14	(4.70)	18.12	(17.86)	19.85	4.98	7.75	9.55	04/01/2004
ESTIMATED INVESTMENT FEES			(0.09)	(0.35)	(0.18)	(0.37)								
BERS-TOTAL ACTIVE EMERGING MARKETS - NET MGR			1.21	(1.22)	3.29	3.77								
MSCI EMERGING MARKETS			0.69	(5.12)	2.95	(2.19)	(2.60)	18.22	(18.42)	18.88	3.68	8.11	9.05	
EXCESS RETURN			0.52	3.90	0.34	5.96	(2.10)	(0.10)	0.56	0.97	1.30	(0.36)	0.50	

# Consolidated Performance Report

Through June 30, 2015



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2014	2013	2012	2011	2010	5 Year	10 Year	ITD	Inception Date
<b>EQUITY RETURN DETAIL</b>														
133 BERS-TOTAL PRIVATE EQUITY (TIME WEIGHTED)	179	4.07	7.78	18.40	9.16	22.16	15.34	7.70	19.15	13.64	15.74		4.72	07/01/2006
NYC R3000 +3% LAGGED			2.55	15.71	8.71	21.24	24.53	35.20	5.55	15.96	18.68		12.34	
EXCESS RETURN			5.23	2.69	0.45	0.92	(9.19)	(27.50)	13.60	(2.32)	(2.94)		(7.62)	
143 BERS-TOTAL PRIVATE REAL ESTATE (TIME WEIGHTED)	175	3.97	2.00	12.96	6.75	13.67	8.64	14.30	9.43				11.53	12/01/2010
NCREIF NFI-ODCE NET + 100 BP			3.84	14.51	7.38	12.56	14.02	10.88	16.09				14.49	
EXCESS RETURN			(1.84)	(1.55)	(0.63)	1.11	(5.38)	3.42	(6.66)				(2.96)	
153 BERS-TOTAL INFRASTRUCTURE (TIME WEIGHTED)	22	0.50	0.75	12.00	7.05	18.85							16.46	12/01/2013
CPI + 4%			1.86	4.19	2.63	4.70							5.06	
EXCESS RETURN			(1.11)	7.81	4.42	14.15							11.40	

# Consolidated Performance Report

Through June 30, 2015



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2014	2013	2012	2011	2010	5 Year	10 Year	ITD	Inception Date
<b>FIXED INCOME RETURN DETAIL</b>														
165 BERS-TOTAL FIXED INCOME - GROSS	1,110	25.18	(1.22)	1.33	0.93	5.69	(0.56)	8.55	9.42	9.39	5.41	5.71	5.62	04/01/2004
ESTIMATED INVESTMENT FEES			(0.04)	(0.14)	(0.07)	(0.16)								
EST MANAGEMENT FEES			(0.04)	(0.14)	(0.07)	(0.16)								
EST INCENTIVE FEES														
EST OTHER FEES														
EST FEE OFFSETS														
BERS-TOTAL FIXED INCOME - NET MGR			(1.26)	1.19	0.86	5.53								
173 BERS-TOTAL STRUCTURED FIXED INCOME - GROSS	643	14.59	(2.04)	2.04	(0.21)	7.66	(2.38)	6.68	9.23	8.36	4.43	5.20	7.99	01/01/1985
ESTIMATED INVESTMENT FEES			(0.01)	(0.07)	(0.03)	(0.08)								
BERS-TOTAL STRUCTURED FIXED INCOME - NET MGR			(2.05)	1.97	(0.24)	7.58								
NYC - CORE PLUS FIVE			(2.21)	2.08	(0.37)	7.66	(2.79)	5.41	9.40	7.13	3.98	5.00		
EXCESS RETURN			0.16	(0.11)	0.13	(0.08)	0.41	1.27	(0.17)	1.23	0.45	0.20		
183 BERS-TOTAL TIPS - GROSS	139	3.16	(1.01)	(1.32)	1.03	3.37	(8.52)	7.67	13.34	6.57	3.46	4.33	4.35	06/01/2005
ESTIMATED INVESTMENT FEES			0.00	(0.07)	(0.02)	(0.10)								
BERS-TOTAL TIPS - NET MGR			(1.01)	(1.39)	1.01	3.27								
BARCLAYS GLOBAL INFLATION LINKED: US TIPS (DAILY)			(1.06)	(1.73)	0.34	3.64	(8.61)	6.98	13.56	6.31	3.29	4.13	4.14	
EXCESS RETURN			0.05	0.34	0.67	(0.37)	0.09	0.69	(0.22)	0.26	0.17	0.20	0.21	
193 BERS-TOTAL ENHANCED YIELD - GROSS	217	4.93	0.35	0.52	3.51	3.09	8.39	15.68	6.25	15.01	9.39	7.92	6.14	08/01/1997
ESTIMATED INVESTMENT FEES			(0.09)	(0.34)	(0.17)	(0.34)								
BERS-TOTAL ENHANCED YIELD - NET MGR			0.26	0.18	3.34	2.75								
CITIGROUP BB & B			0.26	0.28	2.74	2.78	6.17	14.45	6.58	13.35	8.37	6.50	6.15	
EXCESS RETURN			0.00	(0.10)	0.60	(0.03)	2.22	1.23	(0.33)	1.66	1.02	1.42	(0.01)	
203 BERS- TOTAL BANK LOANS - GROSS	86	1.95	1.11	3.22	3.41	2.34	6.33						4.99	12/01/2012
ESTIMATED INVESTMENT FEES			(0.09)	(0.35)	(0.17)	(0.35)								
BERS-TOTAL BANK LOANS - NET MGR			1.02	2.87	3.24	1.99								
CSFB LEVERAGED LOAN INDEX			0.79	2.15	2.87	2.06	6.15						4.58	
EXCESS RETURN			0.23	0.72	0.37	(0.07)	0.18						0.41	
213 BERS-TOTAL TARGETED INVESTMENTS	24	0.54	(1.71)	2.95	0.46	7.31	(1.66)	4.35	7.15	6.31	3.73	5.64	7.08	12/01/1984
BERS CUSTOM BENCHMARK (NO CASH)			(1.16)	2.17	0.24	5.76	(1.71)	3.74	7.09	5.98	3.19			
EXCESS RETURN			(0.55)	0.78	0.22	1.55	0.05	0.61	0.06	0.33	0.54			

