



**New York City**  
**Board of Education Retirement System**  
Performance Overview as of June 30, 2013

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# Total Fund Overview

# New York City Board of Education Retirement System

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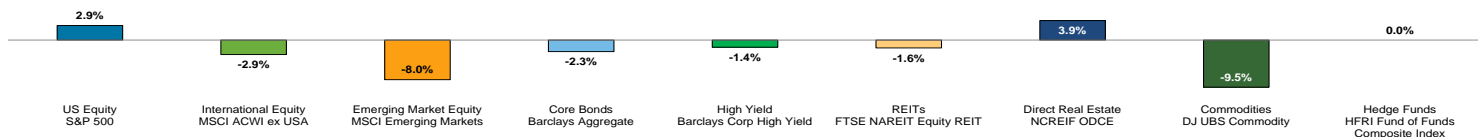
**Appendix**

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# Consultant's Commentary

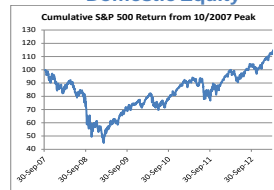
Through June 30, 2013



## Index Returns – Q2 2013

- With the first real indication of the conditions for a withdrawal of Quantitative Easing ("QE") on the horizon, bond markets had their worst quarter of returns since 2004, which was the last time the US central bank (the "Fed") initiated a reversal of extended monetary stimulus.
- In December 2012, the Federal Open Markets Committee ("FOMC") outlined specific economic objectives that would warrant the end of QE3. FOMC comments made in late May and at the June 2013 meeting went on to state that if its optimistic expectations for the US economy were met, QE operations would be gradually reduced or tapered later in the year and possibly ended entirely in 2014, albeit ahead of any increase in base rates, let alone any unwinding of the stimulus.
- A surge in volatility afflicted investment markets upon this announcement, as investors concerned themselves with the impact of the early withdrawal of monetary stimulus with both bonds and equities falling sharply.
- Towards the end of the quarter, equities recovered somewhat as the Fed reaffirmed that any tapering in QE would be more conditional than the market was pricing in.
- By the end of the quarter most developed equity markets ended marginally higher than at the start, glossing over substantial volatility during the quarter. Bond yields, however, did not respond in a similar manner, and most markets saw yields rising to finish the quarter a significant step higher than their starting point.
- US economic data continued to show evidence of gradually improving prospects. The labor market continued to steadily improve with an average monthly increase in non-farm payrolls of just under 200,000, and an unemployment rate that held steady at 7.6%.
- The improving US budget deficit picture and the prospect of QE ending earlier in the US than elsewhere helped the US dollar appreciate against most currencies.
- Japan's equity resurgence continued into the second quarter before selling off in mid-May, following gathering doubt about the Abe government's ability to deliver its "third arrow" of tax and institutional reform. Japan is entering a critical phase to assess the extent to which the real economy responds to "Abenomics."
- Developments in China, including a spike in the Shanghai interbank offered rate ("SHIBOR"), weighed heavily on emerging markets in Asia, and disappointing economic performance afflicted Brazil and India. There was a particularly sharp reaction to the adjustment in market expectations regarding US Fed policy in general, resulting in significant sell-offs in emerging market equity and bonds.

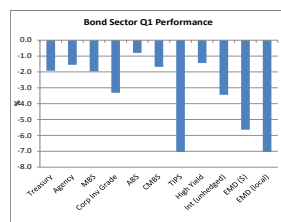
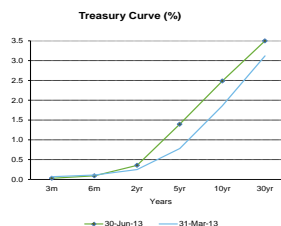
## Domestic Equity



- US Equities rallied going into the quarter, and the S&P 500 traded at a record high level. Gains were partially given back, however, as the end of quantitative easing became a concern. The S&P 500 returned 2.9%.
- Mega- and small-cap stocks returned about 3%, while mid-cap trailed only slightly at 2.2%. The better performing sectors included financials and consumer discretionary, both of which returned about 7%. Commodity-oriented sectors, such as energy and materials, produced slightly negative returns on the back of falling commodity prices.
- With respect to style, performance was mixed. Growth outperformed value in the small- and mid-cap space but lagged in mega-cap. Large-cap value outperformance is partially attributable to strong gains generated by money-center banks.
- International Equity**
  - The risk of potential tail events and the pace of economic decline appeared to moderate in Europe, but the macroeconomic backdrop still remained difficult and resulted in underperformance for **International Equities**. Strength in the US dollar was also a contributing factor, bolstered by higher expected interest rates on anticipated Fed tapering. The MSCI ACWI-ex US Index returned -2.9% with losses being particularly pronounced within the emerging markets.
  - Japan was again a top performer among developed-market equities and returned 4.4%. As was the case last quarter, a weaker Japanese yen masked gains to US investors. In local-market terms, Japan rose more than 10%. The more stable European markets, such as Germany and France, produced modest low single-digit gains, but peripheral European and Asian countries were mostly negative.
- Emerging Market Equities**
  - Emerging Market Equities** underperformed during the quarter, producing a -8.0% loss in US dollar terms and -4.3% in local terms.
  - Turkey and Brazil were especially weak due to negative reactions to deep-seated political and civil unrest and concerns about current account weakness.
  - Sentiment in China's services sector was the weakest since 2005, while manufacturing output contracted in China, India, South Korea, Taiwan, and Vietnam, partly due to the slide in the yen increasing Japan's competitiveness against dollar-linked economies.

# Consultant's Commentary

Through June 30, 2013



- TIPS did particularly poorly during the quarter and declined more than -7.0%. A lack of inflationary pressures weighed on performance, combined with expectations of QE tapering. Market participants noted that the US Treasury department exhibited notable interest in the sector and investigated if abnormally low liquidity contributed to the pronounced losses.

## Global Bond Markets

- International Fixed Income** trailed that of the US during the quarter with the Citigroup WGBI non-USD Index returning -3.4%. Japan was again a notable contributor to the relative decline. This was a result of yields rising with the Bank of Japan's pursuit of its new inflation target, which also served to further weaken the yen. The Australian curve (one of the flatter international curves) steepened on a rate cut by the Reserve Bank of Australia.
- Emerging market debt** fared even worse with the JP Morgan EMBI Global Diversified Index (sovereign, USD-denominated), returning -5.6% during the quarter. Local currency markets returned -7.0%. Although potential Fed tapering served as the catalyst for losses, excessive positioning and technical factors were also contributors. The asset class had experienced significant inflows as a result of accommodative monetary policy in the US and Japan.

## Bond Markets – Interest Rates

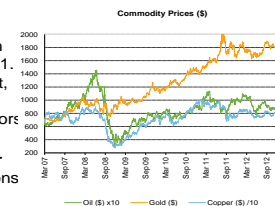
- Interest rates spiked dramatically during the quarter with the yield on the 10 Year Treasury Note rising from 1.85% to 2.49%, briefly rising over 2.6% intra-quarter. Volatility was driven by Fed chairman Bernanke's comments on the timing of reduced quantitative easing, currently in the form of \$85 billion in monthly asset purchases. He did seek to soothe market concerns, however, by stressing that the path of QE tapering would be dependent on economic data.

## Bond Markets – Sectors

- The **Barclays Aggregate Index** returned -2.3% with greater losses among longer-term Treasuries and investment-grade corporates leading the index lower. Treasuries and MBS securities both suffered on the prospect of decreased Fed purchases. Investment-grade corporates underperformed with losses of -3.3%. ABS was the best performing sector in index, restricting losses to -0.8%. High yield, not part of the Barclays Aggregate, lost -1.4% during the quarter.

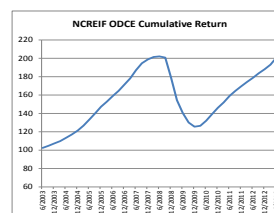
## Commodities

- The collapse in **gold** accelerated rapidly, nearing a three year low during the quarter and leaving it down by more than one third since the bubble burst in 2011. Statements from the US Fed did little to stop the rout, as the prospect of more normal financial conditions with positive real yields on bonds encouraged investors to seek returns elsewhere.
- Metals prices also fell during the period, with **copper** down on slowing demand from China and expectations of further supply entering the market later this year.
- Oil** prices rose towards the end of the period, reaching a 2013 high just after quarter end. The market reacted to political turmoil in Egypt and civil war in Syria with supply forecasts reduced on concerns that the unrest would affect the flow of oil through the Suez Canal.



## 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 a preliminary 3.9% (gross) during the quarter. Capital appreciation contributed about 2/3rds of the return, with the remainder derived from income.
- The FTSE NAREIT Equity **REIT** Index returned -1.6% for the quarter. REITs had continued to rally into the quarter, but tumbled roughly 15% from mid-May through mid-June in anticipation of Fed tapering. Sectors with more stable, bond-like return profiles (such as health care) fared the worst.



## Funds of Hedge Funds

- In a volatile quarter for most markets, Hedge Funds weathered the storm relatively well and posted flat returns overall. Hedge funds with a focus on emerging markets struggled as that region sold off, and were among the poorer returners.
- Global macro managers also found the environment difficult while equity-hedge and event-driven strategies fared the best, on average, posting positive returns for the quarter.

## Consultant's Commentary

### Through June 30, 2013

#### **Asset Allocation**

At June 30, 2013, the Board of Education Retirement System (BERS) Total Portfolio was \$3.5 billion versus \$3.4 billion at year end.

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 7.9%, while also underweighted to Private Equity and Real Estate by 7.6% combined. The overweight in US equity is in place to help offset the Private Equity/Real Estate underweights, and will be gradually reduced as these latter asset classes slowly build up.

The Total Equity and Total Fixed Income allocations are within their allowable ranges. The PE and RE allocations are outside of their ultimate target ranges but this is a function of building up the portfolios.

A new allocation to international small-cap equity, targeted at 10% of international developed allocation, was funded during the quarter.

#### **Manager Issues**

FIS reported the departure of manager research team member, though it is not directly related to the NYCBERS investment since the individual had coverage of international/global managers.

#### **Total Fund Performance**

The Total Plan returned -0.2% in the quarter versus 0.1% for the benchmark. For the year-to-date period, the Total Plan returned 5.4% versus 6.0% for the benchmark. The Total Plan remains slightly ahead over the trailing five-year period with a 5.7% return that is 7 basis points ahead of benchmark.

Net manager effects were negative. Although US managers did well, international equity managers underperformed by notable margins. We note that international equity manager long-term performance still remains strong. From an attribution perspective, private equity was also a detractor, but many such investments are still in their investment phases and pricing frequency is relatively limited.

## Consultant's Commentary

Through June 30, 2013

### U.S. Equity

For the quarter, Total Domestic Equity returned 3.1% versus 2.7% for the Russell 3000 Index. All of the fund's active managers outperformed, and Zevenbergen did especially well having outperformed by more than 800 basis points. Domestic equity is also ahead for the year-to-date period, 15.0% versus 14.1%. Again, all of the active managers are ahead, and Zevenbergen again stands out with an outperformance in excess of 1100 basis points.

**Zevenbergen** returned 10.3% during the quarter versus 2.2% for the Russell 3000 Growth benchmark. The portfolio maintains a similarly large lead for the year-to-date period with a return of 23.5% versus 12.2%. Performance is mixed over longer time periods. While they are still behind over three years, Zevenbergen continues to outperform over all longer time periods. Contributing sectors included consumer discretionary, financials, and materials. The largest individual contributor was electric-car manufacturer Tesla Motors, which returned 183% during the quarter. Tesla is now the largest holding in the portfolio. Other contributors included priceline.com and Precision Castparts, each of which returned about 20% during the quarter. Technology-sector positioning was a mild detractor, including the -23% loss recorded by a position in F5 Networks. A notable change in tech-sector positioning was the elimination of Apple, as management does not foresee the company returning to the significant growth levels of past years.

**Wellington** returned 3.1% for the quarter compared to 1.0% for its S&P Midcap 400 Index benchmark. Year-to-date, the portfolio is also ahead, 17.2% versus 14.6%. Security selection contributed to outperformance during the quarter, especially in health care, energy, and financials. The largest contributor to relative return was a position in generic drug maker Actavis, which returned 37% during the quarter. In energy, exploration and production industry names added to relative return. In financials, position in Moody's and regional banks aided in outperformance. Despite the bottom-up nature of the portfolio construction process, management has identified a number of themes to guide their investment research. Examples include non-residential construction, trucking, and transaction processing. Also, health care positions were shifted from drug distributors in favor of hospitals, which they see benefiting from health care reform. Overall sector positioning is close to benchmark (consistent with their philosophy of focusing on security selection to add value) and allocations are within +/-3% of benchmark allocations.

## Consultant's Commentary

### Through June 30, 2013

#### **U.S. Equity (continued)**

**Daruma** returned 4.5% during the quarter, outperforming the 3.1% return of its Russell 2000 Index benchmark. Year-to-date, the fund is also ahead, 19.2% versus 15.9%. The list of contributing stocks repeats from the previous quarter, with internet-based consumer discretionary stocks such as Shutterfly (+27%) and Pandora Media (+30%) topping the list. With respect to sectors, security selection was favorable in consumer staples (17% versus 9%), health care (11% versus 6%) and consumer discretionary (12% versus 10%). Sectors that presented difficulties during the quarter included materials and energy. As of June 30th, the top 10 stocks accounted for 36% of portfolio assets, with major active sector positions unchanged from last quarter. This includes overweights in consumer discretionary (24% versus 15%) and technology (22% versus 14%), which are offsetting an underweight to financials (6% versus 24%).

**Progress** returned 2.9% for the quarter versus 2.7% for its Russell 3000 benchmark during quarter. For the year-to-date period, Progress trails slightly, 13.9% versus 14.1%. The manager also underperforms over the trailing three- and five-year time periods.

**FIS** returned 5.4% during the quarter outperforming the 2.1% return of its Russell 2000 Index benchmark. FIS also leads year-to-date, 18.4% versus 15.9%. FIS is ahead for three years but trails the index for five years.

## Consultant's Commentary

Through June 30, 2013

### International Equity

The Total Developed Market portfolio underperformed the MSCI EAFE (net dividend) Index during the quarter, -2.4% versus -1.0%. This has led to underperformance for the year-to-date period, 2.8% versus 4.1%. Still, long-term results remain strong for Baillie Gifford and Sprucegrove, each having a record of adding value versus both EAFE and their respective EAFE-style benchmarks (EAFE Growth for Baillie Gifford and EAFE Value for Sprucegrove).

**Baillie Gifford** returned -2.2% during the quarter compared to -1.0% for the MSCI EAFE (net) Index during the quarter. For the year-to-date period, the portfolio returned 3.1% compared to 4.1% for the benchmark. The portfolio remains ahead over the trailing three- and five-year time periods. Underperformance during the quarter can be attributed to a 14% allocation to non-benchmark emerging market stocks, which generally did poorly during the quarter. An investment in Chinese internet provider Baidu was no exception. Management maintains a relatively optimistic outlook, noting that the market preoccupation with the timing of Federal Reserve tapering overshadows signs of recovery in the United States and Europe. They have added to financial-sector names in Spain as well as Italian consumer discretionary holdings. Opportunities in Japan, however, continue to be regarded as limited, and underweighted as a result.

**Sprucegrove** returned -2.6% for the quarter compared to -1.0% for the MSCI EAFE (net). Year-to-date, the portfolio is also behind, 1.6% versus 4.1%. With respect to longer-term performance, the three-year return is ahead of benchmark, while the five-year return remains strong. As in the case of Baillie Gifford, non-benchmark emerging market exposure was a significant contributor to underperformance. Specific EM investments that detracted included Samsung (Korea), Infosys (India) and Petrobras (Brazil). Management took advantage of EM regional weakness, however, to add to such investments. Still, such exposure remains relatively modest and totaled 11% as of quarter end. From a sector and selection perspective, areas that hurt included consumer discretionary, financials, and health care.



## Consultant's Commentary

### Through June 30, 2013

#### **International Small Cap**

**Acadian** small cap was funded during the 2nd quarter with an April 15, 2013 inception date established for performance measurement purposes. Formal monitoring will commence following its first full calendar quarter (in the Q3 2013 report).

#### **Emerging Markets**

**Acadian** returned -9.5% during its first full quarter, underperforming the -8.0% return of its MSCI Emerging Markets Index benchmark. Underperformance was mainly due to security selection in India, Brazil, and China. Selection in Thailand and Mexico were more favorable. The quantitatively-managed portfolio held 404 stocks (compared to 820 for the benchmark) as of quarter end and maintained active factor exposures not atypical for quant strategies such as a value style orientation (10x P/E ratio versus 13x for the benchmark), and a tilt toward smaller market capitalization holdings. For example, sub \$1.5 billion market cap stocks account for 10% of the portfolio compared to about 1% for the benchmark. This has translated into a weighted average market capitalization of \$37 billion versus \$41 billion for the benchmark. Active regional positioning includes an overweight to the Pacific (especially Thailand) and an underweight in emerging Europe (Russia).

## Consultant's Commentary

Through June 30, 2013

### **Fixed Income – Structured Manager Composite**

The Total Structured Portfolio performed roughly in line with its NYC Core + 5 Index during the quarter with a return of -2.9% that was 2 basis points ahead of benchmark. Outperformance by the two Prudential credit portfolios was offset by underperformance from the other managers. The Total Structured Portfolio maintains a slight lead for the year-to-date period, -3.0% versus -3.2%. Trailing three- and five-year returns are ahead of benchmark.

