

**New York City**

**Board of Education Retirement System**

Performance Overview as of September 30, 2012

# Total Fund Overview

# New York City Board of Education Retirement System

## Table of Contents:

**Equity Analysis**

---



**Fixed Income Analysis**

---



**Appendix**

---



## Consultant's Commentary

Through September 30, 2012

### Market Commentary

After peaking at 4.1% in the fourth quarter of 2011, real GDP growth decelerated to 2.0% and only 1.3% in the first and second quarters of 2012, respectively. The first report on GDP growth in the third quarter was 2.0%, which was better than expected due to higher government and consumer spending.

Non-farm payrolls for the third quarter rose 437,000 but have lost some momentum, averaging about 146,000 per month in 2012 versus 153,000 last year. The unemployment rate dropped in September to 7.8% from 8.1%.

CPI rose 1.9% over the past 12 months. Despite some volatility in the short term, inflation is expected to remain controlled. Core CPI (excluding food and energy) for the last 12 months was 2.0%.

The easing of monetary policy from Global Central Banks helped equity markets, despite mixed US economic data, as did signs that the housing market was recovering. For the quarter, the S&P 500 returned 6.4%. Large Cap stocks outperformed small cap by approximately 1% and value outperformed growth across the market cap spectrum. The cyclical or economically-sensitive sectors performed well, led by technology (+7.4%), energy (+10.2%) and consumer discretionary (+7.5%). The utilities sector (-0.5%) was the worst performing area and the only sector to post a negative return.

It was generally a strong quarter for international markets with the MSCI-EAFE, which returned 6.9%, despite softening economic data in some regions. Japan (-0.8%) was less positive during the period, due to a persistently strong currency that hurt export-driven stocks and the tailing-off of disaster-driven recovery spending. The other regions were strong, as Europe rose 8.1% and the Pacific Rim increased 9.5%. The financial sector (+11.4%) was the only double-digit performer and the largest contributor to the index. The weakest performing sectors were technology (+1.4%), utilities (+2.5%) and consumer discretionary (+2.5%). For the quarter, the MSCI EM Index rose 7.7% led by India (+15.4%), Taiwan (+10.9%), and Thailand (+11.1%).

## Consultant's Commentary

Through September 30, 2012

### Market Commentary (continued)

While interest rates were volatile during the quarter the announcement of Fed action had the desired impact on most spread sectors of the domestic fixed income market. Despite growing evidence of slowing economic growth in the third quarter, investment-grade credit and commercial mortgage out-performed Treasuries by more than 300 basis points. For the quarter, US Treasuries returned 0.6%, while the best performing sectors, investment grade corporates and CMBS, each returned 3.8%. MBS and ABS returned 1.1% and 1.2%, respectively. Due to inflationary concerns TIPS (+2.1%) outperformed all other Treasury securities. High Yield bonds returned 4.5%, while non-USD bonds returned 4.0%.

### Asset Allocation

At September 30, 2012, the Board of Education Retirement System (BERS) Total Portfolio was \$3.2 billion versus \$2.9 billion at the end of the second quarter.

The Plan moved closer to its revised asset allocation with the funding of a bank loan portfolio within the Enhanced Yield allocation. Domestic equity, international equity, and cash remain overweighted compared to their respective targets by 2.3%, 2.0%, and 2.9% respectively. The cash fell from 5.8% last quarter, with funds having been used for a bank loan allocation and the movement toward a target weighting in TIPS. Offsetting the overweights are underweights in Private Equity and Real Estate versus their respective targets by 2.8% and 4.8%, respectively. With respect to broader asset allocation positioning, Total Equity (including Real Estate and Private Equity) is approximately 66% versus the 70% target.

### Manager Issues

Loomis announced that Kathleen Gaffney, long-time co-manager to Dan Fuss on the NYC BERS high yield portfolio (and other Loomis fixed-income strategies), departed the firm in October. Although never formalized, she had been widely regarded by asset-management industry observers as the heir apparent to Dan Fuss. Although we are disappointed by the move, we are not recommending any action at this time.

Shenkman High Yield and Babson Bank Loan were both funded during the quarter. Commentaries will be provided following their first full quarter in the Fund (Q4 2012 Report).

## Consultant's Commentary

Through September 30, 2012

### **Manager Issues (continued)**

BMO Asset Management Corp. will increase its ownership in Taplin, Canada & Habacht to 96% in 2013

Emerging market equity manager SSgA remains on watch for performance. Client redemptions have paused, but we note the ongoing effort to significantly revise their investment models.

Wellington remains on watch due to a portfolio manager change.

### **Total Fund Performance**

The Total Plan returned 4.7% in the quarter versus 5.3% for the benchmark. Despite lagging in terms of relative performance, it was still enough to outperform its median peer by placing in the 47th percentile of the Public Fund Master Trusts > \$1 Billion Universe. A similar situation exists for the year-to-date period, where the fund lags the benchmark, 10.9% versus 12.0%, but ranks at the 40th percentile of its peer group. Over the past five years, the Plan earned 2.4% relative to 2.3% for the benchmark. While this is below the long-term expected return for the Plan, performance was still greater than that of its median peer.

During the quarter, Allocation and Management had equally negative effects on relative return. They included an overweight to cash and underperformance from the private equity allocation. Note that much of the Fund's private equity investments are still in their investment phases and subject to "J-curve" effects that make short-term performance comparisons meaningless.

## Consultant's Commentary

Through September 30, 2012

### U.S. Equity

For the quarter, Total Domestic Equity returned 6.2%, just 8 basis points behind the Russell 3000 Index. Most of the active managers outperformed during the quarter, but lagging returns from Zevenbergen (and to a lesser extent Wellington) were sufficiently large to adversely impact overall equity performance. Domestic equity also lags year-to-date, 15.7% versus 16.1%, with Zevenbergen underperformance again an important factor. Year-to-date underperformance from the emerging manager allocations were also a factor.

**Zevenbergen** returned 3.8% during the quarter versus 6.0% for its Russell 3000 Growth benchmark. A second quarter of significant underperformance has hurt the year-to-date returns, where Zevenbergen returned 8.8% to 16.6% for the benchmark. Performance for the trailing three- and five-year periods are also behind the index. Sector positioning had little effect on performance during the quarter, while stock selection had the greatest negative impact. Stock selection in the health care sector was the biggest detractor. The stocks in the portfolio declined by -9% versus a positive 6.8% return for the stocks in the index. Medical device makers, Intuitive Surgical (-10.5%) and Mako Surgical Corp (-32.0%) were the biggest detractors. While an overweight in the strong consumer discretionary sector should have helped, stock selection was a negative. Holdings in retailers were generally positive, but the manager was overweight versus the index in Priceline.com (-6.8%), Chipotle Mexican Grill (-16.4%) and Netflix (-20.5%). An overweight in technology was a positive, but weaker stock selection resulted in negative contribution from the sector overall. An underweight in Apple (5.2% vs. 8.0% for the index) hurt relative results as the stock returned 15.0%. The number of holdings remained similar to last quarter and the top ten holdings in the fund accounted for 40% of assets as of quarter end.

## Consultant's Commentary

Through September 30, 2012

### U.S. Equity (continued)

**Aronson** returned 7.1% for the quarter, which outperformed the Russell 1000 Value return of 6.5%. For the year-to-date period, Aronson maintains a lead, 16.7% versus 15.8%. Aronson also remains ahead for the trailing three and five-year periods. Over five years the portfolio leads 0.8% versus -0.9%. The portfolio benefited from good stock selection in the energy sector, which was the second biggest contributor to the index. Benchmark allocations to the biggest contributors to index returns, such as ExxonMobil (+7.6%) and Chevron (+11.4%), helped, in absolute terms while good results from Valero Energy (+32.0%) and Phillips 66 (+40.2%) benefited both absolute and relative results. Selection effects in the financial sector helped relative performance, led by JP Morgan (+14.2%) and Goldman Sachs (+19.1%). Better stock selection in the utility sector, the only negative performing area for the index, also helped relative to the index. The portfolio's stocks returned 1.8% versus -0.3% for the index.