# Consolidated Performance Report

Through June 30, 2015



		Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2014	2013	2012	2011	2010	5 Year	10 Year	ITD	Inception Date
<b>CASH SUMMARY</b>															
225	BOARD OF ED. SHORT TERM SHORT TERM - GROSS	182	4.13	0.09	0.44	0.26	0.28	0.29	0.53	0.62	0.47	0.43	2.05	2.23	10/01/2000
	ESTIMATED INVESTMENT FEES			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	BOARD OF ED. SHORT TERM SHORT TERM - NET MGR			0.09	0.44	0.26	0.28	0.29	0.53	0.62	0.47	0.43	2.05		
229	C/D - FAIL FLOAT EARNINGS	0	0.00												
231	SECURITY LENDING	0	0.00												

New York City  
Board of Education Retirement System

# Appendix B

## Public Markets Manager Performance Detail



# Public Markets Manager Performance Detail



Net Returns Through June 30, 2015

	Ending Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2014
EQUITY SUMMARY						
US EQUITY						
NYC BERS BLACKROCK R2000 GROWTH	40	0.91	1.98	12.19	8.72	5.50
RUSSELL 2000 GROWTH DAILY			1.98	12.34	8.74	5.60
Excess			0.00	(0.15)	(0.02)	(0.11)
NYC BERS BLACKROCK R2000 VALUE	37	0.85	(1.03)	0.83	0.94	4.11
RUSSELL 2000 VALUE DAILY			(1.20)	0.78	0.76	4.22
Excess			0.17	0.05	0.17	(0.11)
Daruma Small Cap-Core	33	0.74	(0.22)	(2.40)	0.03	(1.93)
RUSSELL 2000 (DAILY)			0.42	6.49	4.75	4.89
Excess			(0.64)	(8.88)	(4.73)	(6.83)
Wellington Mgmt MCC	143	3.23	(0.16)	5.90	5.70	10.96
S&P MID CAP 400			(1.06)	6.40	4.20	9.77
Excess			0.90	(0.50)	1.51	1.19
NYC BERS BLACKROCK R1000 GROWTH	693	15.73	0.12	10.49	3.97	12.91
RUSSELL 1000 GROWTH - DAILY			0.12	10.56	3.96	13.05
Excess			0.00	(0.06)	0.01	(0.14)
NYC BERS BLACKROCK R1000 VALUE	661	15.01	0.13	4.13	(0.59)	13.39
RUSSELL 1000 VALUE (DAILY)			0.11	4.13	(0.61)	13.45
Excess			0.02	(0.00)	0.03	(0.06)
FUND OF FUNDS						
BERS-TOTAL FUND OF FUNDS	162	3.68	(0.18)	5.45	3.59	4.72
RUSSELL 3000 (DAILY)			0.14	7.29	1.94	12.56
Excess			(0.31)	(1.85)	1.65	(7.84)