**Taplin Canida** (credit) returned -3.2% during the quarter, underperforming its customized Citigroup Credit Index by only 2 basis points. Year-to-date, the manager is slightly ahead, -3.2% versus -3.5%. Sector selection added to relative return during the quarter, mainly an overweight to industrials and an allocation to floating rate notes, which did relatively well during the rising interest-rate environment. Such gains were offset, however, by security selection, especially emerging market issuers. An emphasis at the lower-end of the investment-grade spectrum was also a detractor from return. BBB and BB rated securities accounted for 47% and 5% of portfolio assets, compared to 38% and 0% for the benchmark. Duration is positioned only slightly shorter than benchmark, 6.5 years versus 6.6 years.

**Prudential** (credit) returned -3.0% during the quarter versus -3.1% for the customized Citigroup Credit Index. Year-to-date, Prudential returned -3.1% versus -3.5% for the index. Longer-term numbers remain favorable with the three-year return also slightly ahead of the benchmark.

**PRIVEST** (credit) returned -2.4% during the quarter, outperforming the -3.1% return of its custom credit benchmark. The fund has also done relatively well on a year-to-date basis, -1.4% versus -3.5%. The fund's private credit focus gain contributed to return, as such issues experienced relatively less spread widening compared to their public-credit counterparts. The fund consisted of 96% private issues, compared to 91% the previous quarter, and was diversified across 460 total issues. The average credit rating was unchanged at BBB+ and maintained a duration of 5.3 years.

## Consultant's Commentary

Through June 30, 2013

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

**SSgA** (governments) returned -4.6% during the quarter versus -4.3% for the index. For the year-to-date, SSgA returned -5.4% to -5.1% for its benchmark. Longer-term numbers are mixed, with three-year returns slightly behind but five-year numbers slightly ahead of the benchmark. Underperformance was the result of the portfolio's agency security overweight, where spreads widened in anticipation of decreased Federal Reserve purchases going forward. SSgA sees opportunity, however, and increased agency exposure from 20% to 25% of assets, which now represents an 18% overweight compared to benchmark.

**PIMCO** (mortgages) returned -2.1% to -2.0% for the benchmark during the quarter. Year-to-date, the portfolio returned -2.1%, trailing its benchmark by just 3 basis points. PIMCO remains ahead of its benchmark over all longer time periods. The portfolio tracked fairly close to benchmark with differences in duration running at less than two months (shorter). Non-index securities accounted for less than 5% of portfolio assets, with holdings in non-agency CMO included, along with negligible exposure to ABS, CMBS, and inverse floaters.

### **Fixed Income - TIPS**

**PIMCO** returned -7.4%% versus -7.1% for the Barclays Capital US TIPS Index. For the year-to-date period, the portfolio remains only slightly ahead at -7.3% versus -7.4%. PIMCO remains ahead of its benchmark over all longer time periods. A slightly longer duration hurt relative return, with an 8.1 year real duration compared to 7.9 years for the benchmark. Management took advantage of the spike in real yields to add to real duration during the quarter. Non-benchmark exposure in the fund consists of small allocations to UK and Australia inflation-linked bonds.

## Consultant's Commentary

Through June 30, 2013

### Enhanced Yield Fixed Income

Total High Yield returned 0.9% during the quarter versus -1.5% for the Citigroup BB & B Index. Outperformance is attributable to Loomis while Shenkman lagged. Long-term returns for Total High Yield remain ahead of the benchmark. This also represents the first full quarter of bank loan investment. While Babson lagged, it was also the only NYCBERS fixed income manager to produce a positive return during the quarter.

**Loomis Sayles** returned -0.2% for the quarter versus -1.4% for the Merrill Lynch High Yield Master II index. Year-to-date, the fund returned 3.4% versus 1.5% for the index. Performance also remains ahead of the benchmark over longer time periods. Outperformance was derived from the portfolio's allocation to convertible securities. While fixed income suffered during the quarter, securities with equity-like behavior did relatively well. Such securities accounted for about 11% of assets. The contribution was sufficient to offset negative effects from a slightly longer duration and holdings in foreign securities.

**Shenkman** returned -1.6% for the quarter versus -1.5% for its Citigroup BB & B Index benchmark. Year-to-date, the portfolio returned 0.1% versus 0.3%. Performance differed little from the benchmark during the quarter, with negative selection and an overweight in the healthcare and media-cable sectors offsetting positive contribution from favorable selection/underweights in metals/mining and utilities. The portfolio's average credit quality was unchanged and remained at B1/B+ as of quarter end.

**Babson** returned 0.2% for its first full quarter with NYCBERS and this was behind the 0.4% return of its Credit Suisse Leveraged Loan Index benchmark. Underperformance was attributable to security selection among a number of industry sectors, such as retail and service companies. With respect to the overall bank loan market, June was the first negative monthly return for the sector since May of 2012. This was the result of widening spreads, with the 3-year discount margin widening 32 basis points to 521 basis points. The sector average price decreased 85 basis points to 97.6, but the high coupon provided by such securities managed to keep returns positive for the quarter.

## Consultant's Commentary

Through June 30, 2013

**Real Estate (Returns provided are those of the fund, as provided by the manager, and as of the date indicated)**

The Fund's real estate target is 7%, or about \$242 million based on June 30 market values. Current commitments total \$133 million, with two new investments closed during the quarter including \$10 million to Emmes Asset Management and \$11 million to a fund related to Hurricane Sandy rebuilding efforts. Total commitments are now 54% of target. The quarter end market value is \$82.0 million, or 34% of target. Brief comments on the funds follow, with a full report to be provided by the NYC BERS real estate consultant(s).

**LaSalle Property Fund (core)** returned 3.7% in Q2 versus 3.9% for the NFI-ODCE Index<sup>1</sup>. For the trailing year, the fund returned 11.0% versus 12.2%. Leverage is 27% compared to 23% for the ODCE. Debt possessed a weighted average term of 6.6 years and a weighted average interest rate of 3.5%. There are a total of 30 properties in the fund, with approximately 33% of the NYC BERS commitment to the fund remaining uncalled. In terms of sector allocation, the fund is overweighted to residential (35% versus 26%) and industrials (26% versus 13%), while underweighted to office (22% versus 37%). Geographic focus is currently on the East and West (at levels equal or slightly lower than that of the ODCE). The value-added allocation fell from 4 properties last quarter to only a single property as of June. Two were leased-up and reclassified to core, while another property was disposed.

**UBS Trumbull Property Fund (core)** returned 3.4% during Q2, compared to 3.9% for the NFI-ODCE Index<sup>1</sup>. For the trailing year, the fund returned 9.8% versus 12.2% for the index. Lower leverage compared to benchmark contributed to underperformance, which remained at 13% versus 23% for the ODCE. Of the 3.4% return, 1.3% came from income, while 2.1% came from capital appreciation (mainly from multi-family and office properties). Sector positioning as of quarter end was 33% multi-family, 33% office, 20% retail, 9% industrials, and 5% hotel. There was no additional value-add investment activity from last quarter, and the allocation to such properties remains at 7%. The fund maintains an entry queue, and prospective investors continue to be advised of a 12 month+ wait.

<sup>1</sup>NFI-ODCE is short for NCREIF Fund Index - Open End Diversified Core Equity. It is an index of investment returns reporting the results of 28 open-end commingled funds pursuing a core investment strategy. The Index is capitalization-weighted and reported gross of fees.

## Consultant's Commentary

### Through June 30, 2013

**Real Estate (Returns provided are those of the fund, as provided by the manager, and as of the date indicated)**

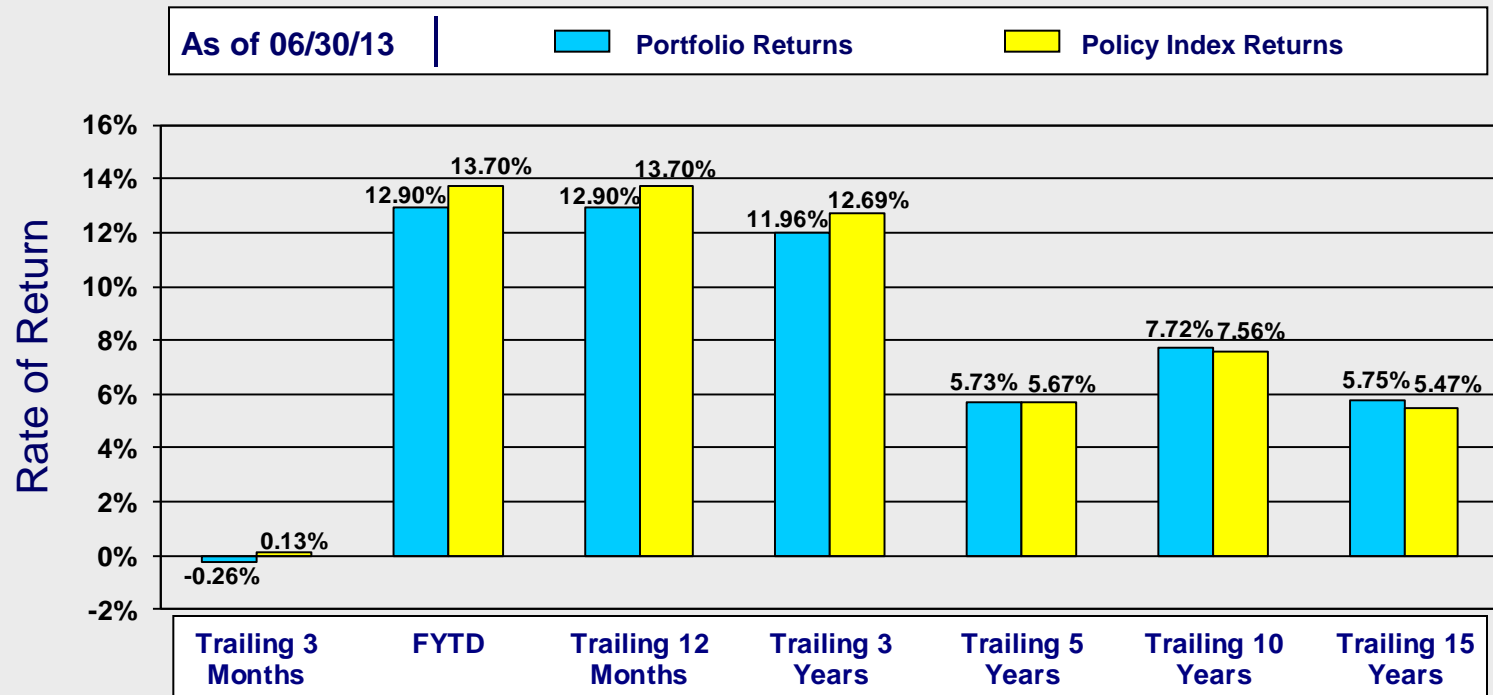
**Franklin Templeton Private Real Estate Fund (non-core)**, a global opportunistic real estate fund of funds has, as of June 30, called approximately 25% of total limited partner commitments, making investments in seven funds and three co-investments. This includes a new commitment during the quarter in a fund that focuses on distressed Japanese real estate. Additionally, they report an additional investment in the pipeline for Q3. Committed assets are allocated 30% US, 26% Europe, and 44% Asia, with office comprising the largest sector exposure (43%). Total portfolio leverage is now 55%, with the underlying fund leverage ranging from 29% to 72%.

**Brookfield Strategic Real Estate partners (opportunistic)** is a closed-end fund investment recently initiated with a \$10 million commitment. The fund does not yet possess a meaningful return history. It completed its final close in July 2013, and the investment period will last for 10 years, subject to up to two consecutive one-year extensions. The fund has only closed on seven investments.

1NFI-ODCE is short for NCREIF Fund Index - Open End Diversified Core Equity. It is an index of investment returns reporting the results of 28 open-end commingled funds pursuing a core investment strategy. The Index is capitalization-weighted and reported gross of fees.

## Total Portfolio Returns: June 30, 2013

**\$3.5B** Under Management

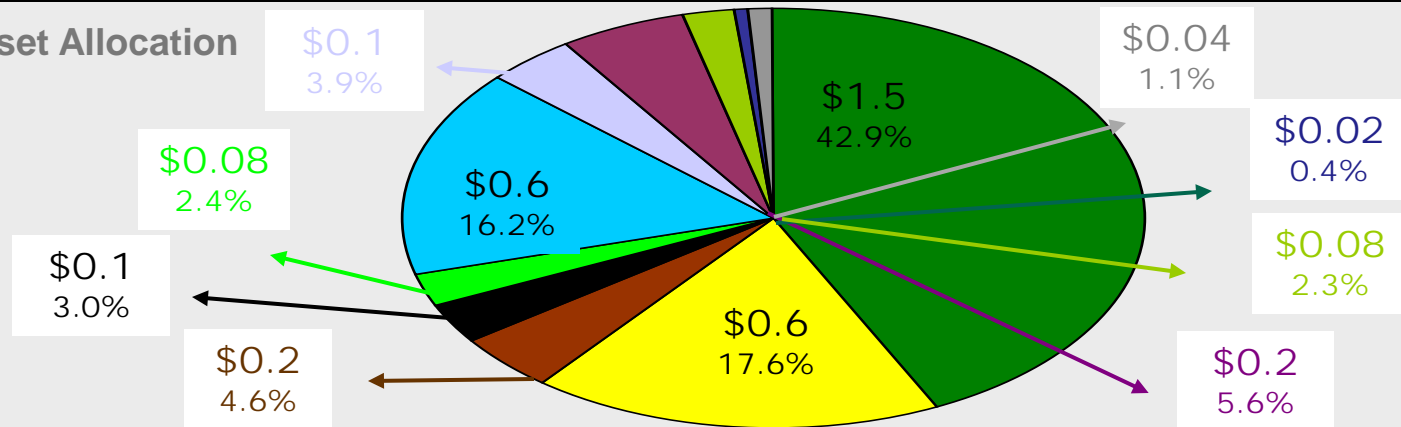


	3 Years	5 Years	10 Years	15 Years
Plan Std Dev	10.1	13.7	11.0	11.6
Benchmark Std Dev	10.4	14.6	11.5	12.0

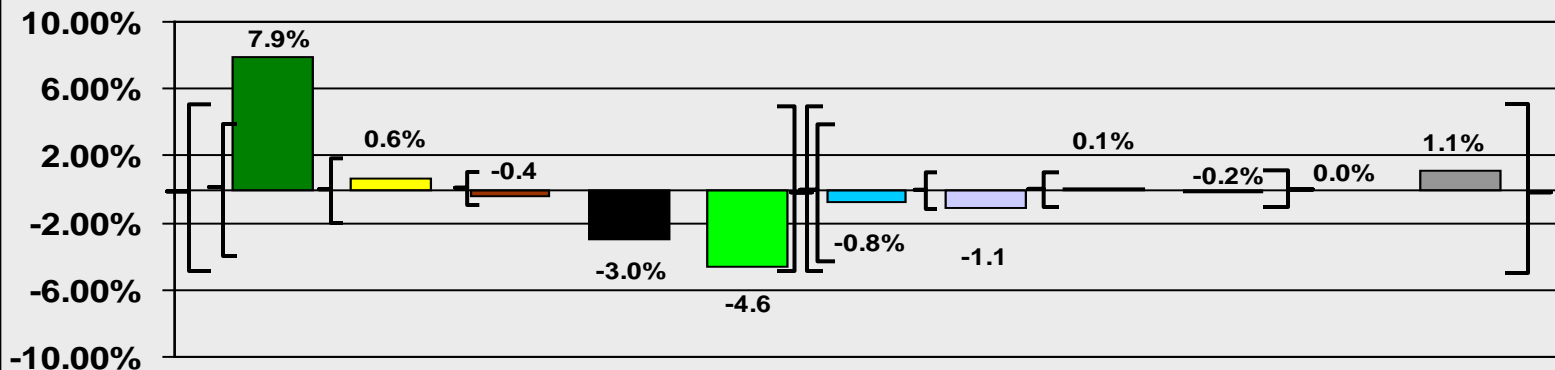
## Portfolio Asset Allocation: June 30, 2013