**Wellington** returned 5.1% for the quarter compared to 5.4% for its S&P Midcap 400 Index benchmark. Year-to-date, the portfolio is ahead, 17.5% versus 13.8%. Modest underperformance for the quarter was primarily due to security selection within the industrials, consumer discretionary, and technology sectors. Top individual detractors to performance included Adtran and TripAdvisor. Adtran is a telecom equipment provider that missed on earnings, but Wellington added to the position on weakness. TripAdvisor declined in the face of direct competition from Google. Conversely, security selection in financials, health care and consumer staples contributed to performance. An underweight in financials and an overweight in health care also were additive during the period. Top contributors to performance included Lincare Holdings and Watson Pharmaceutical, both of which saw their share prices increase on M&A activity. The portfolio remains overweighted to health care (17.6% vs. 10.4%) and focused on generic drug manufacturers and biotechnology companies. Wellington is also overweighted to energy (11.1% vs. 5.9%) and favors offshore drilling and exploration and production companies. Their largest underweight is to financials (14.2% vs. 22.2%), as the fund is underweight REITs due to unattractive valuations

## Consultant's Commentary

Through September 30, 2012

### U.S. Equity (continued)

**Daruma** returned 6.0% in the quarter versus 5.3% for the Russell 2000 index. For the year-to-date period, the portfolio returned 13.4% versus 14.2%. Quarterly outperformance was primarily driven by security selection. The firm Lumber Liquidators contributed nearly 200 bps to performance and was up 50% during the quarter due to better-than-expected second quarter earnings (up 126%). The Medicaid managed-care provider AMERIGROUP contributed about 100 bps to performance and was up 38% during the period due to an announced acquisition by Wellpoint. Direct marketing services firm Acxiom contributed 70 bps of performance for the third quarter. Individual detractors to performance included electronic programming guide maker Rovi (-50 bps contribution), telecom equipment provider Ciena (-46 bps contribution) and flooring and ceiling products maker Armstrong World Industries (-25 bps contribution). From a sector perspective, top contributions came from consumer discretionary and health care. The fund held zero securities in the utilities and consumer staples sectors, which detracted during the quarter, as did an underweight to financial services.

**Progress** returned 7.1% for the quarter versus 6.2% for its Russell 3000 benchmark during quarter. They are now only slightly behind on a year-to-date basis, 15.9% versus 16.1%. The portfolio remains slightly head over the past five years, 1.4% versus 1.3% (annualized).

**FIS** returned 7.2% during the quarter, outperforming the 5.3% return of its Russell 2000 benchmark. Year-to-date, the fund remains behind, 13.4% versus 14.2%. FIS has moved slightly ahead over three years, 13.1% versus 13.0%.



## Consultant's Commentary

### Through September 30, 2012

#### **International Equity**

The Total Developed Market portfolio slightly lagged the MSCI EAFE (net dividend) Index during the quarter, 6.8% to 6.9%. Baillie Gifford outperformed while Sprucegrove lagged. The Total Developed Market is ahead year-to-date, 11.5% to 10.1%, and has been a strong relative performer over time with both managers adding meaningful value versus the EAFE index as well as their style benchmarks (EAFE Growth for Baillie Gifford and EAFE Value for Sprucegrove).

**Baillie Gifford** returned 7.4% to 6.9% for the MSCI EAFE (net) Index during the quarter. Year-to-date through September 30th, the portfolio return is 11.7% versus 10.1% for the index. Baillie Gifford is well ahead of the MSCI EAFE and the MSCI EAFE Growth index over the past one, three and five year periods. From a regional perspective, the portfolio's allocation to emerging markets (approximately 14% as of quarter end) continues to be a notable driver of relative return versus benchmark, and for the past quarter, the effect was positive. Security selection in the UK also added value in the period. Looking at returns from a sector perspective, sector allocation detracted from performance but security selection more than offset this result. In terms of allocation, the fund was hurt by overweight positions in consumer discretionary and technology but in each case, better stock returns more than compensated such that these two sectors accounted for meaningful relative outperformance overall. Weaker results in materials hurt performance.

**Sprucegrove** returned 6.1% for the quarter compared to 6.9% for the MSCI EAFE (net). Year-to-date, the portfolio is ahead, 11.3% versus 10.1%. Sprucegrove leads both the MSCI EAFE and MSCI EAFE Value Indices over the one, three and five year periods. From a country perspective, the fund was hurt most by and underweight position in Germany and security selection within in Germany and the UK. Better results in emerging markets, especially Brazil, South Korea and India, partially offset the negative impact elsewhere. At a sector level, the fund was hurt by an underweight to financials and stock selection in materials. Offsetting these results was better returns in energy, especially from Total and Petrobras.

## Consultant's Commentary

Through September 30, 2012

### **Emerging Markets**

**State Street Global Advisors (SSgA)** returned 5.5% for the quarter versus 7.9% for the MSCI Emerging Markets Index. This widened the distance behind the benchmark year-to-date with a return of 9.4% versus 12.3%. The portfolio now lags over both three- and five-year periods. Investor redemptions paused during the quarter, as the strategy saw an approximate \$115 million in net inflows. This follows \$710 million in net redemptions for the first half of this year and a combined \$1.5 billion in 2010/2011. Security selection drove underperformance during the quarter with specific securities adversely impacted by company-specific events. This included holdings in Chinese financial / real estate and a Brazilian electric utility. From a country allocation perspective, an underweight in Taiwan hurt relative returns. Contribution to performance by model factors was mixed during the quarter, but Sentiment and Macro models were consistent negatives. SSgA implemented the EM Currency project (active currency management) and EM Risk Aversion Timing project at the beginning of the quarter. They note currency was a negative during the quarter, but they believe it is too soon to ascertain its effectiveness and will continue to monitor its progress. A new research project, EM Country Selection Revamp, was initiated, and may alter the process through which country allocation is determined. Current models relating to country allocation involve the forecasting of country returns through the measurement of the usual equity factor risk exposures, e.g. value, momentum, earnings sentiment, etc.

## Consultant's Commentary

Through September 30, 2012

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

The Total Structured Portfolio outperformed its NYC Core + 5 Index during the quarter with a return of 2.6% versus 2.0%. PIMCO Mortgages, the largest single manager allocation within the portfolio, outperformed by 92 basis points. Investment grade credit also did well, due to outperformance by Taplin Canada. Year-to-date, the Total Structured Portfolio is ahead, 6.2% versus 5.1%. One, three and five year returns are also ahead of the benchmark.

**Taplin Canida** (credit) returned 4.5% during the quarter versus 3.7% for the customized Citigroup Credit Index. Year-to-date, this puts Taplin ahead, 9.4% versus 8.3%. Performance is either comparable to, or ahead of benchmark, over longer time periods. Outperformance during the quarter was driven by portfolio positioning in sector, credit quality, and yield curve placement. This included an overweight in financials (the best performing sector during the quarter), an overweight in lower-rated securities (BBB outperformed AAA by more than 300 basis points), and a barbelled yield curve exposure. The portfolio's overweight at the long-end of the credit curve positioned the portfolio to benefit from a credit-curve flattening during the quarter.

**Prudential** (credit) returned 3.6% during the quarter, slightly trailing the 3.7% returned by its customized index. Year-to-date, Prudential is slightly ahead, 8.4% versus 8.3% for the Index. The portfolio is positioned identically to the index in terms of yield (2.5%) and duration (6.5 years). The average quality is also identical to benchmark, per Moody's, at A3. The biggest difference relative to benchmark is in sector allocation. Non-US credit is significantly underweight, 9% versus 20%, as of quarter end. With respect to industries, banking has the largest representation at 18% of the portfolio (and at a slight overweight compared to benchmark). Foreign non-corporates and electrical utilities are the 2nd and 3rd largest industry exposures, accounting for 9% and 8% of the portfolio, respectively.

**SSgA** (governments) returned 0.8% during the quarter, lagging its benchmark by 3 basis points. Year-to-date, the portfolio returned 4.2%, 4 basis points ahead of benchmark. Long-term performance numbers remain slightly ahead of the index. Absolute returns during the quarter came from an overweight to agency securities

## Consultant's Commentary

Through September 30, 2012

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

(19% versus 7%, by market value) and also from a longer duration compared to benchmark (10.2 years versus 9.4 years).