# Public Markets Manager Performance Detail



Net Returns Through June 30, 2015

	Ending Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2014
NON - US EQUITY						
Sprucegrove MTA (BOE)	308	6.99	(0.66)	(7.77)	1.24	(3.19)
MSCI EAFE VALUE NET (DAILY)			0.22	(7.09)	4.11	(5.39)
Excess			(0.87)	(0.69)	(2.87)	2.21
Baillie Gifford MTA	361	8.19	0.62	(1.19)	6.41	(6.66)
MSCI EAFE GROWTH			1.01	(1.33)	6.91	(4.43)
Excess			(0.39)	0.14	(0.51)	(2.23)
Acadian	83	1.88	4.06	(4.54)	9.18	(4.92)
S&P EPAC Small Cap Index			4.74	0.67	10.57	(3.10)
Excess			(0.69)	(5.21)	(1.39)	(1.81)
EMERGING MARKETS						
ACADIAN	218	4.94	1.21	(1.22)	3.29	3.77
MSCI EMERGING MARKETS			0.69	(5.12)	2.95	(2.19)
Excess			0.52	3.90	0.34	5.96
FIXED INCOME SUMMARY						
STRUCTURED FIXED INCOME						
Blackrock Mortgages	254	5.77	(0.62)		0.68	
CITIGROUP MORTGAGE INDEX			(0.78)		0.36	
Excess			0.16		0.32	
Prudential - Credit	167	3.79	(2.52)	1.14	(0.46)	7.20
NYC - Investment Grade Credit			(2.55)	1.04	(0.51)	7.04
Excess			0.03	0.10	0.05	0.16
Taplin Canida Habacht - Credit	111	2.52	(2.88)	0.52	(0.97)	8.68
NYC - Investment Grade Credit			(2.55)	1.04	(0.51)	7.04
Excess			(0.33)	(0.52)	(0.46)	1.64

# Public Markets Manager Performance Detail



Net Returns Through June 30, 2015

	Ending Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2014
Prudential-Prinvest - Credit	16	0.37	(1.34)	3.48	0.80	7.20
NYC - Investment Grade Credit			(2.55)	1.04	(0.51)	7.04
Excess			1.21	2.44	1.31	0.16
State Street Govt	95	2.15	(4.16)	3.92	(1.54)	12.21
NYC - Treasury Agency Plus Five			(4.04)	4.13	(1.31)	12.38
Excess			(0.13)	(0.22)	(0.23)	(0.16)
ENHANCED YIELD						
Loomis Sayles - High Yield	117	2.66	0.20	(1.06)	3.12	2.83
NYC-Loomis (BoA MLMSTII 7-03/BB&B PRIOR)			(0.05)	(0.55)	2.49	2.50
Excess			0.25	(0.51)	0.63	0.33
Shenkman - High Yield	100	2.28	0.34	1.68	3.59	2.66
CITIGROUP BB & B			0.26	0.28	2.74	2.78
Excess			0.07	1.39	0.84	(0.13)
BANK LOANS						
Babson BL	86	1.95	1.02	2.87	3.24	1.99
CSFB LEVERAGED LOAN INDEX			0.79	2.15	2.87	2.06
Excess			0.24	0.72	0.37	(0.07)
TIPS						
SSGA TIPS	139	3.16	(1.01)			
Barclays Global Inflation Linked: US TIPS (Daily)			(1.06)			
Excess			0.05			
OTHER FIXED						
AFL-CIO HOUSING INV TRUST	12	0.28	(1.18)	2.24	0.40	6.10
Barclays Aggregate (Daily)			(1.68)	1.86	(0.10)	5.97
Excess			0.50	0.38	0.50	0.14

# Public Markets Manager Performance Detail



Net Returns Through June 30, 2015

	Ending Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2014
ACCESS RBC	7	0.16	(0.72)	3.13	0.82	6.66
Access RBC Benchmark			(0.69)	2.13	0.42	5.08
Excess			(0.03)	1.01	0.40	1.57
CPC CONST FACILITY	1	0.01	0.63		1.31	
CPC CONST BENCHMARK			0.71		1.43	
Excess			(0.09)		(0.12)	
CFSB-PPAR (GNMA)	0	0.00	(4.99)	1.75	(3.36)	15.34
GNMA Plus 65bps			(0.45)	2.51	0.41	6.65
Excess			(4.54)	(0.75)	(3.77)	8.69
CCD-PPAR (GNMA)	0	0.01	(4.82)	1.83	(3.06)	15.37
GNMA Plus 65bps			(0.45)	2.51	0.41	6.65
Excess			(4.37)	(0.68)	(3.47)	8.72
CCD-PPAR (FNMA)	1	0.02	(5.47)	10.12	(4.23)	25.71
FNMA Plus 85bps			(0.64)	3.42	0.86	7.13
Excess			(4.83)	6.70	(5.09)	18.58
CPC-PPAR (FNMA)	1	0.01	(4.71)	(0.86)	(3.28)	13.91
FNMA Plus 85bps			(0.64)	3.42	0.86	7.13
Excess			(4.07)	(4.28)	(4.14)	6.78
JPMC-PPAR (FNMA)	1	0.02	(6.25)	(3.54)	(6.10)	12.06
FNMA Plus 85bps			(0.64)	3.42	0.86	7.13
Excess			(5.61)	(6.95)	(6.96)	4.93
BOA-PPAR (FNMA)	1	0.02	(5.23)	32.45	28.32	13.31
FNMA Plus 85bps			(0.64)	3.42	0.86	7.13
Excess			(4.59)	29.03	27.47	6.19