**\$3.5B** Under Management

### Asset Allocation



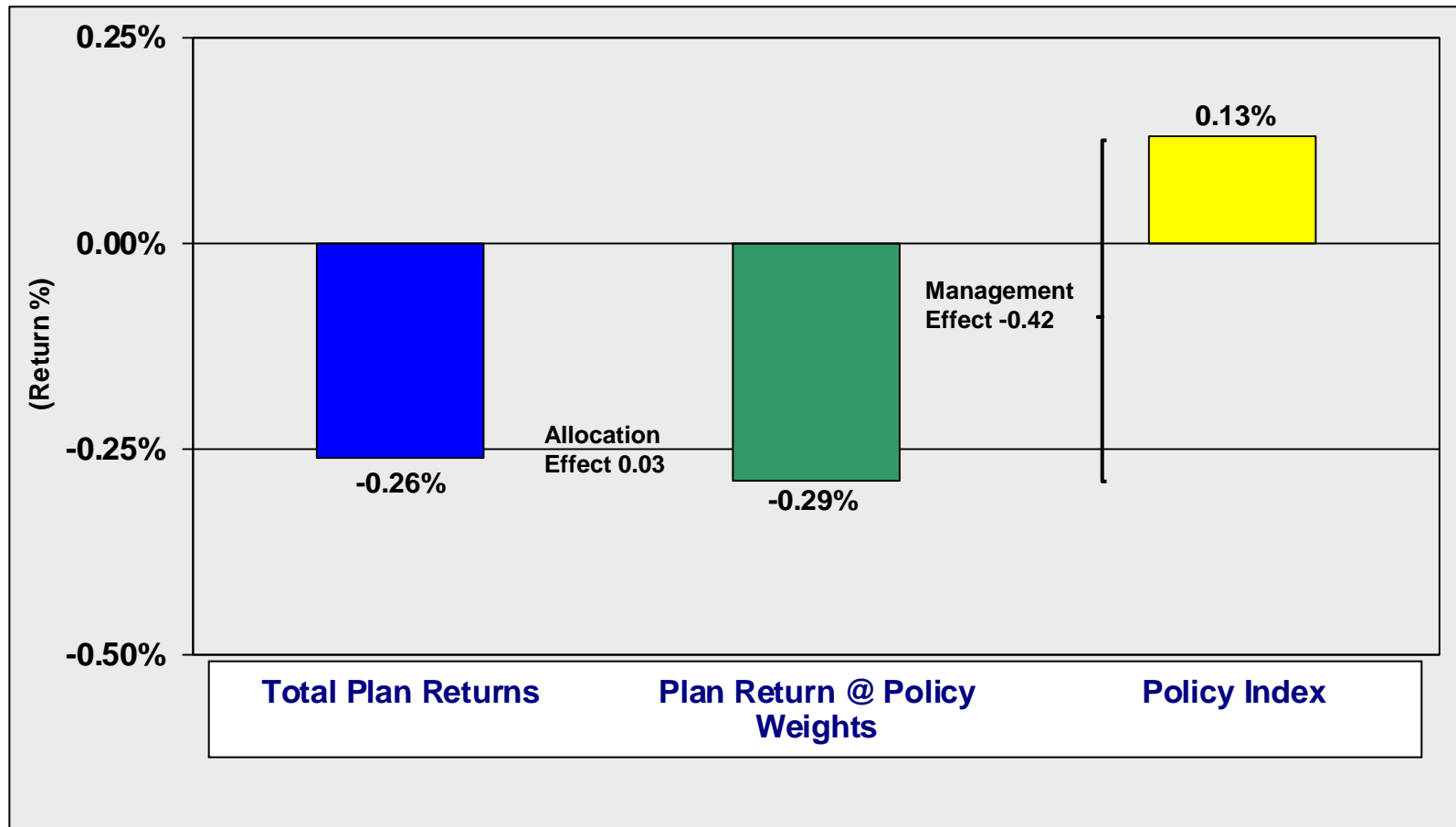
### Relative Mix to New Policy Weights



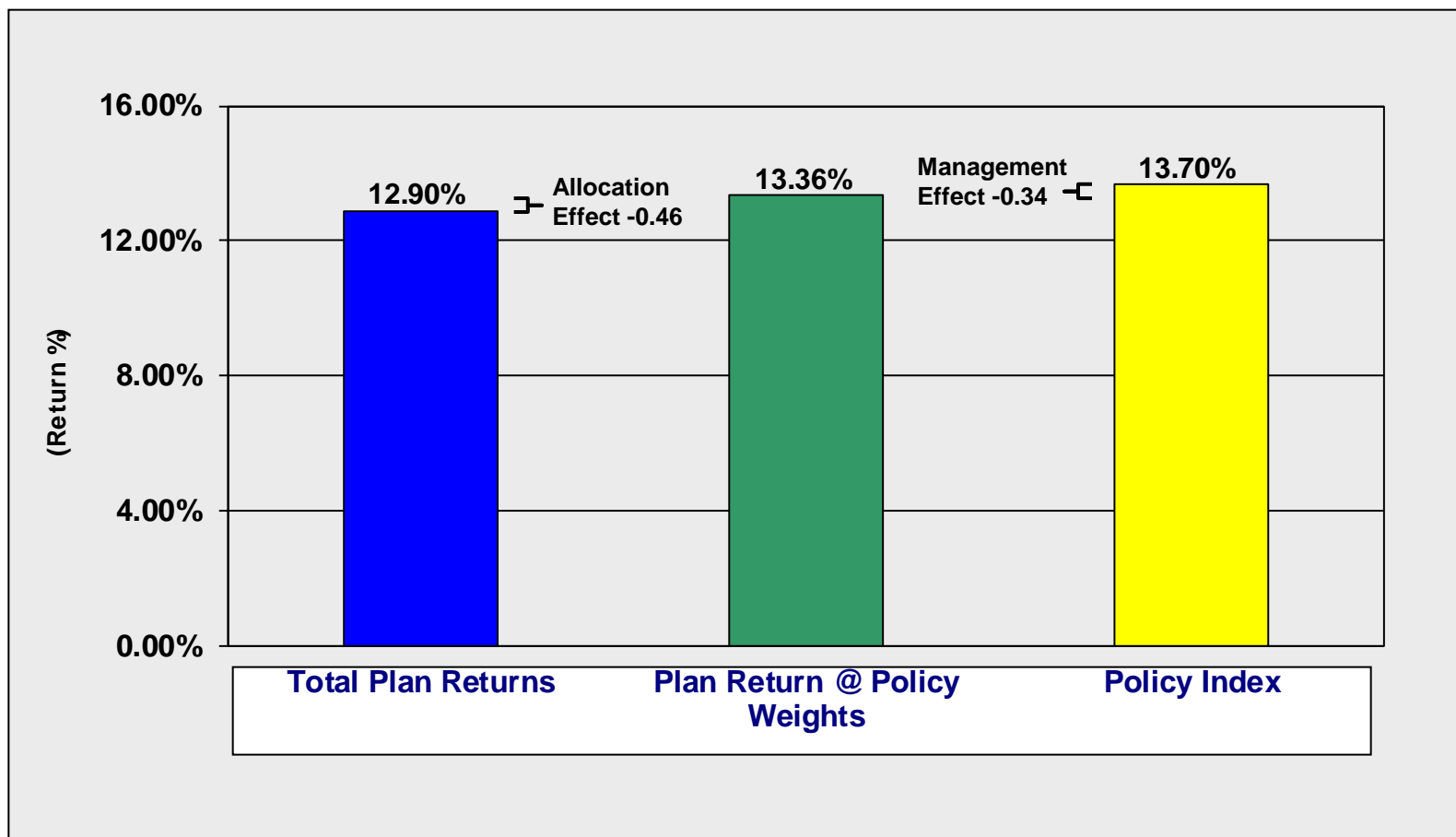
Note: Brackets represent rebalancing ranges versus Policy.



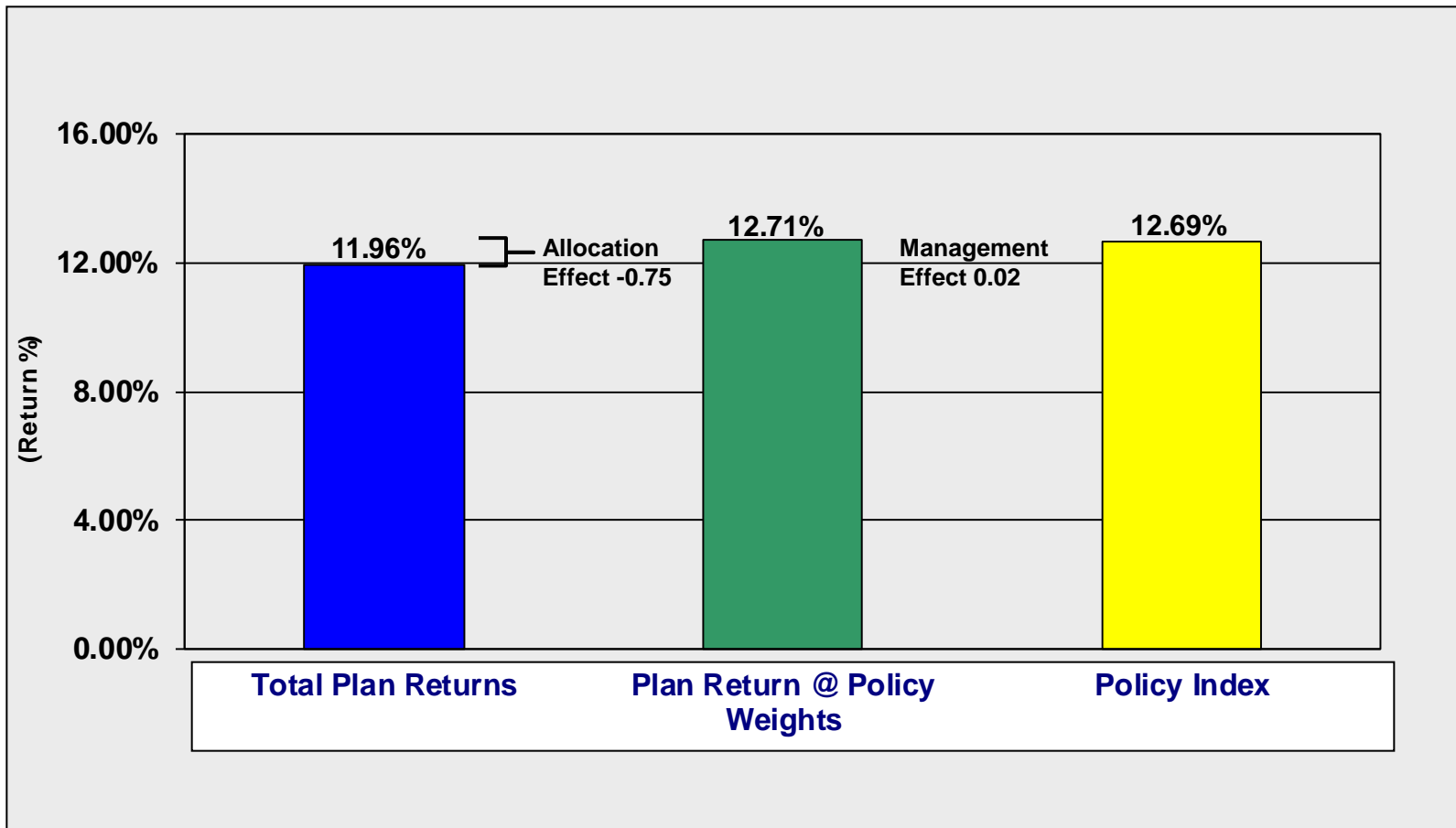
## Performance Attribution: Total Plan - Quarter Ending June 30, 2013



## Performance Attribution: Total Plan – 12 Months Ending June 30, 2013



## Performance Attribution: Total Plan – 3 Years Ending June 30, 2013



## Total Plan - Quarter Ending June 30, 2013

### Allocation Effect – Asset Class Breakdown

<u>Plan</u>	<u>Quarter</u>	<u>12 Months</u>	<u>3 Years</u>	<u>Benchmark</u>
Domestic Equity	-0.03	-0.18	-0.17	Russell 3000 Index
EAFE Markets	-0.02	0.12	-0.06	MSCI EAFE Index
Emerging Markets	0.04	0.03	-0.05	MSCI Emerging Markets Index
Private Equity	0.00	0.00	0.00	Russell 3000 Index + 300 b.p.
Private Real Estate	0.00	0.00	****	NCREIF ODCE NET + 100 b.p.
Domestic Fixed	0.01	-0.06	-0.12	NYC Core +5 Index
Enhanced Yield	0.00	-0.02	-0.06	Citigroup BB&B Index
TIPS	0.06	0.11	0.02	Barclays Capital US TIPS Index
State Street Short Term	-0.02	-0.27	-0.39	Total Plan

Note: Detailed effects may not add up to total due to reallocation and trading effects.

## Total Plan - Quarter Ending June 30, 2013

### Management Effect – Asset Class Breakdown

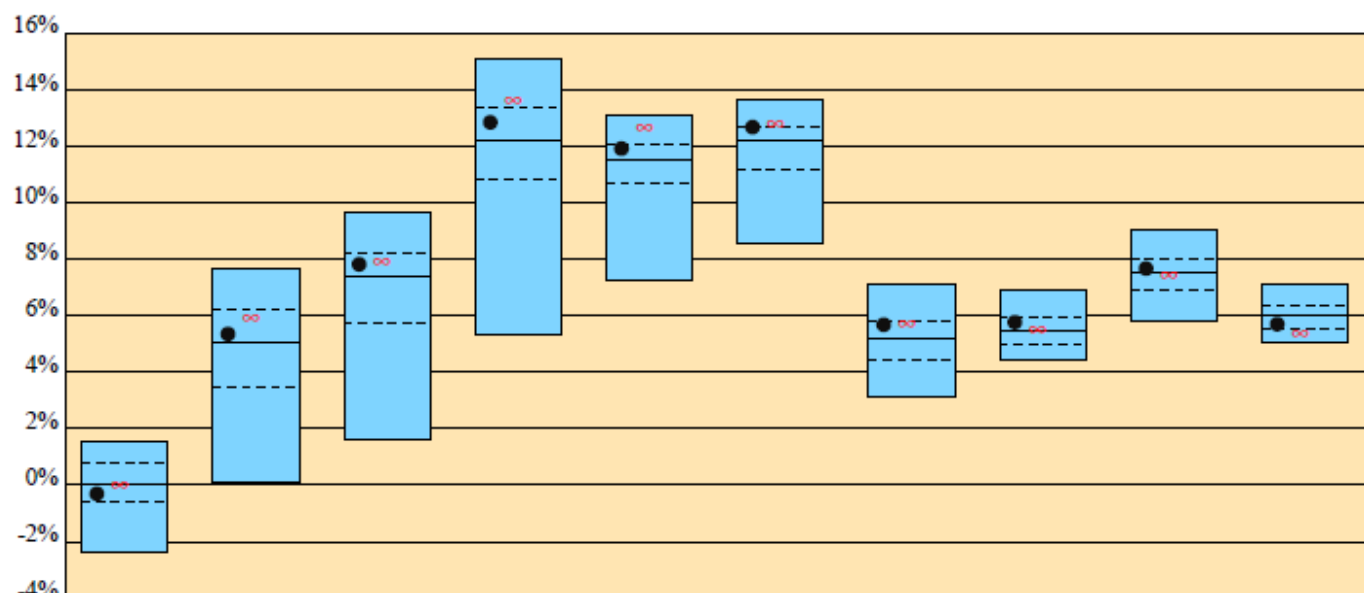
<u>Plan</u>	<u>Quarter</u>	<u>12 Months</u>	<u>3 Years</u>	<u>Benchmark</u>
Domestic Equity	0.19	0.54	-0.01	Russell 3000 Index
EAFE Markets	-0.26	-0.34	0.25	MSCI EAFE Index
Emerging Markets	-0.06	-0.06	0.00	MSCI Emerging Markets Index
Private Equity	-0.34	-0.70	-0.38	Russell 3000 Index + 300 b.p.
Private Real Estate	0.04	-0.04	****	NCREIF ODCE NET + 100 b.p.
Domestic Fixed	0.00	0.17	0.11	NYC Core +5 Index
Enhanced Yield	0.04	0.12	0.07	Citigroup BB&B Index
TIPS	-0.01	0.02	0.01	Barclays Capital US TIPS Index

Note: Detailed effects may not add up to total due to reallocation and trading effects.

# City of New York - Board of Education

## Total Returns of Public Master Trusts > \$1 Billion

### Rates of Return for Periods Ending June 30, 2013

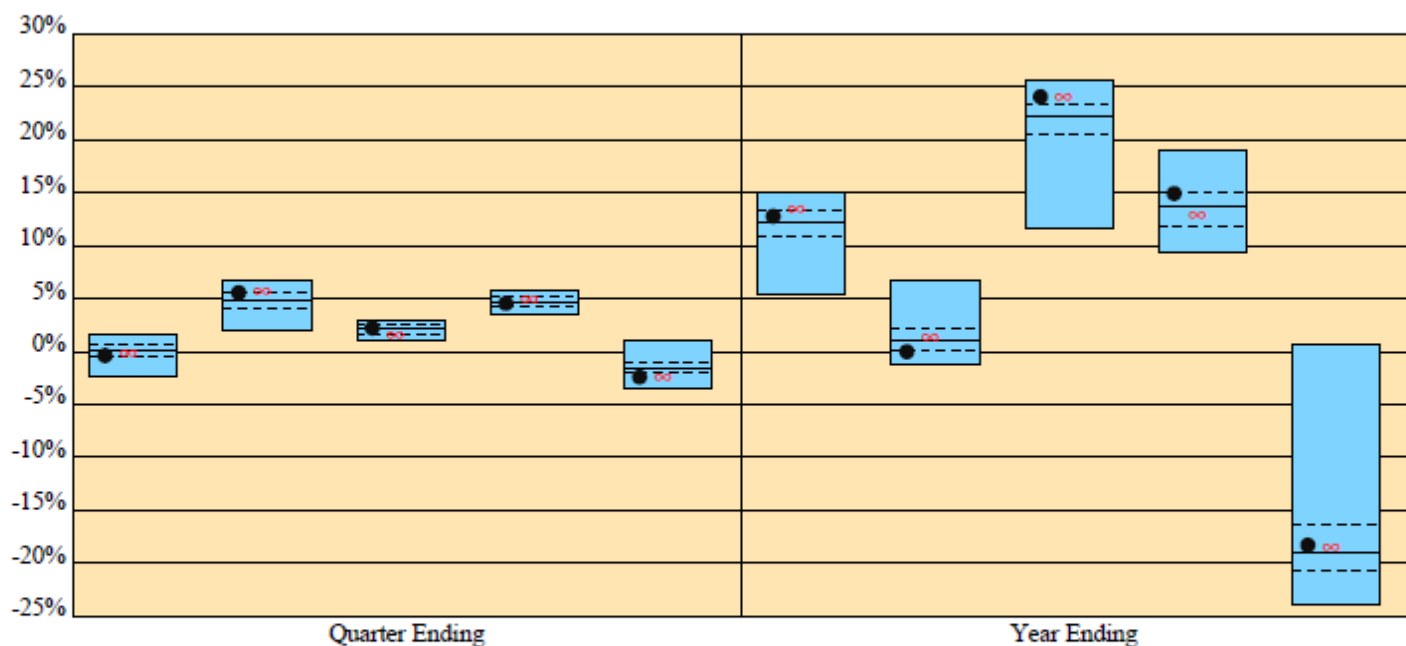


	1 Quarter	2 Quarters	3 Quarters	1 Year	3 Years	4 Years	5 Years	7 Years	10 Years	15 Years
5th Percentile	1.58	7.67	9.64	15.10	13.14	13.69	7.12	6.94	9.07	7.11
25th Percentile	0.76	6.22	8.22	13.38	12.08	12.73	5.80	5.97	8.02	6.39
Median	0.05	5.09	7.40	12.22	11.52	12.22	5.18	5.48	7.53	5.99
75th Percentile	-0.56	3.48	5.75	10.86	10.72	11.19	4.47	4.96	6.94	5.52
95th Percentile	-2.39	0.13	1.62	5.35	7.26	8.56	3.12	4.46	5.84	5.05
● Total System	-0.26 (66)	5.40 (42)	7.87 (38)	12.90 (34)	11.97 (32)	12.73 (25)	5.73 (28)	5.82 (31)	7.72 (40)	5.75 (61)
∞ Board of Ed Policy Benchmark	0.13 (46)	6.02 (28)	7.99 (35)	13.70 (19)	12.79 (9)	12.88 (18)	5.80 (25)	5.61 (40)	7.56 (48)	5.48 (78)