**PIMCO** (mortgages) returned 2.0% for the third quarter compared to 1.1% for the benchmark. PIMCO also leads the index year-to-date with a return of 4.7% versus 2.8%. Three and five year results remain ahead of the benchmark. The portfolio continued to benefit from its allocation to commercial mortgage-backed securities (CMBS). An allocation to non-agency mortgage-backed securities also helped, a sector that benefited from limited new issue supply and signs of a housing recovery.

### **Fixed Income - TIPS**

**PIMCO** returned 2.4% during the quarter, compared to 2.1% for the Barclays Capital US TIPS Index. Year-to-date, the portfolio is also ahead 6.8% versus 6.3%. The three- and five-year returns beat the benchmark by 16 and 25 basis points, respectively. Exposure to Australian and Canadian inflation-linked bonds have been a consistent contributor to relative return, and Q3 was no exception. Canada exposure, however was trimmed by quarter end on profit taking. Exposure to the two countries accounted for 5.5% of the portfolio as of quarter end.

### **Enhanced Yield Fixed Income**

Total Enhanced Yield returned 4.6% during the quarter compared to 4.1% for the Citigroup BB & B Index. Loomis outperformed during the quarter, and Shenkman replaced Seix as the Fund's other high-yield bond manager. Enhanced Yield is ahead year-to-date, 12.3% versus 11.1%, and also over the trailing three- and five-year time periods.

**Loomis Sayles** returned 5.2% for the quarter versus 4.6% for the Merrill Lynch High Yield Master II index. Over the year-to-date period, the fund is ahead, 13.8% versus 12.0%. Performance also remains ahead of benchmark over longer time periods. As previously mentioned, Loomis announced the departure of long-time co-manager Kathleen Gaffney. Although we are disappointed by the loss, we do not believe it requires a watch listing of the

## Consultant's Commentary

Through September 30, 2012

### **Enhanced Yield Fixed Income (continued)**

strategy. Remaining co-managers Elaine Stokes and Matt Eagan have worked with current PM Dan Fuss for over 12 years, and we believe that would diminish a possible loss of continuity should Dan Fuss retire. Furthermore, much of Loomis' strength in fixed-income investment lies in its deep credit-research capabilities, which is not directly impacted by the loss of Mrs. Gaffney.

**Shenkman**, the replacement manager for Seix Advisors was funded in mid-August. We will comment on performance following its first full quarter (in the Q4 2012 report).

**Babson**, the newly invested bank loan portfolio for NYC BERS, began investment in September. We will comment on performance following its first full quarter (in the Q4 2012 report).

## Consultant's Commentary

### Through September 30, 2012

**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 \$220 million based on September 30 market values. Current commitments total \$109 million, or 49% of target, and include \$27.6 million to La Salle Property Fund, \$41.4 million to UBS Trumbull Property Fund, \$30 million to Franklin Templeton Private Real Estate Fund, and \$10 million to Brookfield Strategic Real Estate Partners. 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 2.6% for Q3 2012 versus 2.8% for the NFI-ODCE Index<sup>1</sup>. For the trailing one-year period the fund returned 15.0% versus 11.6% for the index. Leverage was unchanged at 27% as of quarter end, compared to 23% for the ODCE. Debt possesses a weighted average term of 7.8 years and a weighted average interest rate of 3.7%. The property count in the fund is 25, with approximately 40% of the NYC BERS commitment to the fund remaining uncalled (as of September 30). In terms of sector allocation, the fund is overweight to residential (34% versus 24%) and industrials (30% versus 12%), while underweight to office (19% versus 39%). Geographic focus is currently on the East and West. The portfolio is 4% allocated to value-add type investments, distributed across 3 properties. Weighted occupancy rate, including value-add, was 94%.

**UBS Trumbull Property Fund (core)** returned 2.5% for Q3 2012, compared to 2.8% for the NFI-ODCE Index<sup>1</sup>. For the trailing one-year period, the fund returned 10.5% versus 11.6% for the index. As of 9/30, leverage was 13%, significantly lower than the 23% of the benchmark. Underperformance is to be expected from the strategy in the current environment given its extremely conservative leverage. With respect to portfolio positioning, multi-family properties are overweight (33% versus 24%), while industrial and office properties are underweight (6% and 5%, respectively). Geographic focus is overweight the East and underweight the West. The fund maintains an entry queue, and prospective investors continue to be advised of a 12-15 month wait.

**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.**

## Consultant's Commentary

### Through September 30, 2012

**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, committed approximately 50% out of \$269 million in total limited partner investor commitments across six funds and two co-investments. They include two US funds (one of which specializes in real-estate debt), two funds with a Northern Europe focus, three Asia funds (including one co-investment), and a UK co-investment. Committed assets are now allocated 26% US, 32% Europe, and 42% Asia, with office comprising the largest sector exposure (51%). Total portfolio leverage is 54%, with the underlying fund leverage ranging from 23% to 84%.

**Brookfield Strategic Real Estate partners (opportunistic)** is a closed-end fund investment initiated early in the quarter with a \$10 million commitment. The fund does not yet possess a meaningful return history.

**Private Equity (Returns are one quarter in arrears and results shown are provided by the manager)**  
**Mesirow Financial Private Equity Partners III (Fund III)** has committed \$523.9 million to 42 partnerships. This represents 104% of total committed capital, with the amount over 100% reinvested from cash distributions. The fund has contributed \$459.7 million to partnerships and distributed \$144.8 million through 6/30/12. As of 6/30/12, Fund III posted a fair value of \$456.1 million (\$600.9 million including distributions) and a preliminary IRR since inception of 8.4%. The portfolio is moving from the investment phase to the development phase.

**Mesirow Financial Private Equity Partners IV (Fund IV)** has committed \$907.4 million to 53 partnerships. The fund has contributed \$549.3 million (or 61% of capital) and distributed \$89.8 million through 6/30/12 (including its first investment-related distribution of \$18 million in June). As of 6/30/12, Fund IV posted a fair value of \$563.9 million (\$653.7 million including distributions) and a preliminary Portfolio IRR since inception of 8.0%. Mesirow is still in the commitment and investment phase of the portfolio.

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.

## Consultant's Commentary

### Through September 30, 2012

**Private Equity (Returns are one quarter in arrears and results shown are provided by the manager)**

**Mesirow Financial Private Equity Partners V (Fund V)** has committed \$583.5 million to 34 partnerships, contributed \$160.5 million and distributed \$25.4 million (primarily interest equivalent contributions) through 6/30/12. As of 6/30/12, Fund V posted a fair value of \$175.8 million. Portfolio IRR is 23%, but the fund is still too new for the number to be meaningful. Mesirow is still in the commitment and investment phase of the portfolio.