## Public Markets Manager Performance Detail



Net Returns Through June 30, 2015

	Ending Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2014
LIIF-PPAR (GNMA)	0	0.00	(2.34)	2.58	(0.09)	9.74
GNMA Plus 65bps			(0.45)	2.51	0.41	6.65
Excess			(1.89)	0.07	(0.50)	3.09
NCBCI-PPAR (GNMA)	0	0.00	(4.84)	3.02	(2.88)	16.66
GNMA Plus 65bps			(0.45)	2.51	0.41	6.65
Excess			(4.39)	0.52	(3.29)	10.01
LIIF-PPAR (FNMA)	0	0.01	(5.19)	5.13	(3.92)	38.12
FNMA Plus 85bps			(0.64)	3.42	0.86	7.13
Excess			(4.55)	1.71	(4.78)	30.99
NCBCI-PPAR (FNMA)	0	0.00	(4.78)	1.95	(2.93)	14.93
FNMA Plus 85bps			(0.64)	3.42	0.86	7.13
Excess			(4.13)	(1.46)	(3.78)	7.81
CASH						
BOARD OF ED. SHORT TERM	182	4.13	0.09	0.44	0.26	0.28
91 DAY T-BILL			0.00	0.00	0.00	0.02
Excess			0.09	0.44	0.26	0.26
C/D - FAIL FLOAT EARNINGS	0	0.00				
SECURITY LENDING	0	0.00				

New York City  
Board of Education Retirement System

# Appendix C

## Alternative Assets Manager Performance Detail

## Alternative Assets Manager Performance Detail

Through March 31, 2015



	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
<b>TOTAL PRIVATE EQUITY</b>		371,682,368	179,782,370	77,032,797	176,588,362	1.41	10.57%
<b>TOTAL ACTIVE</b>		371,682,368	179,782,370	77,032,797	176,588,362	1.41	10.57%
Mesirow Financial Private Equity Fund III	2005	57,000,000	54,238,273	45,127,092	44,338,037	1.65	0.00%
New York Fairview Private Equity, L.P.	2006	19,000,000	16,924,208	10,831,193	11,555,793	1.32	6.54%
Mesirow Financial Private Equity Fund IV	2006	25,000,000	20,717,233	8,878,759	22,317,739	1.51	10.40%
Mesirow Financial Private Equity Fund V	2008	45,000,000	27,014,326	4,733,886	34,304,545	1.45	0.00%
Platinum Equity Capital Partners III, LP	2012	15,000,000	7,036,830	5,794,549	5,684,781	1.63	69.11%
Warburg Pincus Private Equity XI, LP	2012	25,000,000	15,048,077	1,325,602	18,050,125	1.29	19.86%
New Mainstream Capital II	2013	1,200,000	186,075	836	159,269	0.86	NM
CVC Capital Partners VI	2013	16,832,368	1,516,031	2,600	1,084,882	0.72	NM
Apollo Investment Fund VIII	2013	20,000,000	2,657,928	29,086	2,498,190	0.95	NM
Landmark - NYC Fund I, L.P.	2013	6,000,000	2,515,826	-	2,742,652	1.09	NM
Landmark Equity Partners XV	2013	19,000,000	3,839,456	57,742	4,604,522	1.21	NM
Carlyle Partners VI, L.P.	2013	20,000,000	6,286,237	208,211	5,920,150	0.97	NM
Siris Partners III, LP	2014	3,500,000	-	-	-	0.00	N/A
Carlyle Partners VI, LP. (Side Car)	2014	2,200,000	485,899	-	449,271	0.92	NM
Mill City II	2014	1,200,000	679,380	-	551,135	0.81	NM
Lexington Capital Partners VIII, L.P.	2014	20,000,000	1,400,000	-	2,247,953	1.61	NM
ASF VI B NYC Co-Invest L.P.	2014	5,000,000	2,920,163	-	3,351,296	1.15	NM
ASF VI B L.P.	2014	15,000,000	4,202,445	-	5,187,156	1.23	NM
Vista Equity Partners Fund V, L.P.	2014	25,000,000	9,974,269	1,949	9,652,591	0.97	NM
American Securities Partners VII, L.P.	2015	8,000,000	-	-	-	0.00	N/A
Centerbridge Capital III	2015	2,500,000	-	-	-	0.00	N/A
Raine Partners II	2015	3,000,000	406,077	-	312,771	0.77	NM
Webster Capital III, L.P.	2015	2,250,000	407,475	-	374,493	0.92	NM
Crestview Partners III	2015	15,000,000	1,326,162	41,292	1,201,011	0.94	NM