# City of New York - Board of Education

## Total Returns of Public Master Trusts > \$1 Billion

### Recent Periods



5th Percentile  
25th Percentile  
Median  
75th Percentile  
95th Percentile

Jun 13	Mar 13	Dec 12	Sep 12	Jun 12	Jun 13	Jun 12	Jun 11	Jun 10	Jun 09
1.58	6.69	3.02	5.75	0.98	15.10	6.73	25.68	19.10	0.62
0.76	5.53	2.52	5.14	-0.97	13.38	2.18	23.28	15.01	-16.38
0.05	4.74	2.16	4.57	-1.55	12.22	1.12	22.17	13.73	-18.93
-0.56	4.10	1.70	4.21	-2.07	10.86	0.17	20.59	11.78	-20.75
-2.39	1.94	0.95	3.49	-3.44	5.35	-1.20	11.64	9.35	-23.91

● Total System

∞ Board of Ed Policy Benchmark

-0.26 (66)	5.68 (21)	2.34 (36)	4.67 (45)	-2.29 (80)	12.90 (34)	0.10 (79)	24.20 (18)	15.06 (22)	-18.19 (39)
0.13 (46)	5.89 (13)	1.86 (65)	5.28 (17)	-2.20 (79)	13.70 (19)	1.52 (40)	24.31 (15)	13.15 (54)	-18.36 (41)

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

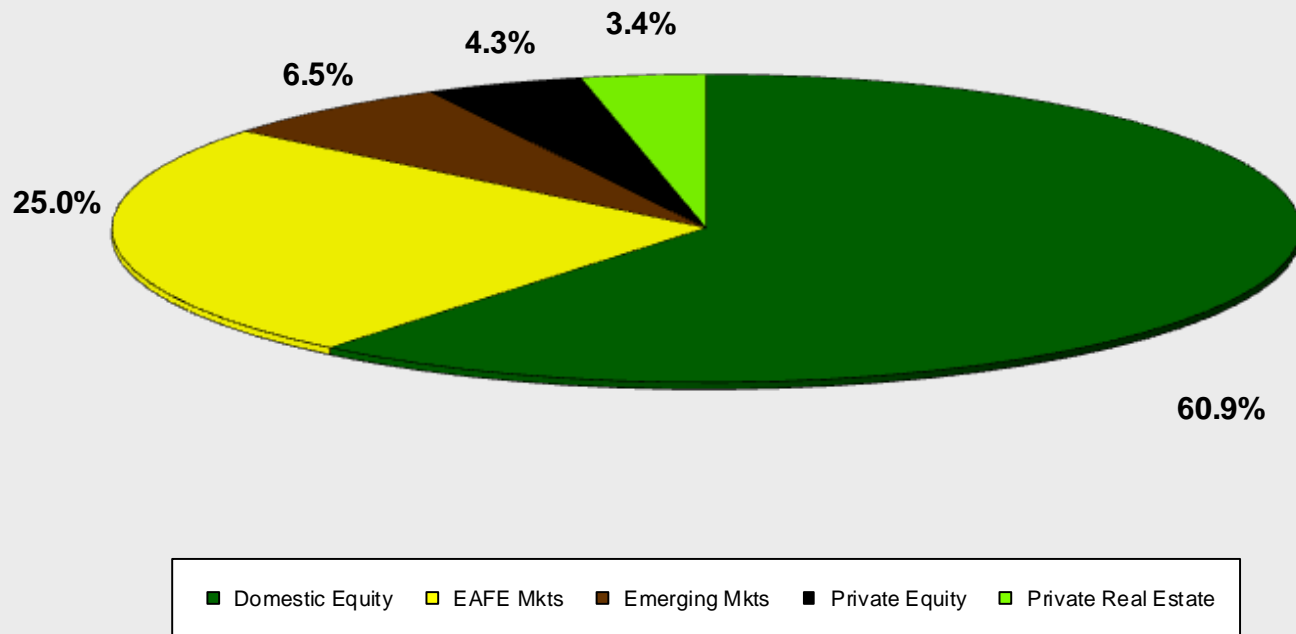
# **Equity Analysis**



## Total Equity Asset Allocation: June 30, 2013

**\$2.4B** Under Management, **70%** of Total Funds

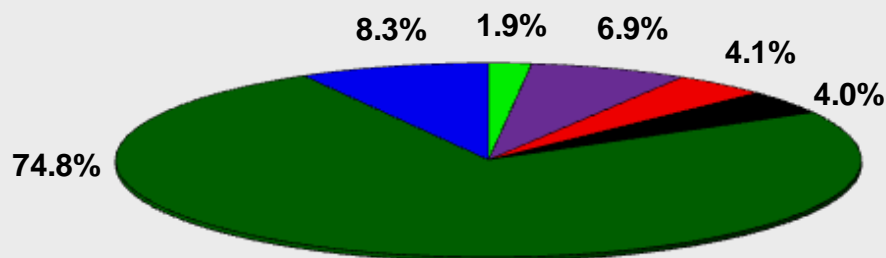
Asset Allocation by Groups



## Total Domestic Equity Asset Allocation: Quarter Ending June 30, 2013

**\$1.5B** Under Management, **43%** of Total Funds

### Asset Allocation by Groups



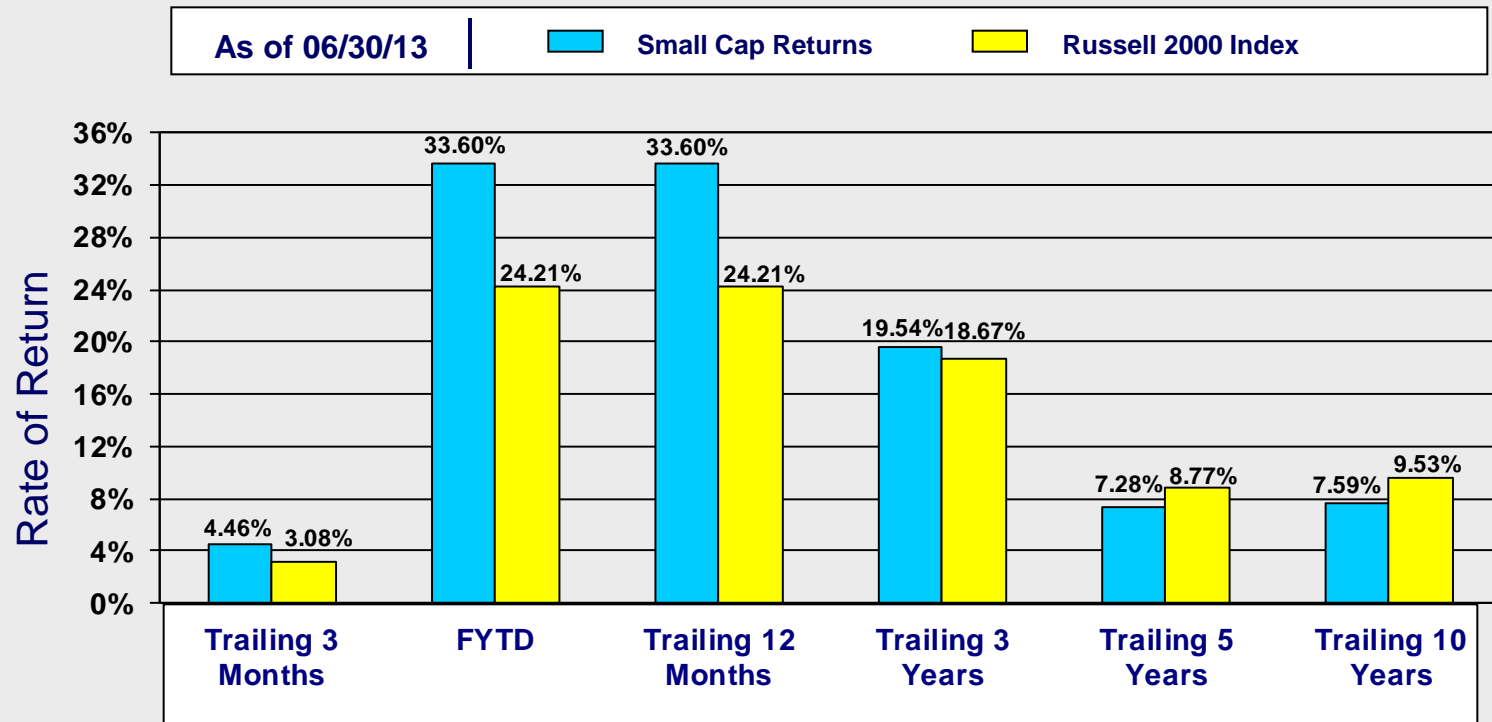
<span style="color: green;">■</span> Small Cap Active	<span style="color: purple;">■</span> Mid Cap Active	<span style="color: red;">■</span> Mid Cap S&P 400 Index
<span style="color: black;">■</span> Russell 1000 Active	<span style="color: green;">■</span> Russell 3000 Index Funds	<span style="color: blue;">■</span> Manager of Managers

### Value Added by Sectors

Sub Sector	Policy Weight	Actual Weight	Under/Over Weight	Index Return	Actual Return	Difference	Contribution to Out/Under Performance	
							Allocation	Management
Small Cap Active	2.83	1.86	-0.97	3.08	4.46	1.38	-0.01	0.02
Mid Cap Active	7.25	6.85	-0.40	1.00	3.05	2.05	0.06	0.15
Mid Cap S&P 400 Index	3.75	4.16	0.41	1.00	1.04	0.04	-0.06	0.00
Russell 1000 Active	11.25	4.03	-7.22	2.65	10.25	7.60	-0.01	0.31
Russell 3000 Index Funds	67.42	74.84	7.42	2.69	2.70	0.02	0.01	0.01
Manager of Managers	7.50	8.26	0.76	2.69	4.75	2.06	0.00	0.17

## Small Cap Returns vs Russell 2000 Index

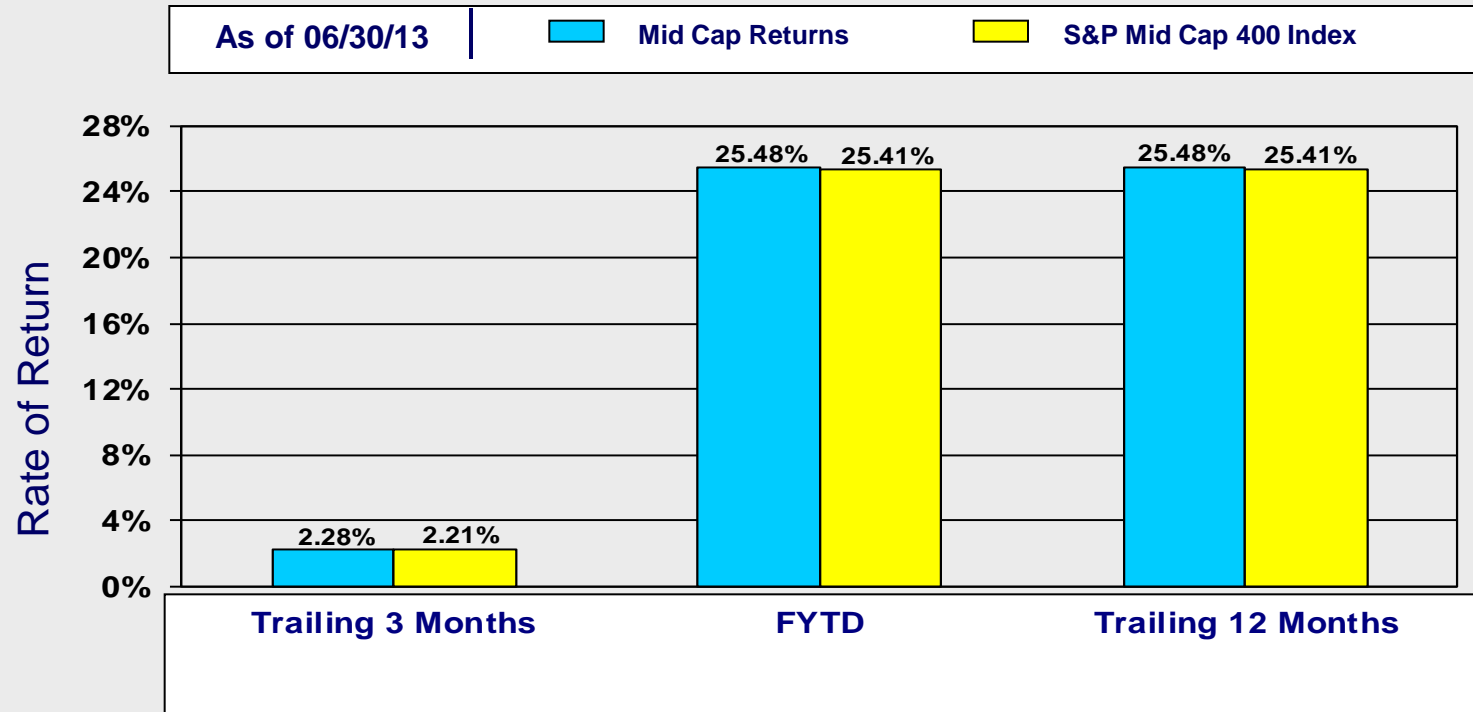
**\$28M** Under Management, **1%** of Total Funds



	3 Years	5 Years	10 Years
Plan Std Dev	20.2	23.7	19.3
Benchmark Std Dev	18.3	23.9	19.7

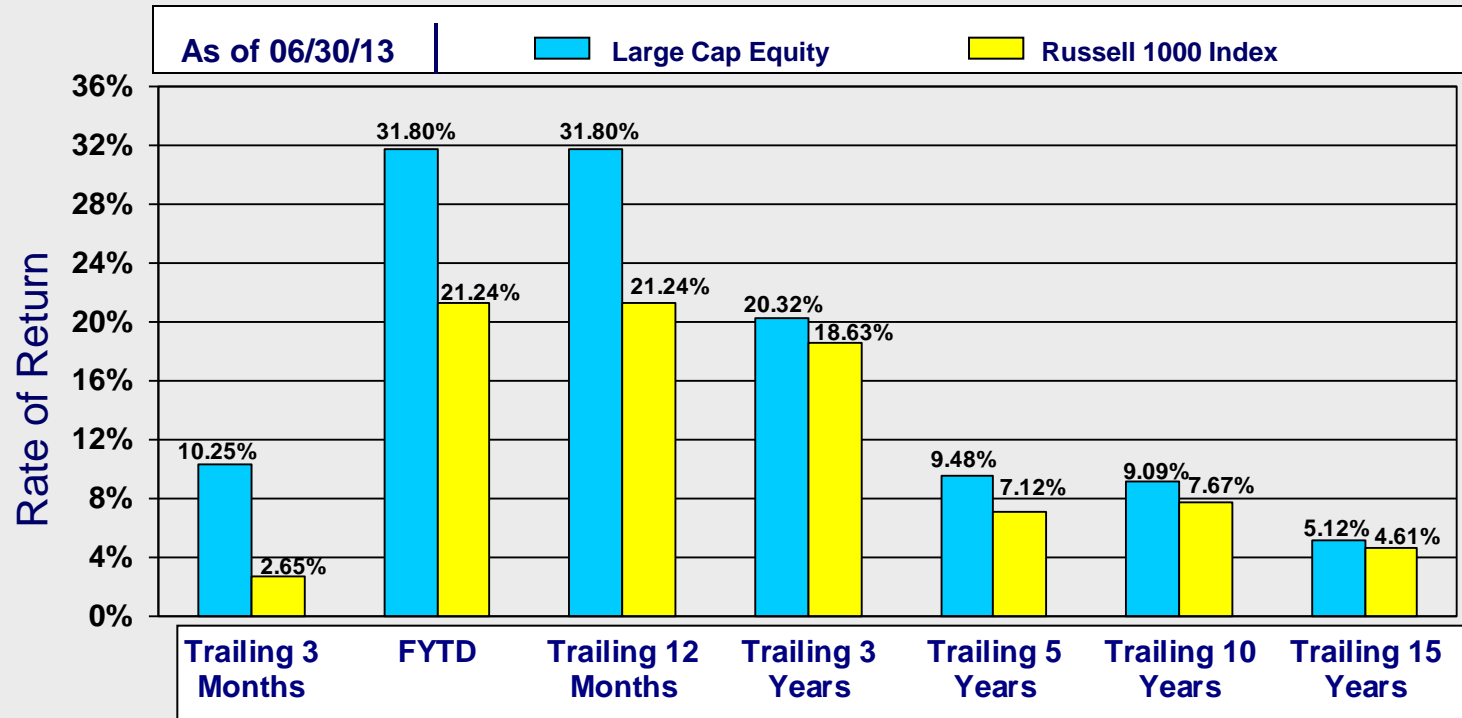
## Mid Cap Returns vs Russell MidCap Index