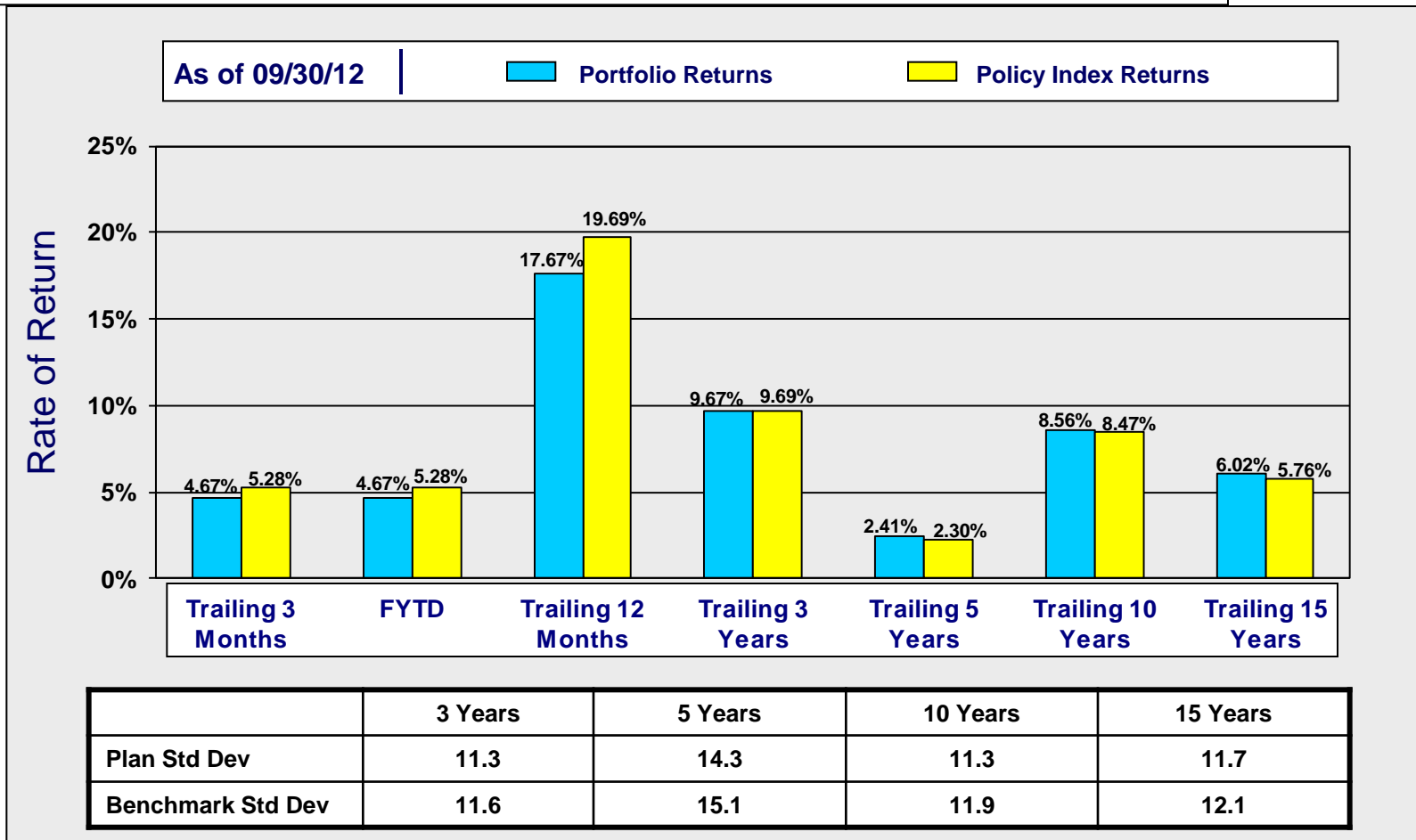
**New York/Fairview Private Equity Fund** has committed \$18 million to 6 partnerships and contributed \$12.7 million through 6/30/2012. As of 6/30/2012, the Fund posted a fair value of \$11.9 mm relative to a cost basis of \$9.4 million. The fund has not made commitments to new partnerships, and continues to hold \$3 mm in each of the following 6 partnerships: 21st Century Group, Bertram Growth I, Encore Consumer Capital, GenNx360 Capital Partners, Halyard Capital II, and Vicente Capital Partners Growth. Most of the investments are diversified across various sectors including industrials, media and telecom, energy, consumer goods, technology and healthcare.

**Warburg Pincus Private Equity XI** has closed on \$5.6 billion in investor commitments through 9/30/2012, out of a total targeted \$12 billion, and includes \$25 million from NYC BERS made on May 2012. \$4.2 million in capital has been contributed. The fund has called just under 17% of its capital through through September 30, and currently has 13 investments. The fund is relatively new and still early in its investment phase. Its target strategy allocation is as follows: 25% energy, 40%-50% growth, 25% buyout, and 10% other.



## Total Portfolio Returns: September 30, 2012

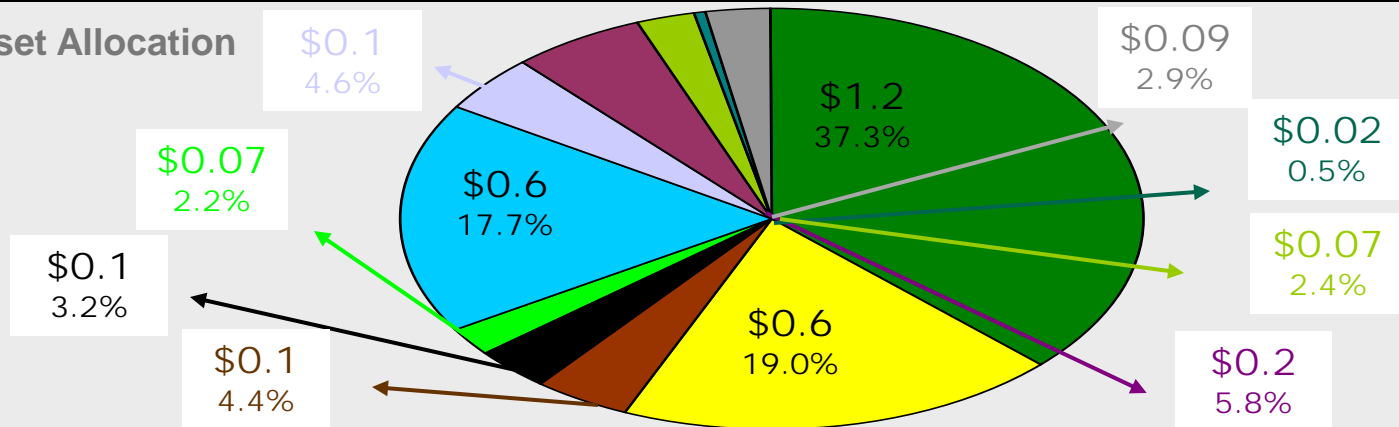
**\$3B** Under Management



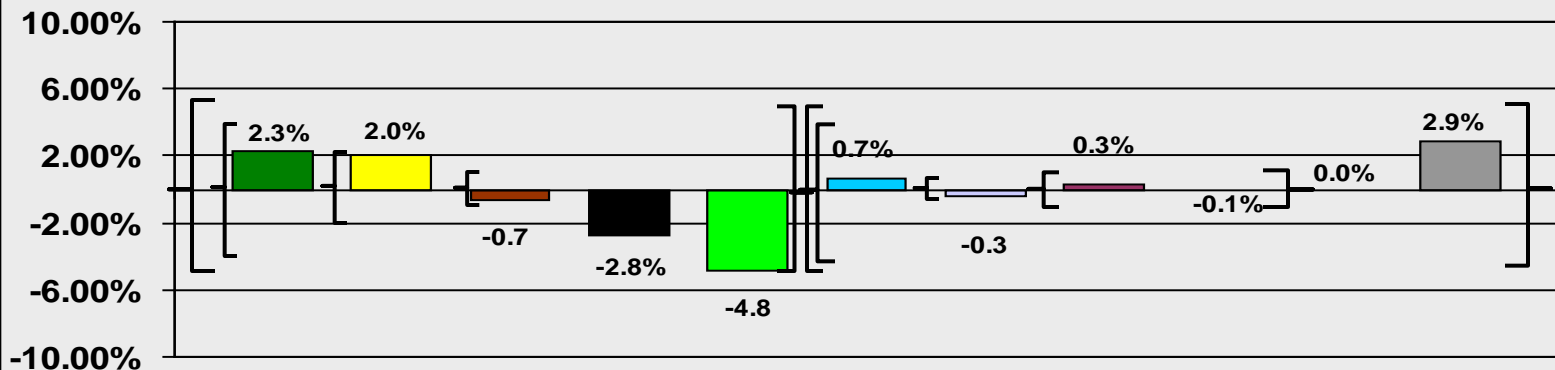
# Portfolio Asset Allocation: September 30, 2012