Information provided by State Street Private Edge

## Alternative Assets Manager Performance Detail

Through March 31, 2015



	Vintage Year	Original Commitment	Total Contributions	Total Distributions	Market Value	Total Value Multiple	Net IRR%
<b>TOTAL REAL ASSETS</b>		298,000,000	160,101,621	28,071,472	171,391,240	1.25	11.70%
<b>TOTAL PRIVATE REAL ESTATE</b>		258,000,000	155,207,668	27,781,844	166,446,556	1.25	11.70%
<b>TOTAL INFRASTRUCTURE</b>		40,000,000	4,893,953	289,628	4,944,684	1.07	11.90%
<b>TOTAL PRIVATE REAL ESTATE</b>							
Franklin Templeton Private Real Estate Fund	2011	30,000,000	23,630,831	12,762,662	17,419,436	1.28	22.82%
LaSalle Property Fund	2011	27,600,000	27,045,987	3,305,104	32,730,558	1.33	12.41%
UBS Trumbull Property Fund	2011	41,400,000	50,912,457	7,603,194	63,396,440	1.39	10.21%
Brookfield Strategic Real Estate Partners	2012	10,000,000	9,949,774	1,903,929	9,682,012	1.16	15.93%
NYC Asset Investor #1 LLC - Emmes	2013	10,000,000	7,451,146	381,920	8,041,744	1.13	NM
NYC Asset Investor #2 LLC - Related	2013	11,000,000	5,042,624	134,023	5,690,300	1.16	NM
NYC Asset Investor #3 LLC - Hudson	2013	8,000,000	1,213,327	-	1,285,500	1.06	NM
Blackstone Real Estate Partners Europe IV	2014	32,500,000	14,531,079	1,463,076	12,407,719	0.95	NM
Carlyle Realty Partners VII	2014	25,000,000	3,212,444	-	2,886,550	0.90	NM
MetLife Core Property Fund	2014	15,000,000	10,465,117	227,936	10,901,669	1.06	NM
H/2 Special Opportunities Fund III	2015	15,000,000	1,752,882	-	2,004,628	1.14	NM
Blackstone RE Partners VIII	2015	16,500,000	-	-	-	N/A	N/A
Jamestown Premier Property Fund	2015	5,000,000	-	-	-	N/A	N/A
NYC/Artemis Co-investment Program	2015	11,000,000	-	-	-	N/A	N/A
<b>TOTAL INFRASTRUCTURE</b>							
Brookfield Infrastructure Fund II	2013	10,000,000	4,547,796	289,628	4,735,422	1.10	17.20%
First Reserve Energy Infrastructure Fund II	2014	15,000,000	346,157	-	209,262	N/M	N/M
IFM Global Infrastructure Fund	2014	15,000,000	-	-	-	N/A	N/A

Information provided by the New York City Board of Education Retirement System Consultants



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

# Appendix D

## Footnotes

Through June 30, 2015



- The Barclays Capital Aggregate (then known as the Lehman Brothers Aggregate) was used prior to 1/1/89. Effective 1/1/89, in the Government Sector, maturities of less than 5 years were dropped from the Salomon and Lehman indices. From that date until 7/1/99 the benchmark was the NYC Core + 5, from Lehman.
- Effective 7/1/94, the NYC Core + 5 Index includes BBB rated securities.
- Effective 7/1/99, the basis of the NYC Index was changed from Lehman Brothers to Salomon. Also effective 7/1/99, only Salomon indices have been used to compare all fixed income managers.
- Effective 4/1/03, the name of the benchmark provider was changed from Salomon to Citigroup.
- Effective 7/1/03, the “NYC-Loomis” benchmark index for the Loomis Sayles Enhanced Yield portfolio reflects a change from the Citigroup BB&B Index to the more appropriate BofA Merrill Lynch High Yield Master II Index.
- Effective 7/1/09, the Core+5 program was restructured.
  - The U.S. Gov’t sector benchmark Index was changed from the Citigroup Core+5 Treasury/Gov’t Sponsored Index to the Citigroup Core+5 Treasury/Agency Index.
  - The Corporate and Yankee sectors were combined to form the new Investment Grade Credit sector. The benchmark for the new combined sector is the customized Citigroup Credit Index. For historical performance purposes, the old Corporate sector Index is linked to the new Credit sector Index.
  - There were no changes to the Mortgage sector Index.
  - The total Core+5 results and benchmark returns combine the three sectors. Historical total Core+5 returns continue to include the old Corporate and Yankee sector returns.

## General Notes

- Estimated management fees for public market investments are calculated on an accrual basis without adjustment for management fee caps. Alternative investment fees are recorded on a cash basis. Since not all alternative managers currently provide detailed fee disclosure, the alternative investment fees noted here are not comprehensive.
- Returns are Net of Manager Fees for periods after January 2014 and Gross of investment advisory fees for other periods unless otherwise indicated.
- Public market excess returns for periods prior to 2014 are based on Gross performance.

## Page Specific

### Page 13 & 14 - Portfolio Asset Allocation

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

### Pages 16 - 18 - Performance Attribution: Total Plan

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

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

*U.S. Equity: Russell 3000 \* 39.70%*

*International Developed (EAFE) Markets: MSCI EAFE \* 17.00%*

*Emerging Markets: MSCI Emerging Markets \* 5.00%*

*Private Equity: Russell 3000 + 300 b.p. per annum \* 3.96%*

*Private Real Estate: NFI - ODCE Net+100BPS \* 3.86%*

*Infrastructure: CPI + 4% \* 0.48%*

*Domestic Fixed Income: NYC Core +5 \* 17.00%*

*TIPS: Lehman U.S. TIPS \* 5.00%*

*Enhanced Yield: Citigroup BB&B \* 5.50%*

*Bank Loans: Credit Suisse Leveraged Loan \* 2.50%*

### **Page 19 – Allocation and Selection Effects - Asset Class Breakdown**

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



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New York City  
Board of Education Retirement System

# Appendix B1

## Manager Performance Detail - Prior to 1/1/14

# Consolidated Performance Report

Through December 31, 2013



STATE STREET.