**\$163M** Under Management, **5%** of Total Funds



# Large Cap Returns vs Russell 1000 Index

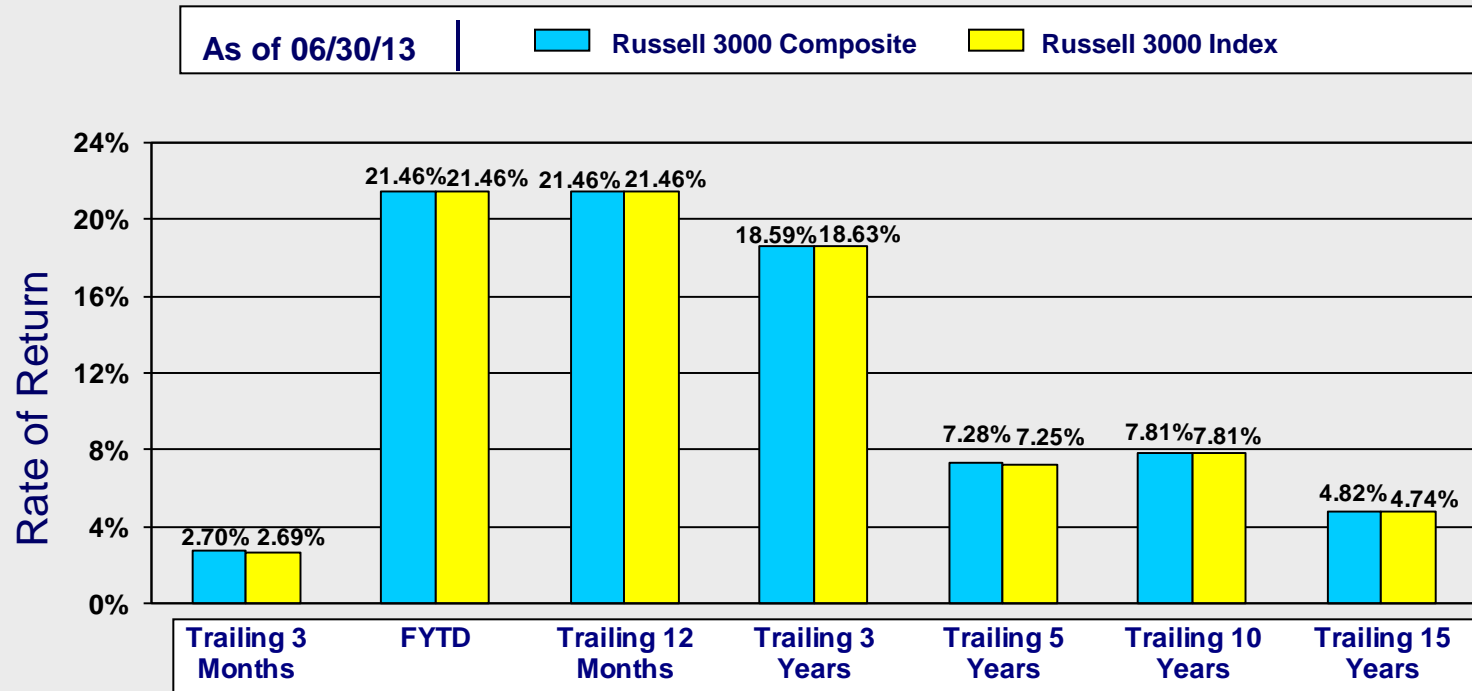
**\$60M** Under Management, **2%** of Total Funds



	3 Years	5 Years	10 Years	15 Years
Plan Std Dev	16.0	19.3	15.7	20.3
Benchmark Std Dev	13.7	18.7	14.8	16.4

## Russell 3000 Passive Returns vs Russell 3000 Index

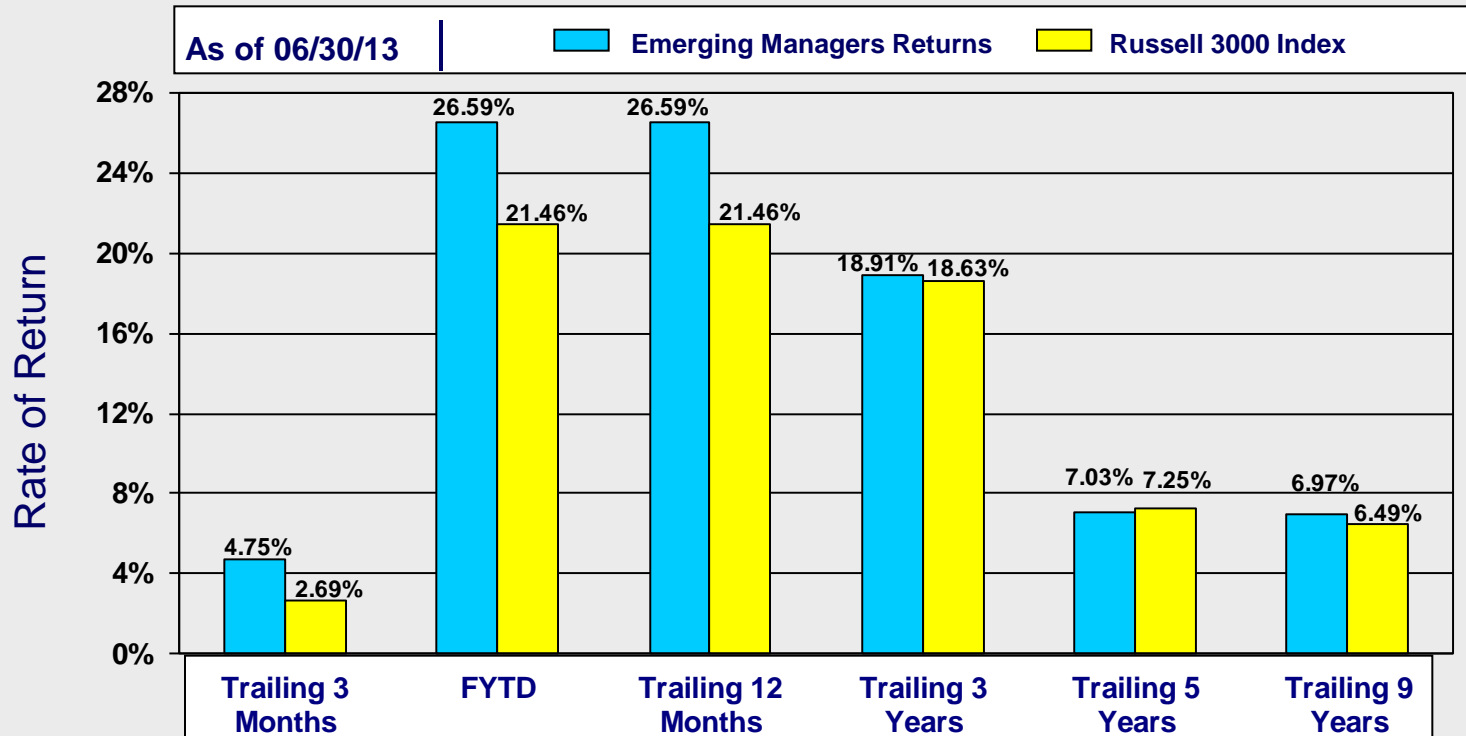
**\$1.1B** Under Management, **32%** of Total Funds



	3 Years	5 Years	10 Years	15 Years
Plan Std Dev	14.0	18.9	15.0	16.5
Benchmark Std Dev	14.0	19.0	15.1	16.5

## Emerging Managers Returns vs Russell 3000 Index

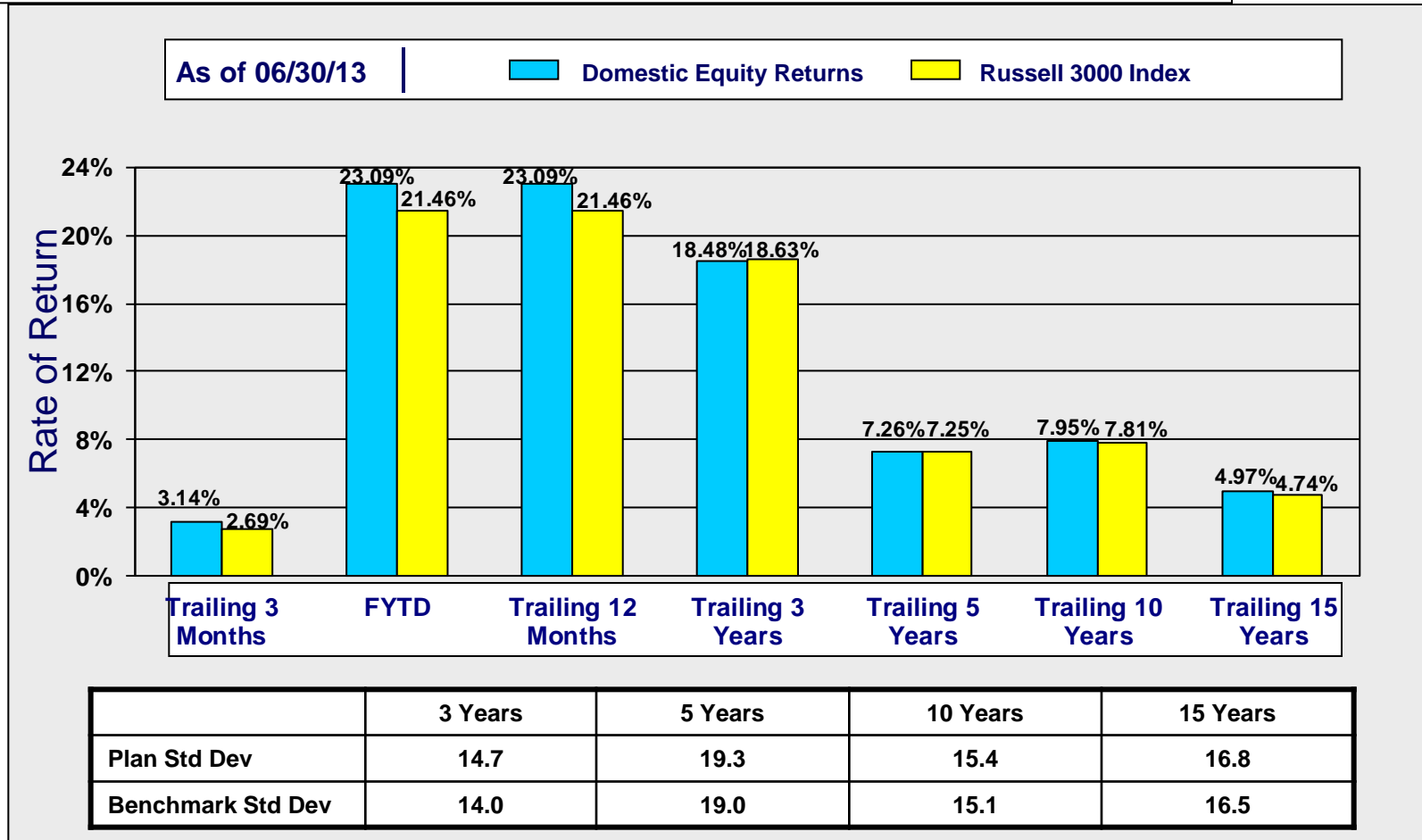
**\$123M** Under Management, **4%** of Total Funds



	3 Years	5 Years	9 Years
Plan Std Dev	16.0	20.3	16.8
Benchmark Std Dev	14.0	19.0	15.7

## Total Domestic Equity Returns vs Russell 3000 Index

**\$1.5B** Under Management, **43%** of Total Funds

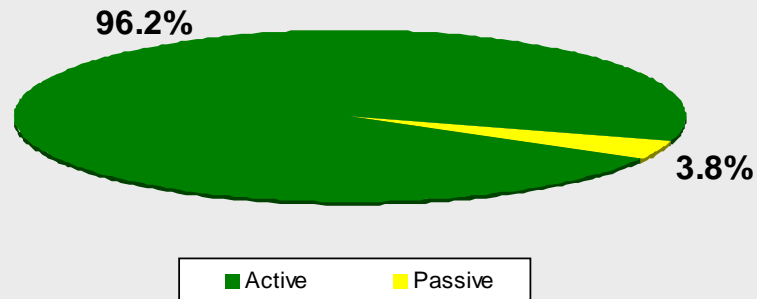




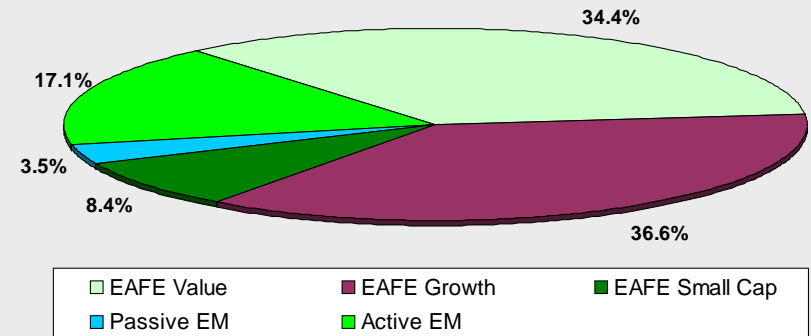
## International Equity Asset Allocation: June 30, 2013

**\$766M** Under Management, **22%** of Total Funds

Asset Allocation by Groups



Asset Allocation by Style

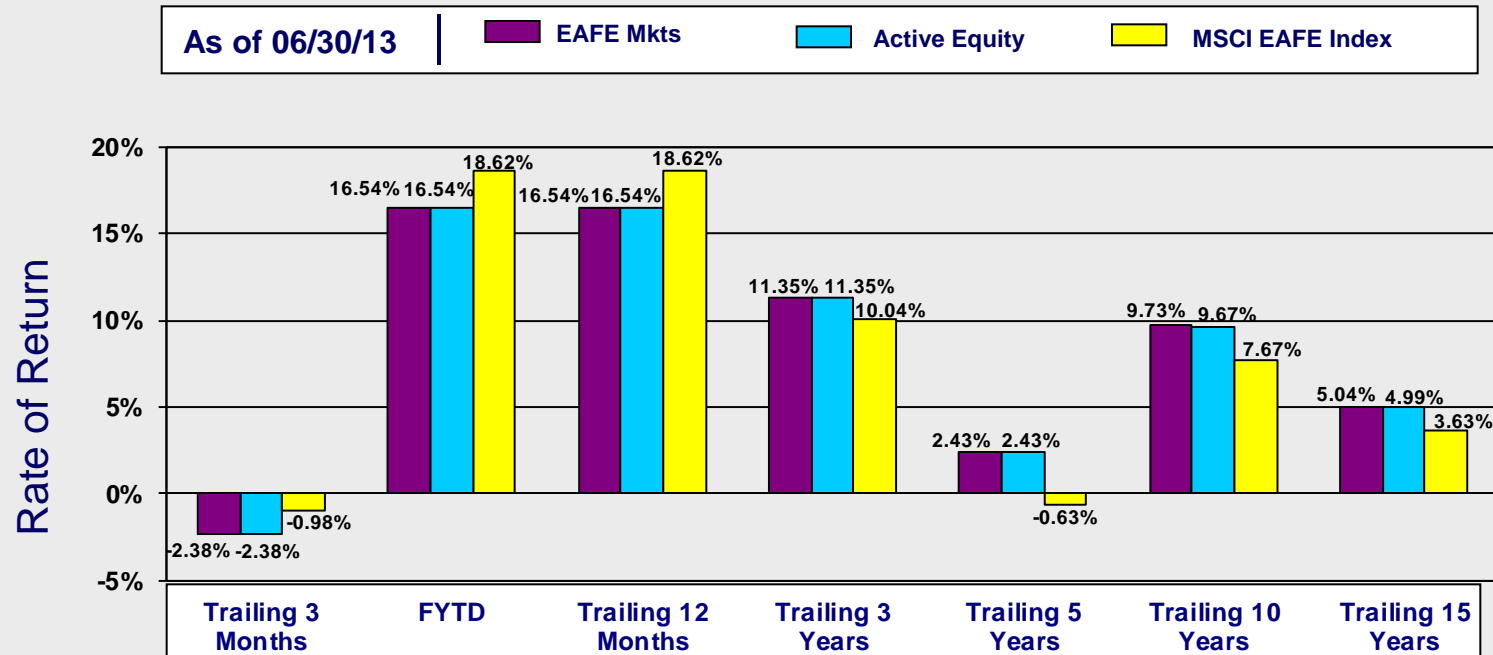


Value Added by Sectors

Sub Sector	Policy Weight	Actual Weight	Under/Over Weight	Index Return	Actual Return	Difference	Contribution to Out/Under Performance	
							Allocation	Management
EAFE Growth		36.59		-0.99	-2.24	-1.26		-0.89
EAFE Value		34.45		-0.45	-2.61	-2.16		-1.21
EAFE Small Cap		8.38		-1.99	****	****		****
ACTIVE EM		17.09		-7.95	-9.44	-1.48		-0.24
PASSIVE EM		3.49		-7.95	-7.84	0.12		0.00

## EAFE Markets Returns vs MSCI EAFE Index

**\$608M** Under Management, **18%** of Total Funds



	3 Years	5 Years	10 Years	15 Years
EAFE Plan Std Dev	17.9	22.8	18.1	18.2
Active Plan Std Dev	17.9	22.8	18.1	18.4
Benchmark Std Dev	18.1	22.8	18.1	18.0