**\$3.2B** Under Management

## Asset Allocation

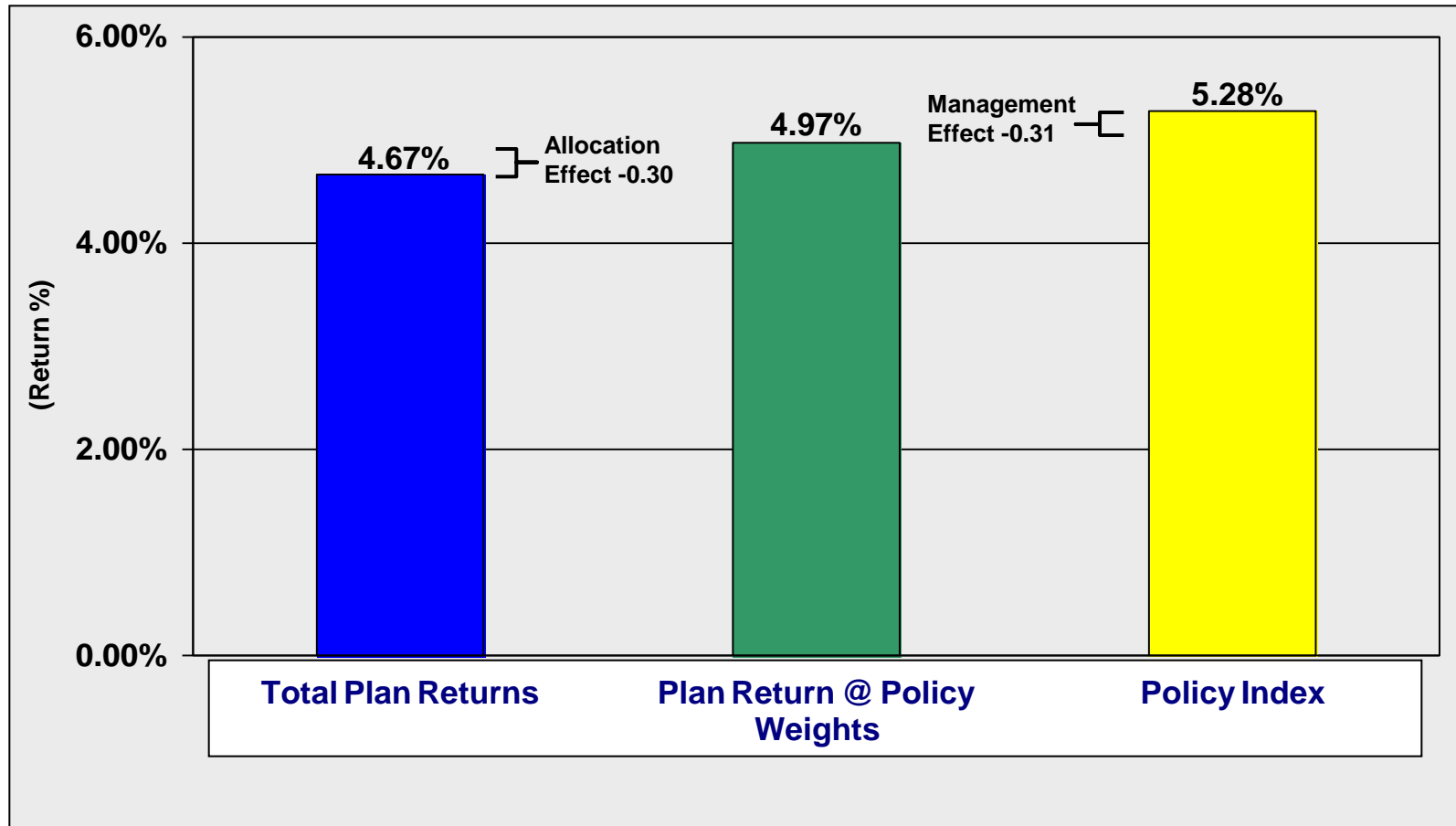


## Relative Mix to New Policy Weights

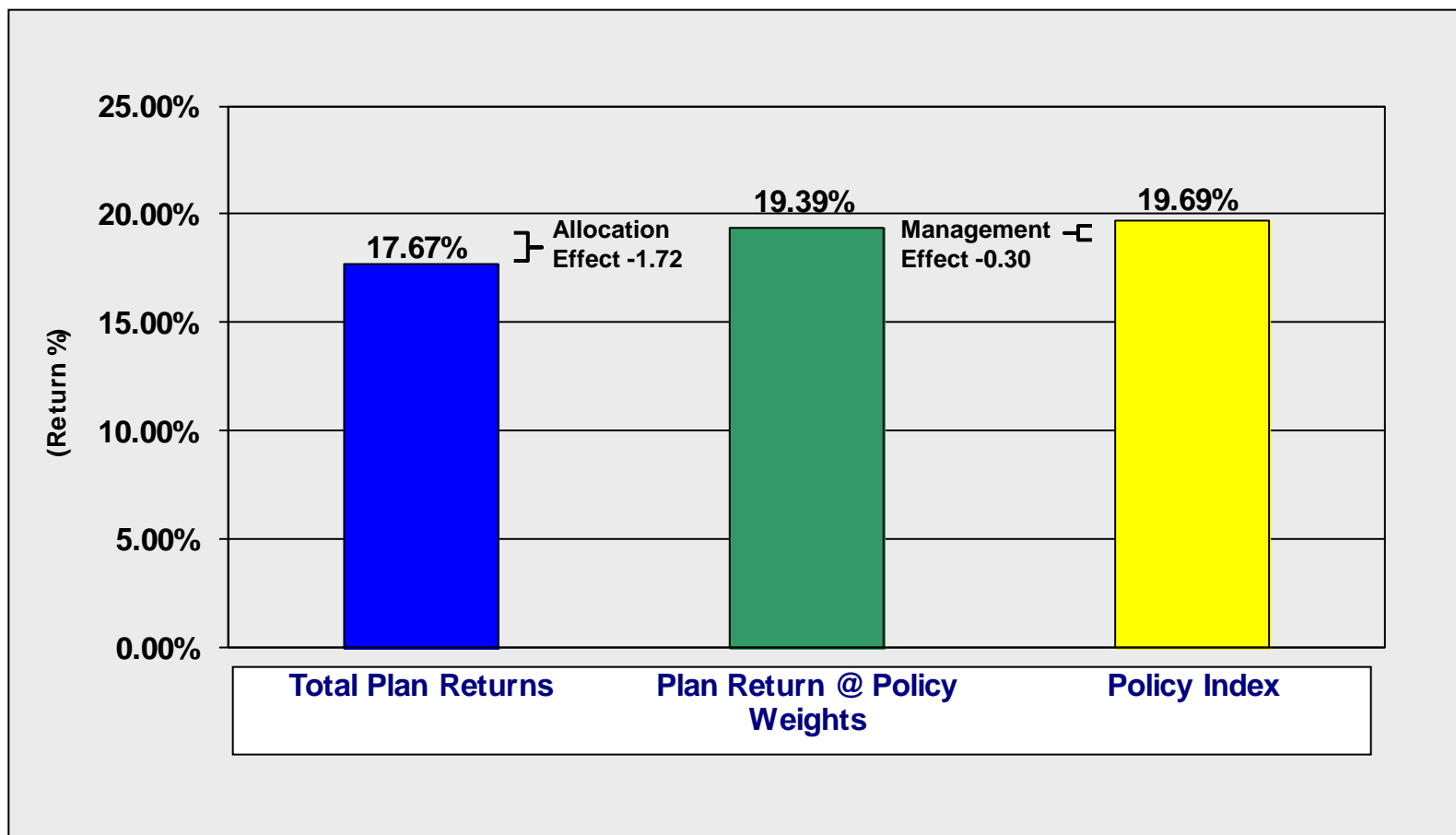


Note: Brackets represent rebalancing ranges versus Policy.