	Assets (\$MM)	% of Total	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
<b>Equity Management Russell 3000</b>									
RUSSELL 3000			10.10	33.55	33.55	16.24	18.71	7.88	5.32
<b>SMALL CAP</b>									
DARUMA -SCC	33.3	0.85	8.47	44.54	44.54	15.90			
TOTAL SMALL CAP CORE	33.3	0.85	8.47	44.54	44.54	15.90			
RUSSELL 2000			8.72	38.82	38.82	15.67	20.08	9.07	8.42
TOTAL SMALL CAP ACTIVE	33.3	0.85	8.47	44.54	44.54	15.90	20.68		
RUSSELL 2000			9.30	34.52	34.52	14.49	17.64	8.61	9.82
BLACKROCK R2000 GROWTH MTA	53.6	1.37	8.52						
RUSSELL 2000 GROWTH			8.17	43.30	43.30	16.82	22.58	9.41	6.48
BLACKROCK R2000 VALUE MTA	51.4	1.31	9.41						
RUSSELL 2000 VALUE			9.30	34.52	34.52	14.49	17.64	8.61	9.82
TOTAL SMALL CAP PASSIVE	105.0	2.68	8.95						
TOTAL SMALL CAP	138.3	3.53	8.83	44.74	44.74	15.95	20.71	7.49	
RUSSELL 2000			8.72	38.82	38.82	15.67	20.08	9.07	8.42
<b>MID CAP</b>									
WELLINGTON MID CAP CORE	121.4	3.10	9.39	40.05	40.05	16.10			
TOTAL MID CAP CORE	121.4	3.10	9.39	40.05	40.05	16.10			
S&P MIDCAP 400			8.33	33.50	33.50	15.64	21.89	10.36	9.97
STATE STREET GA S&P 400	71.8	1.83	8.31	33.46	33.46				
TOTAL MID CAP PASSIVE	71.8	1.83	8.31	33.46	33.46				
S&P MIDCAP 400			8.33	33.50	33.50	15.64	21.89	10.36	9.97
TOTAL MID CAP	193.2	4.93	8.99	37.52	37.52	15.67			

# Consolidated Performance Report

Through December 31, 2013



STATE STREET.

	Assets (\$MM)	% of Total	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
RUSSELL MIDCAP			8.39	34.76	34.76	15.88	22.36	10.22	9.22
<b>RUSSELL 1000</b>									
BLACKROCK R1000 GROWTH MTA	608.2	15.52	10.54						
RUSSELL 1000 GROWTH			10.44	33.48	33.48	16.45	20.39	7.83	3.33
BLACKROCK R1000 VALUE MTA	586.9	14.97	9.94						
RUSSELL 1000 VALUE			10.01	32.53	32.53	16.06	16.67	7.58	6.23
TOTAL LARGE CAP PASSIVE	1,195.1	30.49	10.25						
ZEVENBERGEN	77.9	1.99	5.89	60.88	60.88	16.21	24.82	11.37	6.02
RUSSELL 3000 GROWTH			10.25	34.23	34.23	16.47	20.56	7.95	3.56
TOTAL LARGE CAP GROWTH	77.9	1.99	5.89	60.88	60.88	16.67	21.96	9.45	5.14
TOTAL RUSSELL 1000	1,273.0	32.48	9.97	62.18	62.18	22.37	22.79	10.55	5.84
RUSSELL 1000			10.23	33.11	33.11	16.30	18.59	7.78	5.08
<b>PROGRESS MANAGERS</b>									
AFFINITY IA	9.8	0.25	12.06						
JOHN HSU -LCC	11.6	0.30	11.78	31.85	31.85	13.13	19.14	9.60	
HERNDON CAPITAL MGMT-LCV	12.5	0.32	12.36	31.48	31.48	16.45	20.88		
HIGH POINTE LLC -LCG	5.2	0.13	12.11	34.07	34.07	17.25			
LOMBARDIA CAPITAL -SCV	3.9	0.10	8.74	37.23	37.23	15.94	21.61		
NICHOLS ASSET MGMT -SCG	3.0	0.08	11.59	47.05	47.05				
REDWOOD INV -LCG	12.1	0.31	11.47	39.35	39.35				
TOTAL PROGRESS	72.4	1.85	11.61	37.64	37.64	16.61	19.15	8.48	
RUSSELL 3000			10.10	33.55	33.55	16.24	18.71	7.88	5.32
<b>F.I.S. MANAGEMENT</b>									
CHANNING -SCV	9.4	0.24	8.73	39.57	39.57				