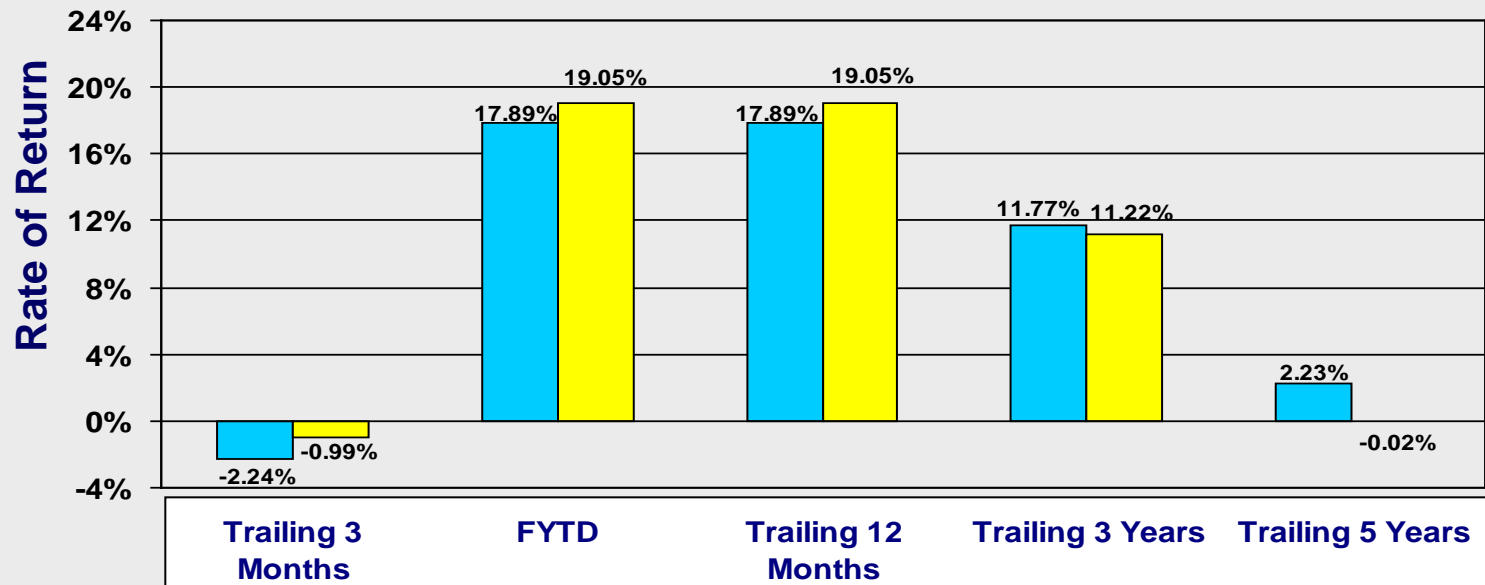
## International Growth Returns vs MSCI EAFE Growth Index

**\$280M** Under Management, **8%** of Total Funds

As of 06/30/13

International Growth Returns

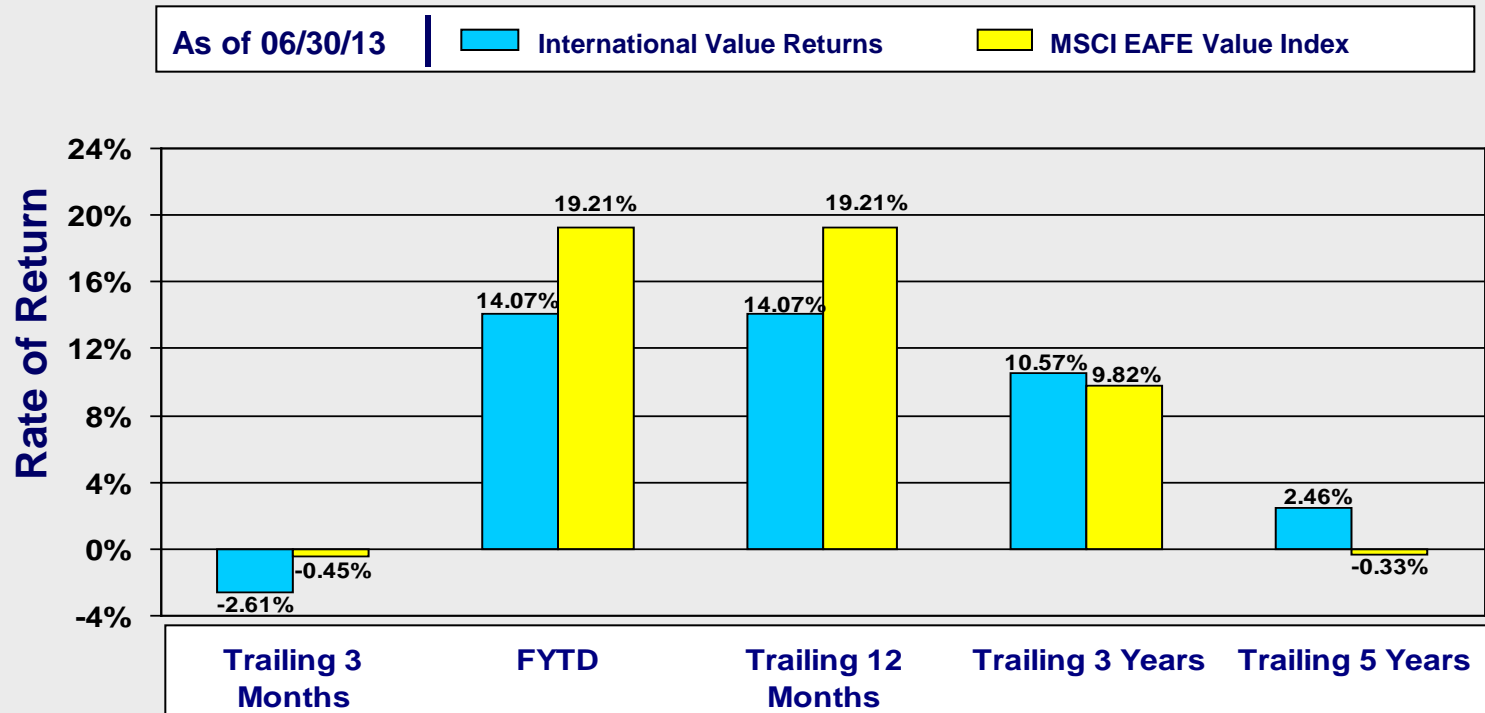
MSCI EAFE Growth Index



	3 Years	5 Years
Plan Std Dev	19.4	24.8
Benchmark Std Dev	17.5	21.9

## International Value Returns vs MSCI EAFE Value Index

**\$263M** Under Management, **8%** of Total Funds



	3 Years	5 Years
Plan Std Dev	16.3	20.8
Benchmark Std Dev	19.1	24.2

# Emerging Markets Returns vs MSCI Emerging Markets Index

**\$158M** Under Management, **5%** of Total Funds

As of 06/30/13

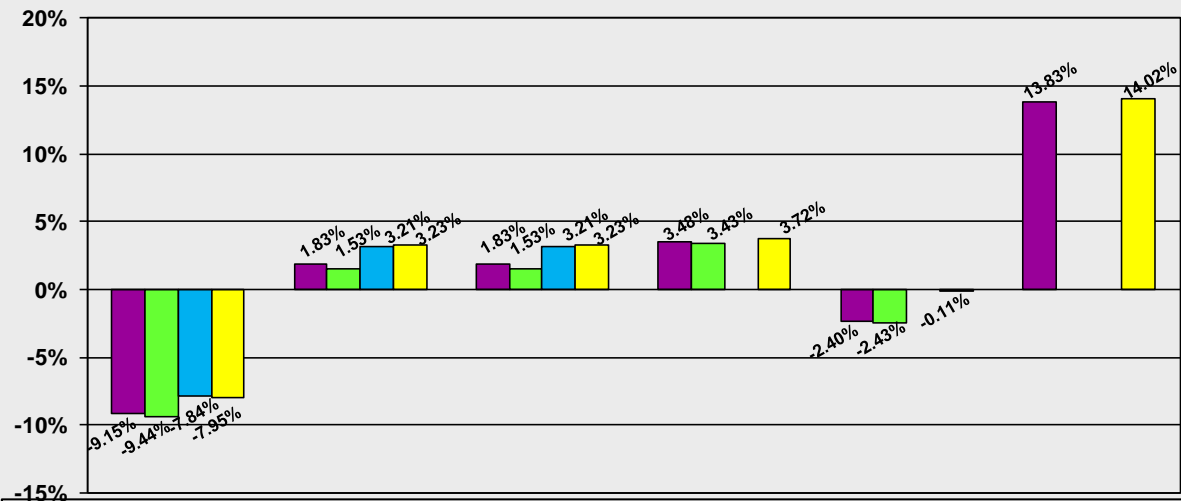
Emerging Mkts Returns

Active Equity

Passive Equity

MSCI Emerging Mkts Index

Rate of Return



	3 Years	5 Years	10 Years
Plan Std Dev	21.2	27.7	24.0
Active Plan Std Dev	21.4	27.8	****
Passive Plan Std Dev	****	****	****
Benchmark Std Dev	20.6	27.5	23.9

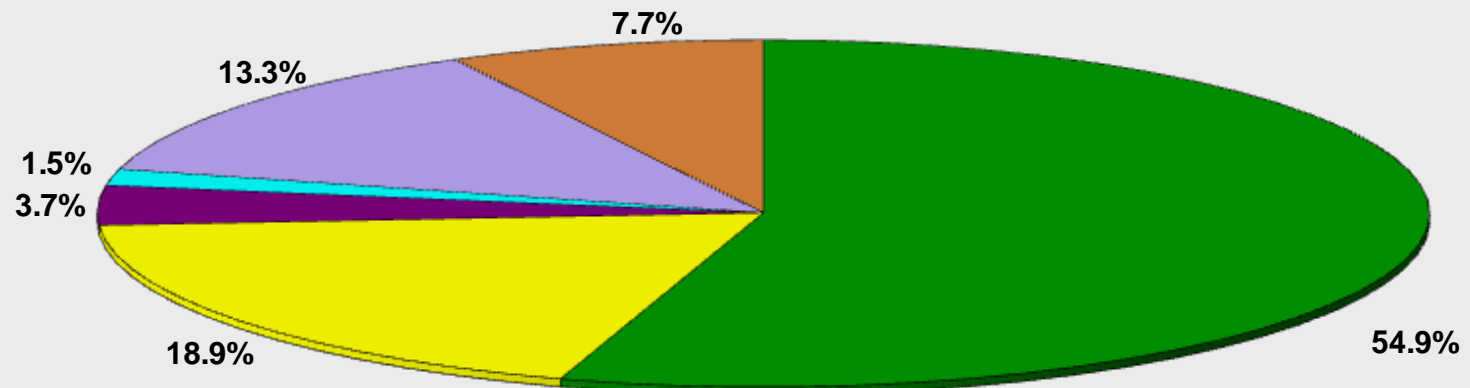
**New York City**  
**Board of Education Retirement System**

# **Fixed Income Analysis**

## Total Fixed Income Asset Allocation: June 30, 2013

**\$1.0B** Under Management, **30%** of Total Funds

Asset Allocation by Groups

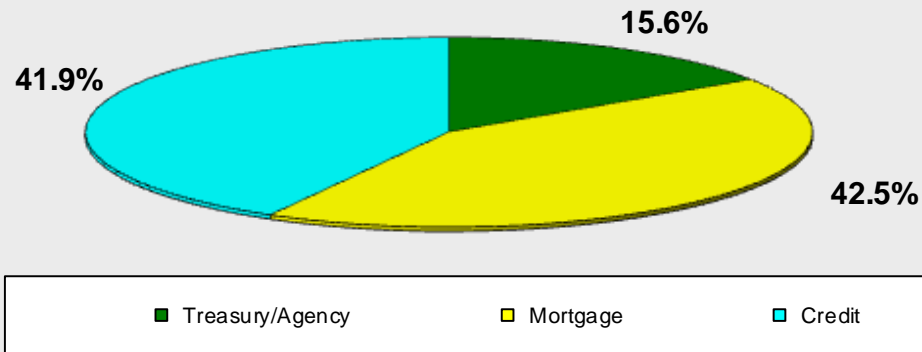


■ Structured Fixed Income   ■ Enhanced Yield   ■ Short Term Investments   ■ ETI   ■ Tips Managers   ■ Bank Loans

## Structured Fixed Income Asset Allocation: Quarter Ending June 30, 2013

**\$560M** Under Management, **16%** of Total Funds

### Asset Allocation by Groups



### Asset Allocation by Sectors

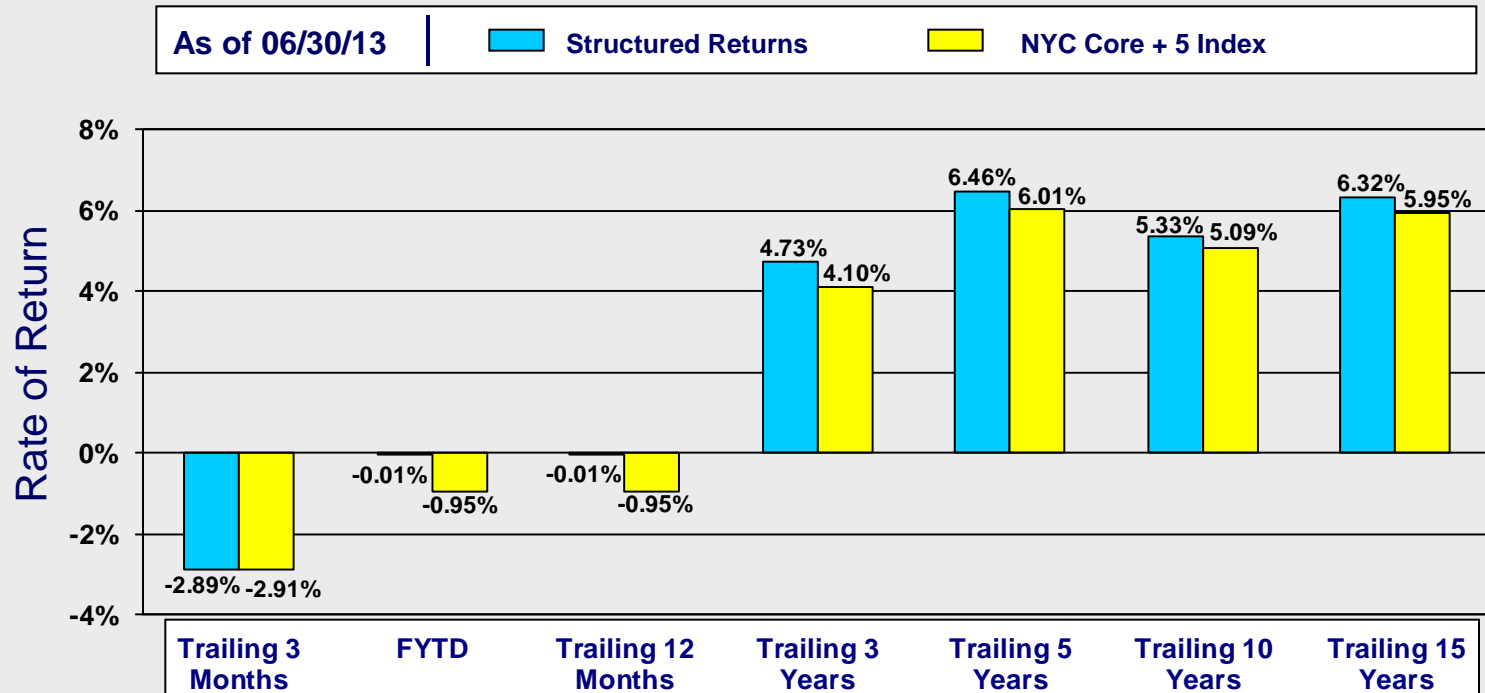
Sub Sector	Policy Weight	Actual Weight	Under/Over Weight	Index Return	Actual Return	Difference	Contribution to Out/Under Performance	
							Allocation	Management
Treasury/Agency	18.63	15.64	-2.99	-4.33	-4.55	-0.22	0.05	-0.04
Mortgage	40.04	42.49	2.45	-1.98	-2.14	-0.16	0.02	-0.08
Credit	41.33	41.87	0.54	-3.13	-3.02	0.11	0.00	0.05