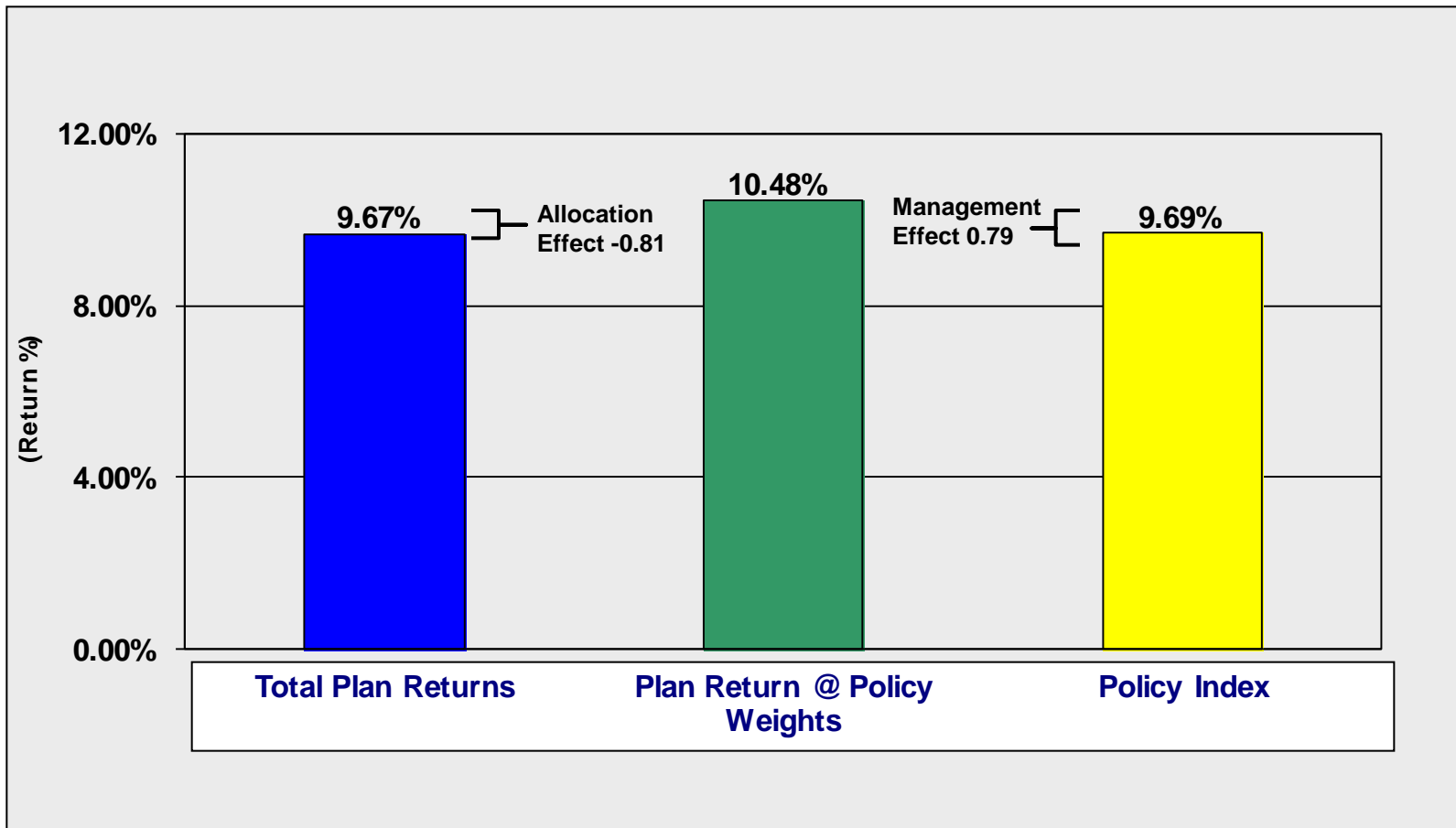
## Performance Attribution: Total Plan - Quarter Ending September 30, 2012



## Performance Attribution: Total Plan – 12 Months Ending September 30, 2012



## Performance Attribution: Total Plan – 3 Years Ending September 30, 2012



## Total Plan - Quarter Ending September 30, 2012

### Allocation Effect – Asset Class Breakdown

<u>Plan</u>	<u>Quarter</u>	<u>12 Months</u>	<u>3 Years</u>	<u>Benchmark</u>
Domestic Equity	-0.08	-0.33	-0.15	Russell 3000 Index
EAFE Markets	0.04	-0.18	-0.10	MSCI EAFE Index
Emerging Markets	-0.01	0.00	-0.06	MSCI Emerging Markets Index
Private Equity	0.00	0.00	0.00	Russell 3000 Index + 500 b.p.
Private Real Estate	0.00	0.00	****	NCREIF ODCE NET
Domestic Fixed	-0.01	0.11	-0.17	NYC Core +5 Index
Enhanced Yield	0.00	0.03	-0.02	Citigroup BB&B Index
TIPS	0.01	0.02	-0.01	Barclays Capital US TIPS Index
State Street Short Term	-0.19	-0.74	-0.41	Total Plan

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

## Total Plan - Quarter Ending September 30, 2012

### Management Effect – Asset Class Breakdown

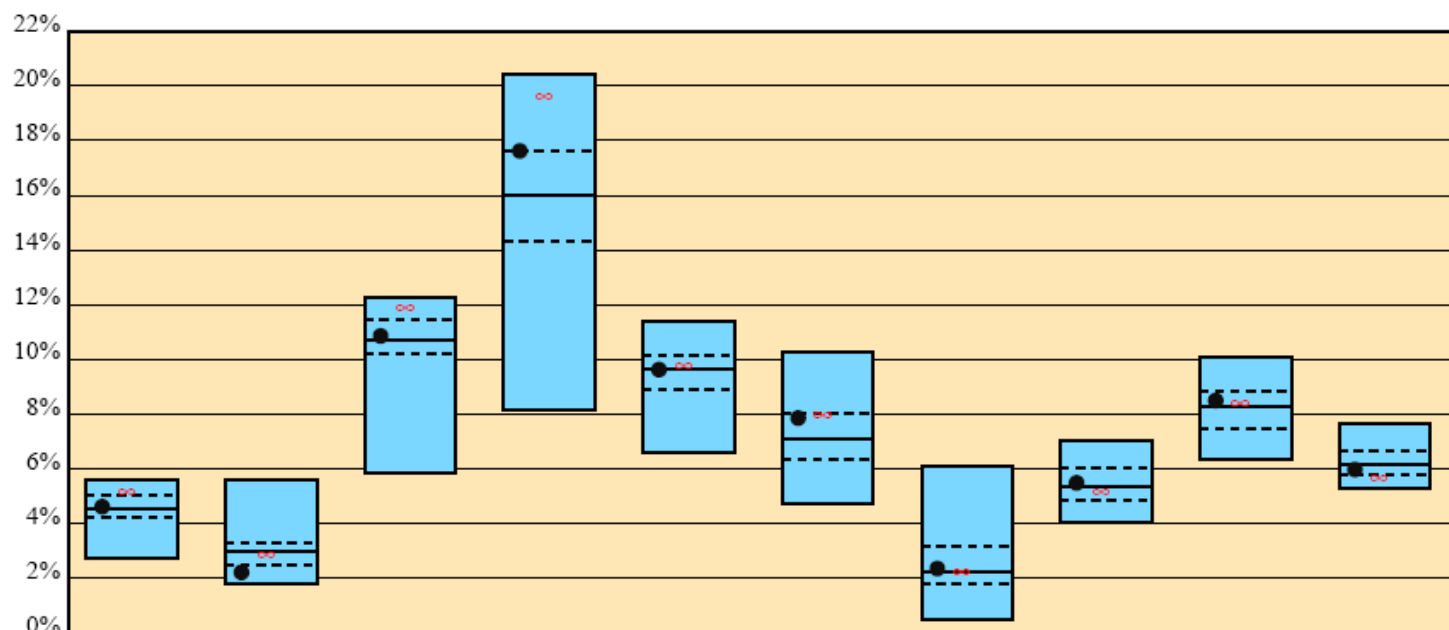
<u>Plan</u>	<u>Quarter</u>	<u>12 Months</u>	<u>3 Years</u>	<u>Benchmark</u>
Domestic Equity	-0.03	-0.17	-0.19	Russell 3000 Index
EAFE Markets	-0.03	0.65	0.88	MSCI EAFE Index
Emerging Markets	-0.08	-0.05	-0.01	MSCI Emerging Markets Index
Private Equity	-0.22	-0.92	-0.14	Russell 3000 Index + 500 b.p.
Private Real Estate	-0.05	0.05	****	NCREIF ODCE NET
Domestic Fixed	0.10	0.20	0.16	NYC Core +5 Index
Enhanced Yield	0.03	0.03	0.06	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 September 30, 2012