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	Assets (\$MM)	% of Total	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
CUPPS CAPITAL SCG	4.1	0.10	(0.75)	45.53	45.53	18.92			
EUDAIMONIA -MICRO CG	4.7	0.12	8.91	57.41	57.41	17.35			
HUBER CAP MGMT -SCV	4.3	0.11	10.31	41.49	41.49				
NICHOLS ASSET MGMT -SCG	11.5	0.29	11.53						
NICHOLAS SCG	8.1	0.21	7.47	58.90	58.90				
PIERMONT -SCV	13.3	0.34	11.18						
PUNCH SCC	9.1	0.23	10.14	42.71	42.71				
TOTAL F.I.S FUND MGMT	75.9	1.94	9.00	43.42	43.42	17.90	20.87		
RUSSELL 2000			8.72	38.82	38.82	15.67	20.08	9.07	8.42
TOTAL EMERGING MANAGERS	148.3	3.78	10.26	40.84	40.84	17.42	19.89		
RUSSELL 3000			10.10	33.55	33.55	16.24	18.71	7.88	5.32
TOTAL ACTIVE DOMESTIC EQUITY	380.9	9.72	8.91	44.80	44.80	17.72	20.15	8.94	4.72
TOTAL PASSIVE DOMESTIC EQUITY	1,371.9	35.00	10.04	33.59	33.59	16.15	18.66	7.89	5.71
TOTAL DOMESTIC EQUITY	1,752.8	44.72	9.79	35.96	35.96	16.33	18.91	8.11	5.56
INTERNATIONAL EQUITY DEVELOPED MARKETS									
BAILLIE	352.1	8.98	7.45	29.53	29.53	11.20	18.58		
MSCI EAFE GROWTH			5.17	22.94	22.94	8.33	13.21	7.34	3.52
ACADIAN	79.4	2.03	8.53						
S&P EPAC SMALL CAP			5.92	28.40	28.40	9.81	17.47	10.01	8.39
TOTAL EAFE SMALL CAP	79.4	2.03	8.53						
SPRUCEGROVE	303.3	7.74	4.72	16.94	16.94	7.47	14.61		
MSCI EAFE VALUE			6.26	22.95	22.95	8.32	11.99	6.77	5.72
TOTAL ACTIVE DEVELOPED MARKETS	734.8	18.75	6.42	24.21	24.21	9.65	16.82	9.42	6.57
TOTAL DEVELOPED MARKETS	734.8	18.75	6.42	24.21	24.21	9.65	16.82	9.41	6.48
MSCI EAFE			6.26	22.95	22.95	8.32	11.99	6.77	5.72



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	Assets (\$MM)	% of Total	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
<b>EMERGING MARKETS</b>									
ACADIAN	179.5	4.58	1.25						
TOTAL ACTIVE EMERGING MARKETS	179.5	4.58	1.25	(4.70)	(4.70)	(2.58)	13.73		
MSCI EMERGING MARKET FREE			1.83	(2.60)	(2.60)	(2.06)	14.79	11.17	
MSCI EMERGING MARKET FREE			1.83	(2.60)	(2.60)	(2.06)	14.79	11.17	
TOTAL EMERGING MARKETS	179.5	4.58	1.25	(4.27)	(4.27)	(2.49)	13.79	10.99	11.46
MSCI EMERGING MARKET FREE			1.83	(2.60)	(2.60)	(2.06)	14.79	11.17	
TOTAL INTERNATIONAL EQUITY	914.3	23.33	5.37	17.99	17.99	7.18	16.12	9.69	7.22
<b>PRIVATE EQUITY INVESTMENTS</b>									
FAIRVIEW PRIVATE EQUITY FD	12.2	0.31							
MESIROW PTNRS FD III	51.6	1.32							
MESIROW PTNRS FD IV	19.8	0.50							
MESIROW PTNRS FD V	23.1	0.59							
PLATINUM EQ PTNRS III	3.3	0.08							
WARBURG PINCUS XI	7.1	0.18							
TOTAL PRIVATE EQUITY	119.7	3.05							
NYC R3000 +3% Lagged									
<b>REAL ASSETS</b>									
<b>PRIVATE REAL ESTATE</b>									
BROOKFIELD STRATEGIC RE PTNRS	4.0	0.10							
EMMES ASSET MGMT CO	1.6	0.04							
FRANKIN TEMPLETON FD	8.2	0.21							
LASALLE US PROPERTY FD	25.8	0.66							
UBS TRUMBULL PROPERTY FD	53.9	1.37							
TOTAL PRIVATE REAL ESTATE	97.2	2.48							