\*NYC Core +5 Breakdown



## Structured Returns vs NYC Core + 5 Index

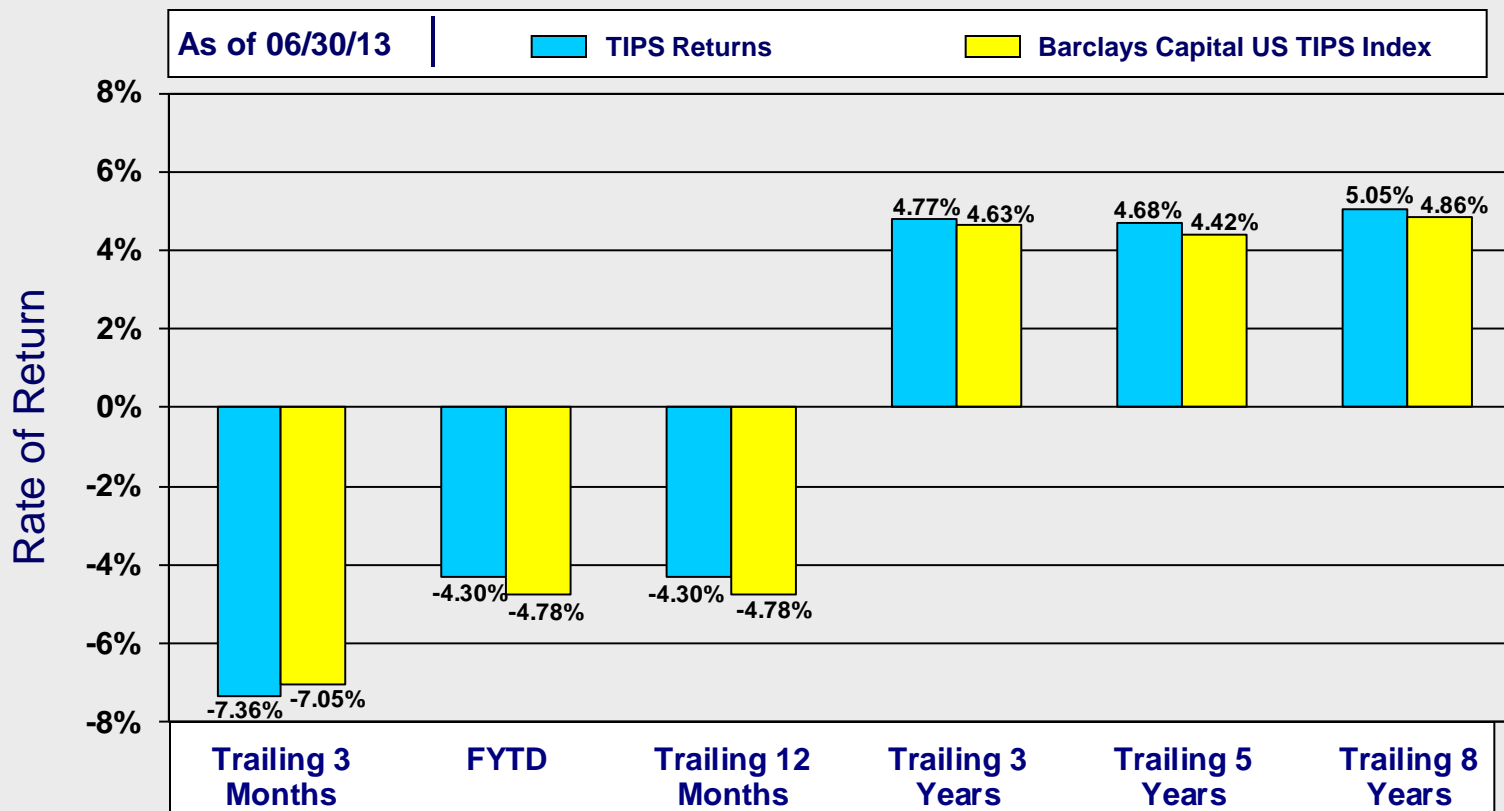
**\$560M** Under Management, **16%** of Total Funds



	3 Years	5 Years	10 Years	15 Years
Plan Std Dev	3.3	4.5	4.2	4.0
Benchmark Std Dev	3.5	4.6	4.4	4.2

## TIPS Returns vs Barclays Capital US TIPS Index

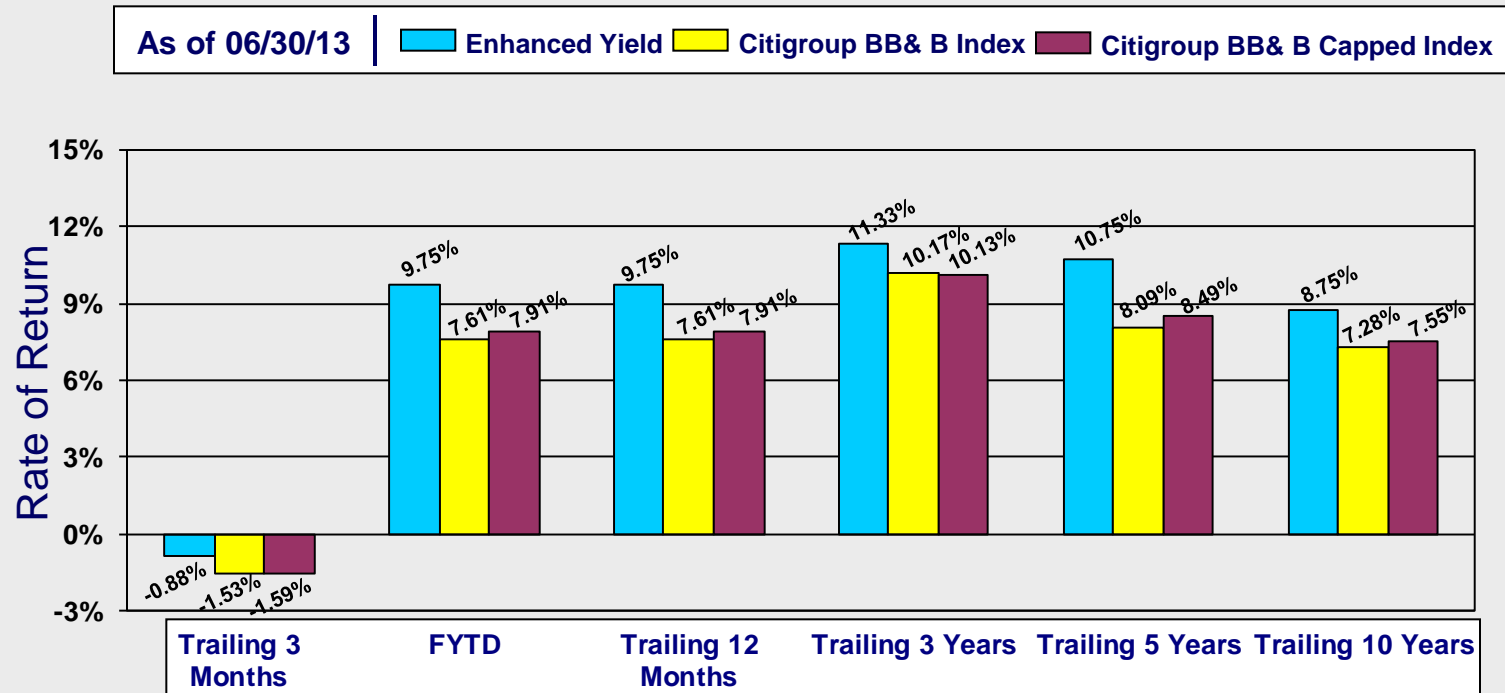
**\$135M** Under Management, **4%** of Total Funds



	3 Years	5 Years	8 Years
Plan Std Dev	5.5	7.8	6.9
Benchmark Std Dev	5.5	7.5	6.7

## Enhanced Yield Returns vs Citigroup BB & B Index & Citigroup BB & B Capped Index

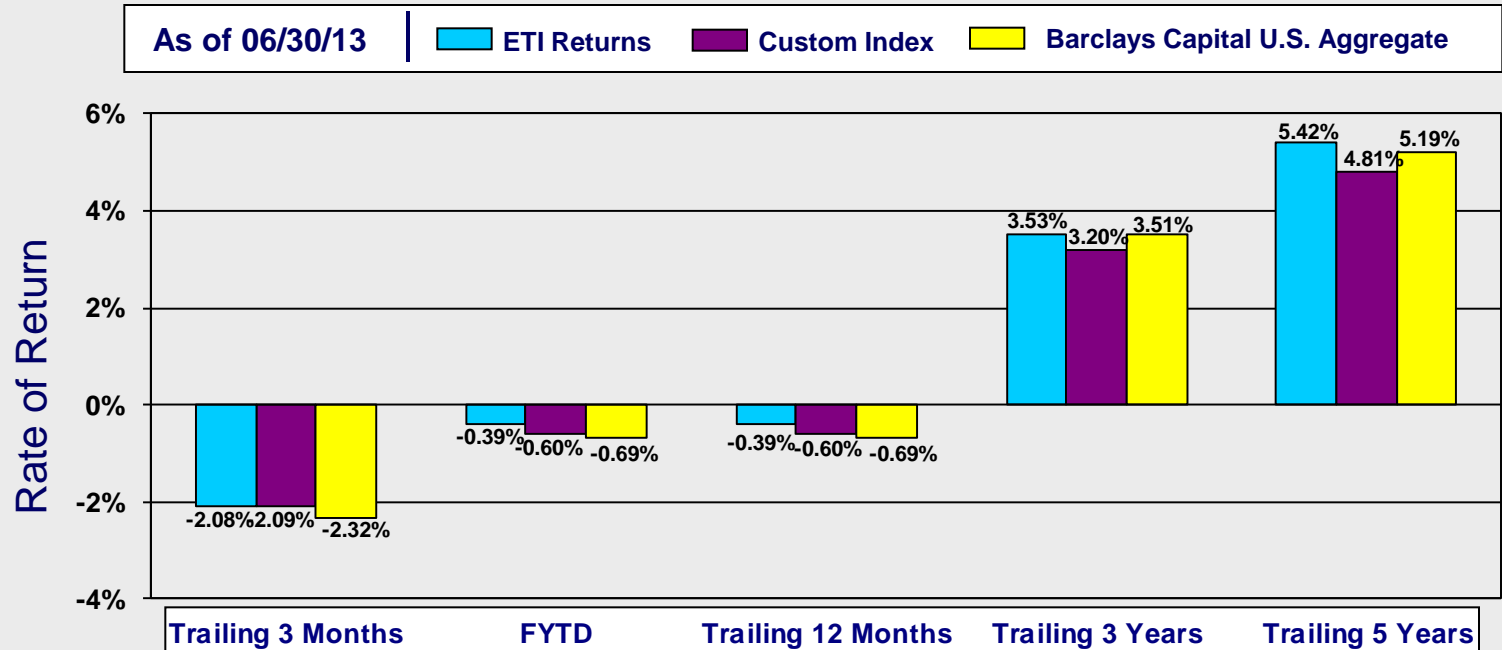
**\$193M** Under Management, **6%** of Total Funds



	3 Years	5 Years	10 Years
Plan Std Dev	6.5	11.2	8.7
Citigroup BB&B	6.0	11.6	8.9
Citigroup BB&B Capped	5.9	11.4	8.7

## ETI Returns vs Custom Index & Barclays Capital U.S. Aggregate

**\$16M** Under Management, **0.45%** of Total Funds



	3 Years	5 Years
Plan Std Dev	2.2	2.8
Custom Index Std Dev	2.5	3.1
BC US Aggreg Std Dev	2.8	3.7

Note: Returns (shown net of fees) and Market Value do not include cash

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

# Appendix

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# Consolidated Performance Report

Through June 30, 2013

Assets (\$MM)	% Total		3 Mos Apr-13 Jun-13	YTD Jan-13 Jun-13	1 Yr Jul-12 Jun-13	3 Yrs Jul-10 Jun-13	5 Yrs Jul-08 Jun-13	10 Yrs Jul-03 Jun-13	15 Yrs Jul-98 Jun-13
<b>EQUITY MANAGEMENT</b>									
<b>SMALL CAP</b>									
27.55	0.80	DARUMA -SCC	4.46	19.21	33.60	19.54	****	****	****
27.55	0.80	<b>TOTAL SMALL CAP CORE</b>	4.46	19.21	33.60	19.54	****	****	****
		RUSSELL 2000	3.08	15.86	24.21	18.67	****	****	****
		SMALL CAP CORE MEDIAN	2.88	15.84	25.66	18.86	****	****	****
27.55	0.80	<b>TOTAL SMALL CAP</b>	4.46	19.21	33.60	19.54	7.28	7.59	****
		RUSSELL 2000	3.08	15.86	24.21	18.67	8.77	9.53	****
101.64	2.94	WELLINGTON MID CAP	3.05	17.15	25.66	****	****	****	****
101.64	2.94	<b>TOTAL MID CAP CORE</b>	3.05	17.15	25.66	****	****	****	****
		S&P MIDCAP 400	1.00	14.59	25.18	****	****	****	****
61.69	1.78	STATE STREET GA S&P 400	1.04	14.61	25.17	****	****	****	****
61.69	1.78	<b>TOTAL MID CAP PASSIVE</b>	1.04	14.61	25.17	****	****	****	****
		S&P MIDCAP 400	1.00	14.59	25.18	****	****	****	****
163.33	4.72	<b>TOTAL MID CAP</b>	2.28	16.18	25.48	****	****	****	****
		RUSSELL MIDCAP	2.21	15.45	25.41	****	****	****	****
<b>LARGE CAP</b>									
59.81	1.73	ZEVENBERGEN	10.25	23.49	27.71	16.99	9.03	10.33	5.65
		RUSSELL 3000 GROWTH	2.19	12.23	17.56	18.77	7.58	7.56	3.20
59.81	1.73	<b>TOTAL LARGE CAP GROWTH</b>	10.25	23.49	27.71	15.83	8.00	8.09	4.48
		LARGE CAP GROWTH MEDIAN	1.94	11.51	17.68	18.17	7.29	8.39	****
59.81	1.73	<b>TOTAL LARGE CAP</b>	10.25	23.41	31.80	20.32	9.48	9.09	5.12
		RUSSELL 1000	2.65	13.91	21.24	18.63	7.12	7.67	4.61
<b>RUSSELL 3000</b>									
1110.07	32.10	BLACKROCK R3000	2.70	14.05	21.46	18.59	7.28	7.81	****
1110.07	32.10	<b>TOTAL RUSSELL 3000</b>	2.70	14.05	21.46	18.59	7.28	7.81	4.82
		RUSSELL 3000	2.69	14.06	21.46	18.63	7.25	7.81	4.74

# Consolidated Performance Report

Through June 30, 2013

Assets (\$MM)	% Total		3 Mos Apr-13 Jun-13	YTD Jan-13 Jun-13	1 Yr Jul-12 Jun-13	3 Yrs Jul-10 Jun-13	5 Yrs Jul-08 Jun-13	10 Yrs Jul-03 Jun-13	15 Yrs Jul-98 Jun-13
<b>PROGRESS MANAGERS</b>									
8.33	0.24	AFFINITY IA	3.20	****	****	****	****	****	****
9.39	0.27	JOHN HSU -LCC	-0.54	6.37	14.39	14.86	4.08	9.94	****
10.60	0.31	HERNDON CAPITAL MGMT-LCV	0.21	11.49	18.19	19.09	9.18	****	****
4.35	0.13	HIGH POINTE LLC -LCG	1.12	13.13	16.83	18.74	****	****	****
3.29	0.10	LOMBARDIA CAPITAL -SCV	2.98	16.29	25.27	18.08	12.32	****	****
2.42	0.07	NICHOLS ASSET MGMT -SCG	4.82	18.08	25.47	****	****	****	****
9.79	0.28	REDWOOD INV -LCG	3.92	12.80	16.53	****	****	****	****
11.74	0.34	SEIZERT CAPITAL PTNRS -LCV	7.85	22.49	45.47	****	****	****	****
59.92	1.73	<b>TOTAL PROGRESS</b>	2.88	13.87	22.95	17.89	6.45	8.10	****
		RUSSELL 3000	2.69	14.06	21.46	18.63	7.25	7.81	****
<b>F.I.S. MANAGEMENT</b>									
3.17	0.09	APEX SCG	3.28	14.19	26.21	****	****	****	****
7.65	0.22	CHANNING -SCV	1.80	14.16	34.19	****	****	****	****
3.59	0.10	CUPPS CAPITAL SCG	16.70	28.01	29.22	24.78	****	****	****
3.77	0.11	EUDAIMONIA -MICRO CG	7.70	24.96	33.40	21.34	****	****	****
3.62	0.10	HUBER CAP MGMT -SCV	3.87	18.08	37.79	****	****	****	****
9.26	0.27	NICHOLS ASSET MGMT -SCG	8.74	****	****	****	****	****	****
6.54	0.19	NICHOLAS SCG	7.56	27.75	33.88	****	****	****	****
6.45	0.19	OPUS SCV	1.27	12.87	23.12	****	****	****	****
11.26	0.33	PIERMONT -SCV	3.88	****	****	****	****	****	****
7.34	0.21	PUNCH SCC	4.97	14.75	27.90	****	****	****	****
62.65	1.81	<b>TOTAL F.I.S FUND MGMT</b>	5.43	18.43	31.34	20.01	7.71	****	****
		RUSSELL 2000	3.08	15.86	24.21	18.67	8.77	****	****
0.75	0.02	EMOM TRANSITION	****	****	****	****	****	****	****
122.58	3.55	<b>TOTAL EMERGING MANAGERS</b>	4.75	16.40	26.59	18.91	7.03	****	****
		RUSSELL 3000	2.69	14.06	21.46	18.63	7.25	****	****
311.59	9.01	<b>TOTAL ACTIVE DOMESTIC EQUITY</b>	5.16	18.37	27.60	18.86	7.60	8.47	3.99
1171.76	33.89	<b>TOTAL PASSIVE DOMESTIC EQUITY</b>	2.61	14.09	21.69	18.54	7.25	7.80	5.15
1483.35	42.90	<b>TOTAL DOMESTIC EQUITY</b>	3.14	15.03	23.09	18.48	7.26	7.95	4.97