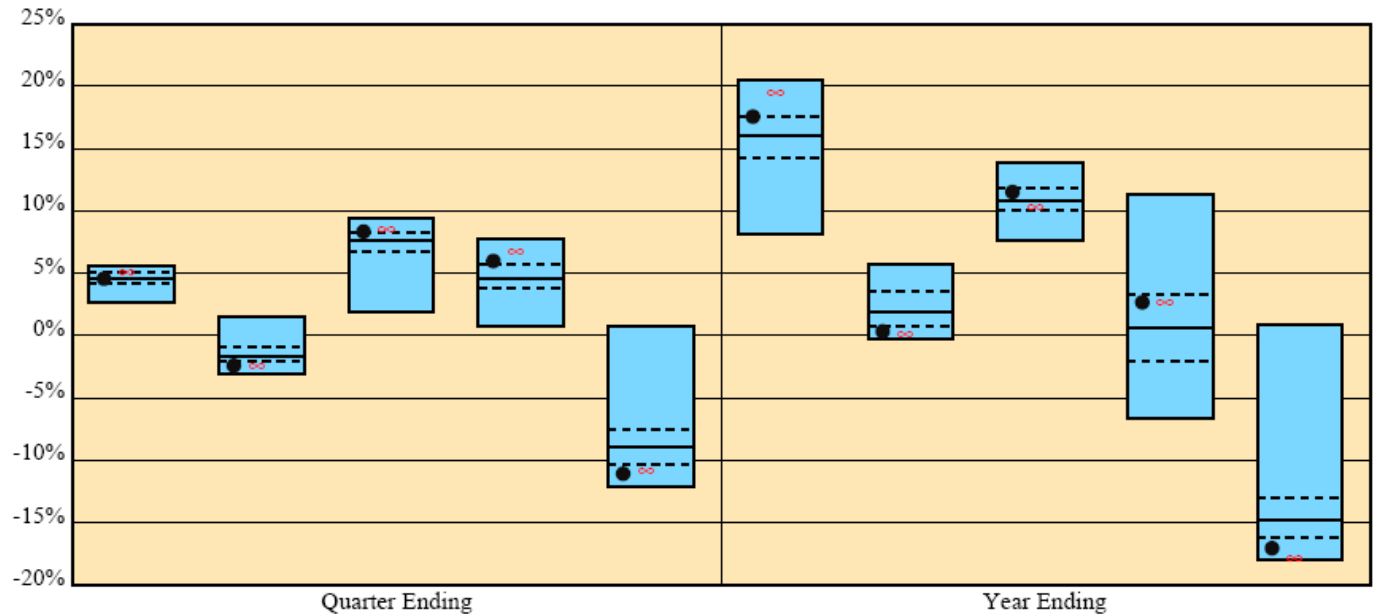
	1 Quarter	2 Quarters	3 Quarters	1 Year	3 Years	4 Years	5 Years	7 Years	10 Years	15 Years
5th Percentile	5.63	5.59	12.27	20.45	11.40	10.25	6.10	7.02	10.06	7.64
25th Percentile	5.05	3.30	11.44	17.63	10.13	8.05	3.17	6.01	8.85	6.69
Median	4.53	2.99	10.69	16.00	9.68	7.07	2.27	5.36	8.27	6.17
75th Percentile	4.21	2.49	10.20	14.30	8.92	6.38	1.82	4.88	7.47	5.80
95th Percentile	2.72	1.78	5.86	8.18	6.63	4.73	0.52	4.05	6.34	5.29
● Total System	4.67 (41)	2.27 (82)	10.91 (40)	17.67 (22)	9.68 (50)	7.91 (28)	2.41 (46)	5.54 (36)	8.55 (29)	6.03 (57)
∞ Board of Ed Policy Benchmark	5.28 (14)	2.97 (52)	11.97 (9)	19.69 (8)	9.86 (42)	8.06 (23)	2.33 (47)	5.28 (58)	8.47 (37)	5.77 (76)



# 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

	Sep 12	Jun 12	Mar 12	Dec 11	Sep 11	Sep 12	Sep 11	Sep 10	Sep 09	Sep 08
5th Percentile	5.63	1.58	9.42	7.73	0.78	20.45	5.78	13.85	11.38	0.86
25th Percentile	5.05	-0.85	8.31	5.74	-7.58	17.63	3.56	11.87	3.31	-12.98
Median	4.53	-1.66	7.68	4.62	-8.90	16.00	1.88	10.81	0.60	-14.78
75th Percentile	4.21	-2.09	6.80	3.77	-10.28	14.30	0.81	10.00	-1.98	-16.24
95th Percentile	2.72	-3.09	1.97	0.71	-12.07	8.18	-0.23	7.66	-6.57	-17.92

● Total System

4.67 (41)	-2.29 (80)	8.45 (23)	6.09 (16)	-10.96 (85)	17.67 (22)	0.45 (83)	11.62 (32)	2.78 (27)	-16.94 (87)
-----------	------------	-----------	-----------	-------------	------------	-----------	------------	-----------	-------------

∞ Board of Ed Policy Benchmark

5.28 (14)	-2.20 (78)	8.74 (16)	6.90 (9)	-10.70 (83)	19.69 (8)	0.24 (87)	10.51 (55)	2.85 (26)	-17.71 (93)
-----------	------------	-----------	----------	-------------	-----------	-----------	------------	-----------	-------------

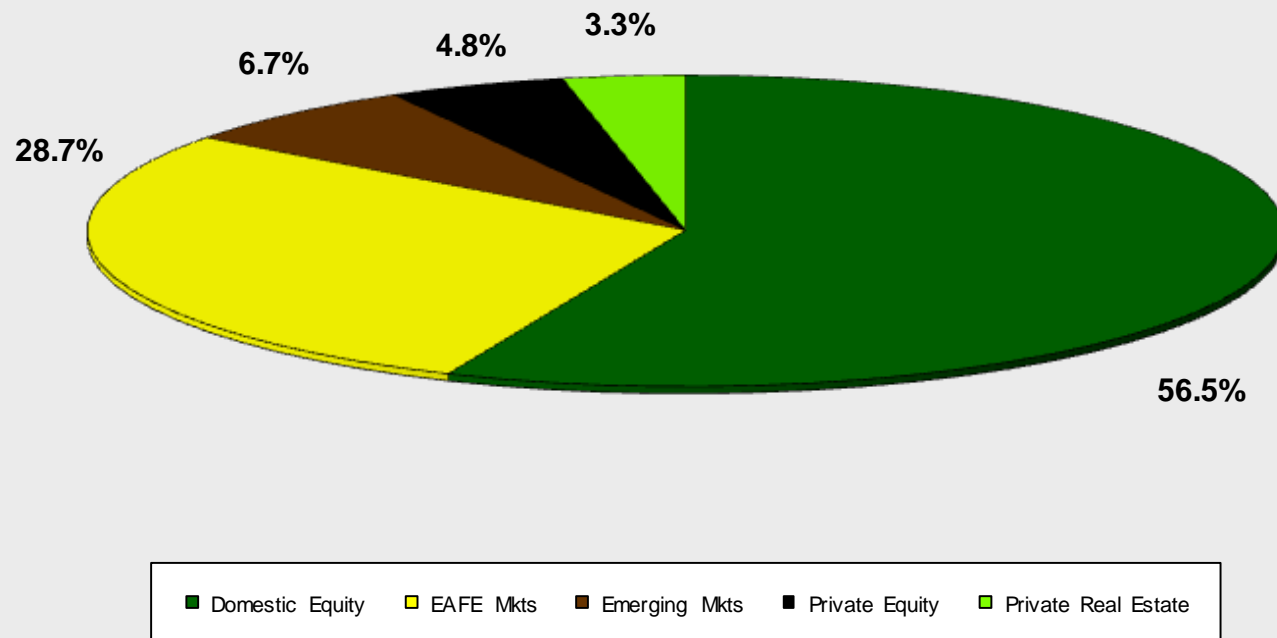
**New York City**  
**Board of Education Retirement System**