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	Assets (\$MM)	% of Total	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
NCREIF NFI-ODCE NET + 1									
Brookfield Infr Fd II	0.7								
BERS-TOTAL INFRASTRUCTURE	0.7								
BERS-TOTAL REAL ASSETS	97.8								
TOTAL EQUITY - PUBLIC & PRIVATE	2,884.7	73.60	7.78	27.83	27.83	12.72	17.43	8.38	5.89
FIXED INCOME MANAGEMENT GOVERNMENT									
STATE STREET	85.7	2.19	(1.68)	(7.49)	(7.49)	4.46	3.00	5.64	6.02
ALL TREASURY / AGENCY	85.7	2.19	(1.68)	(7.49)	(7.49)	4.46	3.00	5.48	5.90
NYC - TREASURY AGENCY PLUS 5			(1.98)	(7.48)	(7.48)	4.40	2.85	5.51	5.90
MORTGAGE									
PIMCO	238.6	6.09	(0.48)	(1.73)	(1.73)	2.96	5.15	5.08	5.88
CITIGROUP MORTGAGE INDEX			(0.55)	(1.52)	(1.52)	2.43	3.70	4.65	5.29
CREDIT									
PRUDENTIAL CREDIT	128.5	3.28	1.07	(1.21)	(1.21)	5.32			
PRUDENTIAL PRIVEST	15.0	0.38	(0.13)	0.00	0.00				
TAPLIN, CANADA	95.8	2.44	1.74	(1.04)	(1.04)	6.29	9.98	5.25	6.44
ALL INVESTMENT GRADE CREDIT	239.3	6.11	1.26	(1.07)	(1.07)	5.76	9.59	5.06	6.29
NYC - INVESTMENT GRADE CREDIT			0.92	(1.85)	(1.85)	5.03	7.88	5.12	5.76
TOTAL STRUCTURED	563.6	14.38	0.07	(2.38)	(2.38)	4.39	6.04	5.29	6.09
NYC - CORE PLUS FIVE			(0.19)	(2.79)	(2.79)	3.88	5.00	5.12	5.67
ACTIVE TIPS MANAGERS									
PIMCO-TIPS-MTA	133.5	3.41	(2.21)	(8.52)	(8.52)	3.74	5.57		
TOTAL ACTIVE TIPS MANAGERS	133.5	3.41	(2.21)	(8.52)	(8.52)	3.74	5.57		
BARCLAYS CAPITAL US TIPS INDEX			(2.00)	(8.61)	(8.61)	3.55	5.63	4.85	6.40

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STATE STREET

	Assets (\$MM)	% of Total	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
<b>ENHANCED YIELD</b>									
LOOMIS SAYLES & CO	110.5	2.82	3.41	9.95	9.95	11.45	19.61	9.61	9.41
NYC-LOOMIS (BofA ML-MST II 7-03/BB&B PRIOR)			3.50	7.42	7.42	9.03	18.65	8.46	7.35
SHENKMAN ENHANCED YIELD	95.0	2.42	4.71	6.63	6.63				
ALL ENHANCED YIELD	205.5	5.24	4.01	8.39	8.39	10.04	17.20	8.50	7.60
CITIGROUP BB & B			3.38	6.17	6.17	9.00	15.56	7.07	6.38
CITIGROUP BB & B CAPPED			3.38	6.20	6.20	8.93	15.45	7.30	
<b>BANK LOANS</b>									
BABSON BL	81.2		2.33	6.33	6.33				
TOTAL BANK LOANS	81.2	2.07	2.33	6.33	6.33				
CREDIT SUISSE LEVERAGED LOAN INDEX			1.82	6.15	6.15	5.76	13.51	5.06	
<b>ETI</b>									
ACCESS/RBC	4.9	0.12	(0.88)	(2.09)	(2.09)	3.04	5.12		
AFL-CIO HOUSING INV TRUST	11.5	0.29	0.10	(2.37)	(2.37)	3.17	4.38		
CFSB-PPAR	0.1	0.00	0.55	4.28	4.28	5.22	7.61		
CCD-PPAR	0.3	0.01	1.07	8.64	8.64	8.52	9.91		
CPC-PPAR 2013	0.1	0.00							
JPMC-PPAR 2013	0.0	0.00	2.81						
LIIF-PPAR	0.2	0.00	1.29	7.82	7.82	6.53			
NCBCI-PPAR	0.1	0.00	(14.98)	(7.92)	(7.92)	3.03			
TOTAL PPAR	1.0	0.02	0.40	6.94	6.94	7.05	8.15		
GNMA PLUS 65bps			(0.38)	(1.56)	(1.56)	3.26	4.57	5.34	5.98
CPC TERM LOAN	0.6	0.01	0.62	2.45	2.45	2.35	2.26		
TOTAL BOE ETI (w/o cash)	17.9		(0.17)	(1.90)	(1.90)	3.13	4.53	5.67	4.79
TOTAL TARGETED	17.9	0.46	(0.09)	(1.73)	(1.73)	3.18	4.46		
BERS CUSTOM ETI INDEX (NO CASH)			(0.22)	(1.71)	(1.71)	2.98	3.96		
BARCLAYS CAPITAL AGGREGATE			(0.14)	(2.02)	(2.02)	3.26	4.44	4.55	5.23

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	Assets (\$MM)	% of Total	3 Month	YTD	1 Year	3 Year	5 Year	10 Year	15 Year
TOTAL FIXED INCOME	1,001.7	25.56	0.71	(0.57)	(0.57)	5.71	8.05		
C/D - Fail Float Earnings	0.1								
SECURITY LENDING	0.4								
STATE STREET SHORT TERM	32.8	0.84	0.05	0.29	0.29	0.47	0.65		
<b>TOTAL BOARD OF EDUCATION</b>	<b>3,919.6</b>	<b>100.00</b>	<b>5.82</b>	<b>18.78</b>	<b>18.78</b>	<b>10.31</b>	<b>14.18</b>	<b>7.67</b>	<b>6.25</b>
Board of Education Policy Benchmark			5.52	17.91	17.91	10.55	14.04	7.33	5.77