# Consolidated Performance Report

Through June 30, 2013

Assets (\$MM)	% Total		3 Mos Apr-13 Jun-13	YTD Jan-13 Jun-13	1 Yr Jul-12 Jun-13	3 Yrs Jul-10 Jun-13	5 Yrs Jul-08 Jun-13	10 Yrs Jul-03 Jun-13	15 Yrs Jul-98 Jun-13
		<b>INTERNATIONAL EQUITY</b>							
		<b>DEVELOPED MARKETS</b>							
280.28	8.11	BAILLIE	-2.24	3.10	17.89	11.77	2.23	****	****
		MSCI EAFE GROWTH	-0.99	5.76	19.05	11.22	-0.02	****	****
64.17	1.86	ACADIAN EAFE SMALL CAP MTA	****	****	****	****	****	****	****
		S&P EPAC SMALL CAP	-1.99	5.45	20.57	11.95	1.82	10.77	6.74
64.17	1.86	<b>TOTAL EAFE SMALL CAP</b>	****	****	****	****	****	****	****
263.49	7.62	SPRUCEGROVE	-2.61	1.60	14.07	10.57	2.46	****	****
		MSCI EAFE VALUE	-0.45	3.17	19.21	9.82	-0.33	****	****
0.43	0.01	TRANSITION - EAFE REBALANCE	-3.73	57.30	61.07	18.37	****	****	****
608.37	17.59	<b>TOTAL ACTIVE DEVELOPED MARKETS</b>	-2.38	2.77	16.54	11.35	2.43	9.67	4.99
608.37	17.59	<b>TOTAL DEVELOPED MARKETS</b>	-2.38	2.77	16.54	11.35	2.43	9.73	5.04
		MSCI EAFE (NET DIVIDEND)	-0.98	4.10	18.62	10.04	-0.63	7.67	3.63
		INTERNATIONAL EQUITY MEDIAN	-0.79	3.70	18.04	10.72	0.85	9.13	6.21
		<b>EMERGING MARKETS</b>							
130.84	3.78	ACADIAN	-9.45	****	****	****	****	****	****
0.03	0.00	TRANSITION - EMERGING MARKETS	107.54	****	****	****	****	****	****
130.87	3.78	<b>TOTAL ACTIVE EMERGING MARKETS</b>	-9.44	-10.90	1.53	3.43	-2.43	****	****
		MSCI EMERGING MARKET FREE	-7.95	-9.40	3.23	3.72	-0.11	****	****
26.70	0.77	BLACKROCK EMERGING MARKETS	-7.84	-9.31	3.21	****	****	****	****
26.70	0.77	<b>TOTAL PASSIVE EMERGING MARKETS</b>	-7.84	-9.31	3.21	****	****	****	****
		MSCI EMERGING MARKET FREE	-7.95	-9.40	3.23	****	****	****	****
157.57	4.56	<b>TOTAL EMERGING MARKETS</b>	-9.15	-10.61	1.83	3.48	-2.40	13.83	10.13
		MSCI EMERGING MARKET FREE	-7.95	-9.40	3.23	3.72	-0.11	14.02	10.05
		EMERGING MARKET MEDIAN	-7.40	-7.34	5.37	5.63	1.73	15.10	11.70
765.94	22.15	<b>TOTAL INTERNATIONAL EQUITY</b>	-3.75	0.02	13.52	9.79	1.42	10.47	5.85



# Consolidated Performance Report

Through June 30, 2013

Assets (\$MM)	% Total		3 Mos Apr-13 Jun-13	YTD Jan-13 Jun-13	1 Yr Jul-12 Jun-13	3 Yrs Jul-10 Jun-13	5 Yrs Jul-08 Jun-13	10 Yrs Jul-03 Jun-13	15 Yrs Jul-98 Jun-13
<b>PRIVATE EQUITY INVESTMENTS</b>									
13.39	0.39	FAIRVIEW PRIVATE EQUITY FD	****	****	****	****	****	****	****
47.46	1.37	MESIROW PTNRS FD III	****	****	****	****	****	****	****
18.78	0.54	MESIROW PTNRS FD IV	****	****	****	****	****	****	****
18.88	0.55	MESIROW PTNRS FD V	****	****	****	****	****	****	****
1.75	0.05	PLATINUM EQ PTNRS III	****	****	****	****	****	****	****
4.90	0.14	WARBURG PINCUS XI	****	****	****	****	****	****	****
105.17	3.04	<b>TOTAL PRIVATE EQUITY</b>	1.07	4.28	7.31	12.09	4.71	****	****
<b>PRIVATE REAL ESTATE</b>									
1.26	0.04	BROOKFIELD STRATEGIC RE PTNRS	****	****	****	****	****	****	****
0.75	0.02	EMMES ASSET MGMT CO	****	****	****	****	****	****	****
7.11	0.21	FRANKIN TEMPLETON FD	****	****	****	****	****	****	****
20.66	0.60	LASALLE US PROPERTY FD	****	****	****	****	****	****	****
52.96	1.53	UBS TRUMBULL PROPERTY FD	****	****	****	****	****	****	****
82.74	2.39	<b>TOTAL PRIVATE REAL ESTATE</b>	5.65	5.92	9.79	****	****	****	****
2437.20	70.48	<b>TOTAL EQUITY - PUBLIC &amp; PRIVATE</b>	0.87	9.05	18.82	15.14	5.13	8.53	5.16

# Consolidated Performance Report

Through June 30, 2013

Assets (\$MM)	% Total		3 Mos Apr-13 Jun-13	YTD Jan-13 Jun-13	1 Yr Jul-12 Jun-13	3 Yrs Jul-10 Jun-13	5 Yrs Jul-08 Jun-13	10 Yrs Jul-03 Jun-13	15 Yrs Jul-98 Jun-13
		<b>FIXED INCOME MANAGEMENT</b>							
		<b>GOVERNMENT</b>							
87.64	2.53	STATE STREET	-4.55	-5.37	-4.81	4.99	6.69	5.56	6.61
87.64	2.53	<b>ALL TREASURY / AGENCY</b>	-4.55	-5.37	-4.81	4.99	6.69	5.41	6.47
		NYC - TREASURY AGENCY PLUS 5	-4.33	-5.05	-4.52	5.11	6.61	5.46	6.54
		<b>MORTGAGE</b>							
238.06	6.88	PIMCO	-2.14	-2.05	-0.24	3.41	5.69	5.25	6.07
		CITIGROUP MORTGAGE INDEX	-1.98	-2.02	-1.15	2.51	4.91	4.75	5.50
		<b>CREDIT</b>							
126.01	3.64	PRUDENTIAL CREDIT	-3.00	-3.12	1.44	5.60	****	****	****
14.79	0.43	PRUDENTIAL PRIVEST	-2.36	-1.39	****	****	****	****	****
93.79	2.71	TAPLIN, CANADA	-3.15	-3.15	3.19	6.66	7.46	5.32	6.54
234.59	6.78	<b>ALL INVESTMENT GRADE CREDIT</b>	-3.02	-3.02	2.29	6.08	7.12	5.15	6.39
		NYC - INVESTMENT GRADE CREDIT	-3.13	-3.48	1.19	5.37	6.73	5.01	5.94
560.29	16.20	<b>TOTAL STRUCTURED</b>	-2.89	-2.99	-0.01	4.73	6.46	5.33	6.32
		NYC - CORE PLUS FIVE	-2.91	-3.21	-0.95	4.10	6.01	5.09	5.95
		<b>ACTIVE TIPS MANAGERS</b>							
135.24	3.91	PIMCO-TIPS-MTA	-7.36	-7.31	-4.30	4.77	4.68	****	****
135.24	3.91	<b>TOTAL ACTIVE TIPS MANAGERS</b>	-7.36	-7.31	-4.30	4.77	4.68	****	****
		BARCLAYS CAPITAL US TIPS INDEX	-7.05	-7.39	-4.78	4.63	4.42	****	****
		<b>ENHANCED YIELD</b>							
103.99	3.01	LOOMIS SAYLES & CO	-0.23	3.42	12.38	12.74	12.38	9.92	8.38
		NYC-LOOMIS (BofA ML-MST II 7-03/BB&B PRIOR)	-1.35	1.50	9.57	10.43	10.63	8.75	6.90
89.24	2.58	SHENKMAN ENHANCED YIELD	-1.62	0.11	****	****	****	****	****
193.23	5.59	<b>ALL ENHANCED YIELD</b>	-0.88	1.87	9.75	11.33	10.75	8.75	6.45
		CITIGROUP BB & B	-1.53	0.34	7.61	10.17	8.09	7.28	5.94
		CITIGROUP BB & B CAPPED	-1.59	0.75	7.91	10.13	8.49	7.55	****
		ENHANCED YIELD MEDIAN	-1.42	1.26	9.30	10.45	9.91	8.32	7.97

Through June 30, 2013									
Assets% (\$MM)	Total		3 Mos Apr-13 Jun-13	YTD Jan-13 Jun-13	1 Yr Jul-12 Jun-13	3 Yrs Jul-10 Jun-13	5 Yrs Jul-08 Jun-13	10 Yrs Jul-03 Jun-13	15 Yrs Jul-98 Jun-13
		<b>BANK LOANS</b>							
78.44	2.27	BABSON BL MTA	0.23	2.55	****	****	****	****	****
78.44	2.27	<b>TOTAL BANK LOANS</b>	0.23	2.55	****	****	****	****	****
		CREDIT SUISSE LEVERAGED LOAN INDEX	0.43	2.81	****	****	****	****	****
		<b>ETI</b>							
2.72	0.08	ACCESS/RBC	-2.13	-2.13	-0.51	3.17	6.11	****	****
11.47	0.33	AFL-CIO HOUSING INV TRUST	-2.48	-2.61	-1.06	3.53	5.20	****	****
0.13	0.00	CFSB-PPAR	0.31	1.82	5.55	6.83	7.81	****	****
0.32	0.01	CCD-PPAR	2.48	5.02	10.30	9.22	10.04	****	****
0.17	0.01	LIIF-PPAR	2.09	4.24	8.12	4.77	****	****	****
0.08	0.00	NCBCI-PPAR	2.48	4.80	10.42	7.36	****	****	****
0.71	0.02	<b>TOTAL PPAR</b>	1.93	4.14	8.70	7.02	8.35	****	****
		GNMA PLUS 65bps	-2.39	-2.46	-1.53	3.47	5.63	****	****
0.66	0.02	CPC TERM LOAN	0.60	1.20	2.45	2.29	2.46	****	****
15.56	0.45	<b>TOTAL ETI (WITH CASH)</b>	-2.09	-2.06	-0.42	3.47	5.25	4.40	4.80
		BERS CUSTOM ETI INDEX (NO CASH)	-2.09	-2.13	-0.60	3.20	4.81	****	****
		BARCLAYS CAPITAL AGGREGATE	-2.32	-2.44	-0.69	3.51	5.19	4.52	5.52
1020.28	29.51	<b>TOTAL FIXED INCOME</b>	-2.82	-2.21	1.24	5.27	6.40	5.57	6.10
0.28	0.01	SECURITIES LENDING	****	****	****	****	****	****	****
37.46	1.08	STATE STREET SHORT TERM	-0.42	-0.36	-0.09	0.31	1.03	2.26	3.10
0.06	0.00	BNY-MELLON - CD	****	****	****	****	****	****	****
3457.76	100.00	<b>TOTAL BOARD OF EDUCATION</b>	-0.26	5.40	12.90	11.96	5.73	7.72	5.75
		BOARD OF EDUCATION POLICY BENCHMARK	0.13	6.02	13.70	12.69	5.67	7.56	5.47

## Actual And Estimated Fees

NEW YORK CITY BERS RETIREMENT SYSTEMS						
ACTUAL FEES FOR FISCAL YEAR ENDING JUNE 30, 2012 AND ESTIMATED FEES FOR FY 2013 UPDATED THROUGH SEPTEMBER 2012						
Actual 2012			Estimates 2013			
INVESTMENT STYLE (EQUITIES)	MARKET VALUE 06-30-2012 (\$MM)	BASIS POINTS	MARKET VALUE 09-30-2012 (\$MM)	BASIS POINTS		
<b>US Equities</b>	<b>1,114</b>	<b>14.31</b>	<b>1,178</b>	<b>16.90</b>		
Small Cap Active	25	64.23	22	63.55		
Small Cap Growth	-	-	-	-		
Small Cap Value	-	-	-	-		
Small Cap core	25	64.23	22	63.55		
Small Cap Fundamental Index	-	-	-	-		
Small/Mid Cap Active	-	-	-	-		
Small/Mid Cap Growth	-	-	-	-		
Small/Mid Cap Value	-	-	-	-		
Mid Cap Active	82	55.04	86	57.64		
Mid Cap Growth	-	-	-	-		
Mid Cap Value	-	-	-	-		
Mid Cap core	82	55.04	86	57.64		
Large Cap Active	142	22.00	150	24.25		
Large Cap Growth	47	23.63	49	23.31		
Large Cap Value	95	21.19	101	24.70		
Large Cap Core	-	-	-	-		
Large Cap Fundamental Index	-	-	-	-		
Active Emerging Managers (U.S.)	97	66.38	104	92.53		
Total US Active Equities	345	45.37	362	54.22		
Total US Passive Equities	769	0.36	816	0.36		
Opportunistic US Equity Strategies	-	-	-	-		
<b>International Equities</b>	<b>693</b>	<b>24.03</b>	<b>739</b>	<b>31.21</b>		
Active EAFE Equities	561	21.18	599	27.95		
Growth	305	20.36	328	27.07		
Value	256	22.15	271	29.00		
Core	-	-	-	-		
Opportunistic-Non US Equity Strategies	-	-	-	-		
Active Emerging Markets	106	43.44	112	55.00		
Total Int'l Active Equities	667	24.72	711	32.21		
Total Int'l Passive Equities	26	6.33	28	5.73		
REITS Passive Index	-	-	-	-		

## Actual And Estimated Fees

NEW YORK CITY BERS RETIREMENT SYSTEMS ACTUAL FEES FOR FISCAL YEAR ENDING JUNE 30, 2012 AND ESTIMATED FEES FOR FY 2013 UPDATED THROUGH SEPTEMBER 2012						
		Actual 2012		Estimates 2013		
INVESTMENT STYLE (FIXED INCOME)		MARKET VALUE 06-30-2012 (\$MM)	BASIS POINTS		MARKET VALUE 09-30-2012 (\$MM)	BASIS POINTS
<b>Fixed Income</b>		<b>981</b>	<b>9.82</b>		<b>1,073</b>	<b>13.56</b>
Structured Program		<b>546</b>	<b>8.55</b>		<b>560</b>	<b>6.66</b>
Government Sector		92	4.51		93	5.00
Mortgage Sector		239	11.35		244	6.10
Investment Grade Credit Sector		215	7.17		224	7.95
Global Fixed Income		-	-		-	-
Progress Fixed Emerging Managers		-	-		-	-
TIPS		<b>73</b>	<b>10.16</b>		<b>145</b>	<b>10.00</b>
Active TIPS		73	10.16		145	10.00
Passive TIPS		-	-		-	-
Opportunistic Fixed Income		-	-		-	-
Enhanced Yield		176	20.82		185	32.81
Bank Loans		-	-		75	36.11
Convertible Bonds		-	-		-	-
Targeted - Access Voyageur		3	26.75		3	27.90
Targeted - AFL-CIO		12	41.41		12	44.00
Other ETI Programs		2	-		2	-
In-House Short Term		170	0.00		92	0.00
<b>Total Public Markets</b>		<b>2,789</b>	<b>15.15</b>		<b>2,990</b>	<b>19.24</b>
<b>INVESTMENT STYLE (PRIVATE)</b>						
Hedge Funds		-	-		-	-
Private Equity Investments *		97	115.60		100	132.57
Private Real Estate Investments		63	106.62		68	108.36
<b>Total Private Markets</b>		<b>160</b>	<b>112.05</b>		<b>169</b>	<b>122.27</b>
<b>Total Overall</b>		<b>2,949</b>	<b>20.41</b>		<b>3,158</b>	<b>24.77</b>
<b>* Private Equity Investments exclude GP CARRY</b>						

# Securities Lending Income

Through June 30, 2013

	U.S. <u>FIXED INCOME</u>	U.S. <u>EQUITY</u>	INTERNATIONAL <u>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 (6 Months)	211,000	756,000	243,000
<u>Since Inception</u>	<u>\$8,017,000</u>	<u>\$11,597,000</u>	<u>\$4,267,000</u>

Note: Inception 4/89

## Footnotes

### Through June 30, 2013

- 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.

## Glossary of Terms

### Through June 30, 2013

#### **General Notes**

- All Returns are Gross of investment advisory fees unless otherwise indicated.

#### **Page Specific**

#### **Page 16- Portfolio Asset Allocation**

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



# Glossary of Terms

Through June 30, 2013

## Page 17- 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.
- **Management 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.

- **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, of 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 \* 42.60%*

*International Developed (EAFE) Markets: MSCI EAFE \* 17%*

*International Emerging Markets: MSCI Emerging Markets \* 5%*

*Private Equity: Russell 3000 + 300 b.p. per annum \* 3.13%*

*Private Real Estate: NFI - ODCE Net +100 b.p.\* 2.26%*

*Domestic Fixed Income: NYC Core +5 \* 17%*

*TIPS: Barclays Capital U.S. TIPS \* 5%*

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

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

# Glossary of Terms

## Through June 30, 2013

### **Page 21 - Management Effect - Asset Class Breakdown**

- This chart aims to break down the Management Effect 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.

### **Page 26- Domestic Equity Asset Allocation**

- **Value Added By Sectors:** This disaggregates out-performance or under-performance by Asset Allocation and Management Effect.
- **Implied Policy** = Retirement's System Asset Allocation.
- **Implied Return** = Benchmark Return
- **Allocation** = 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 rests in a positive Allocation Effect and vice versa.*
- **Management** = Contribution to Performance from security selection versus the Benchmark, e.g., *If the managers Actual Returns are higher than the Implied Return there will be a positive Management Effect.*

### **Page 40 – Structured Fixed Income Asset Allocation**

- See Domestic Equity Asset Allocation for explanation

### **Page 44 – ETI Returns vs Custom Index and Barclays Capital U.S. Aggregate**

- ETI has implemented a Custom Benchmark to better track the performance of the individual ETI programs relative to their respective benchmarks. The Custom Benchmark represents the weighted average return of the individual benchmark indexes for each program, updated monthly. The indexes are as follows:
- AFL-CIO Housing Inv Trust: Barclays Capital U.S. Aggregate Bond Index
- CPC Term Loan: 30 Day Libor + 200 bps per annum (with a floor of 250 bps)
- PPAR: Citigroup GNMA + 65 bps per annum
- Access/RBC: 60% BofA Merrill Lynch 30 yr Mortgage Index plus 40% BofA Merrill Lynch US Treasury 1-10yr Index