# **Equity Analysis**

## Total Equity Asset Allocation: September 30, 2012

**\$2B** Under Management, **66%** of Total Funds

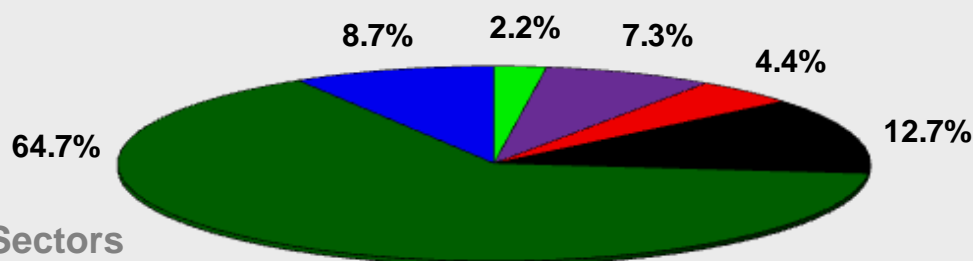
Asset Allocation by Groups



# Total Domestic Equity Asset Allocation: Quarter Ending September 30, 2012

**\$1.1B** Under Management, **38%** of Total Funds

## Asset Allocation by Groups



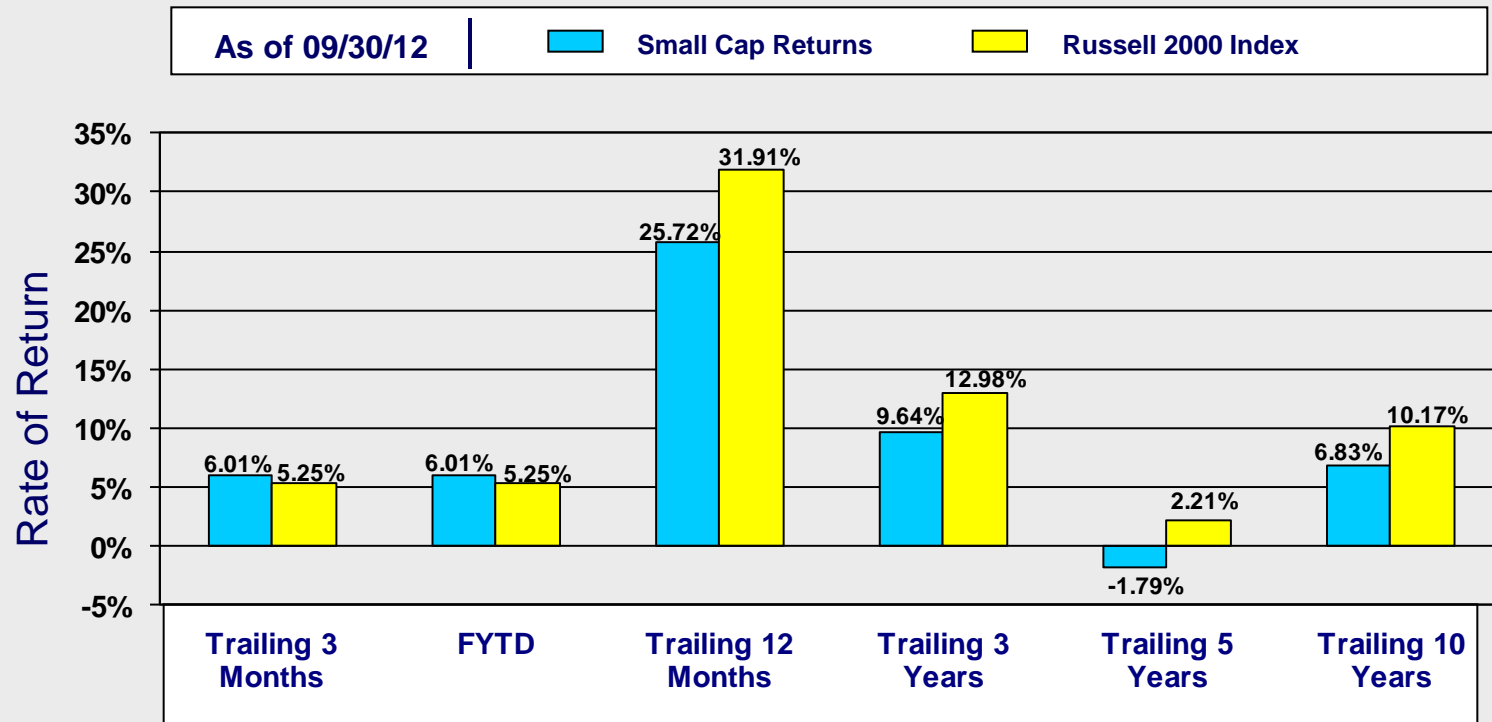
## Value Added by Sectors

■ Small Cap Active 
 ■ Mid Cap Active 
 ■ Mid Cap S&P 400 Index 
 ■ Russell 1000 Active 
 ■ Russell 3000 Index Funds 
 ■ Manager of Managers

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	5.25	6.01	0.76	0.00	0.02
Mid Cap Active	7.25	7.26	0.01	5.44	5.13	-0.31	0.02	-0.03
Mid Cap S&P 400 Index	3.75	4.41	0.66	5.44	5.42	-0.02	-0.03	0.00
Russell 1000 Active	11.25	12.73	1.48	6.31	6.03	-0.28	0.00	-0.10
Russell 3000 Index Funds	67.42	64.88	-2.54	6.23	6.21	-0.02	0.00	-0.01
Manager of Managers	7.50	8.85	1.35	6.23	7.13	0.90	0.00	0.07

## Small Cap Returns vs Russell 2000 Index

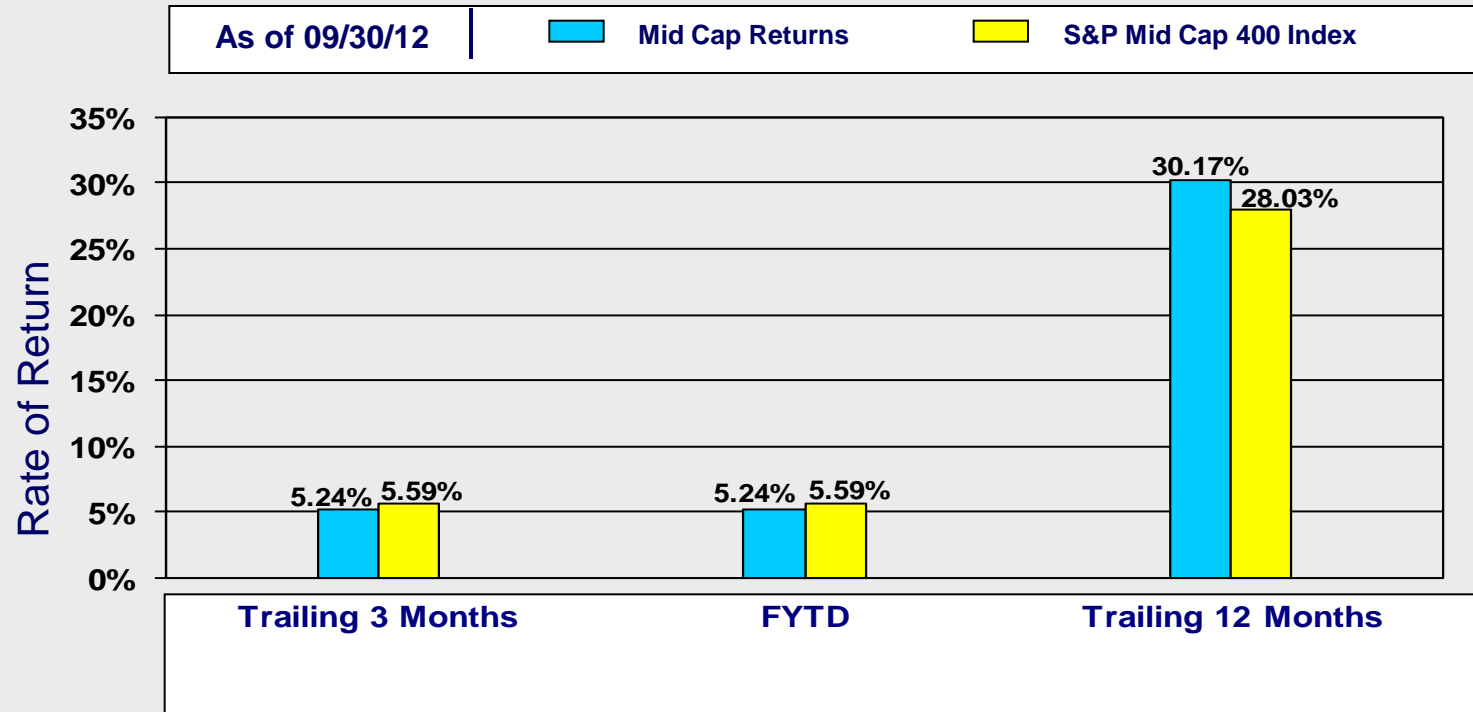
**\$22M** Under Management, **1%** of Total Funds



	3 Years	5 Years	10 Years
Plan Std Dev	22.3	24.2	19.6
Benchmark Std Dev	21.0	24.5	20.3

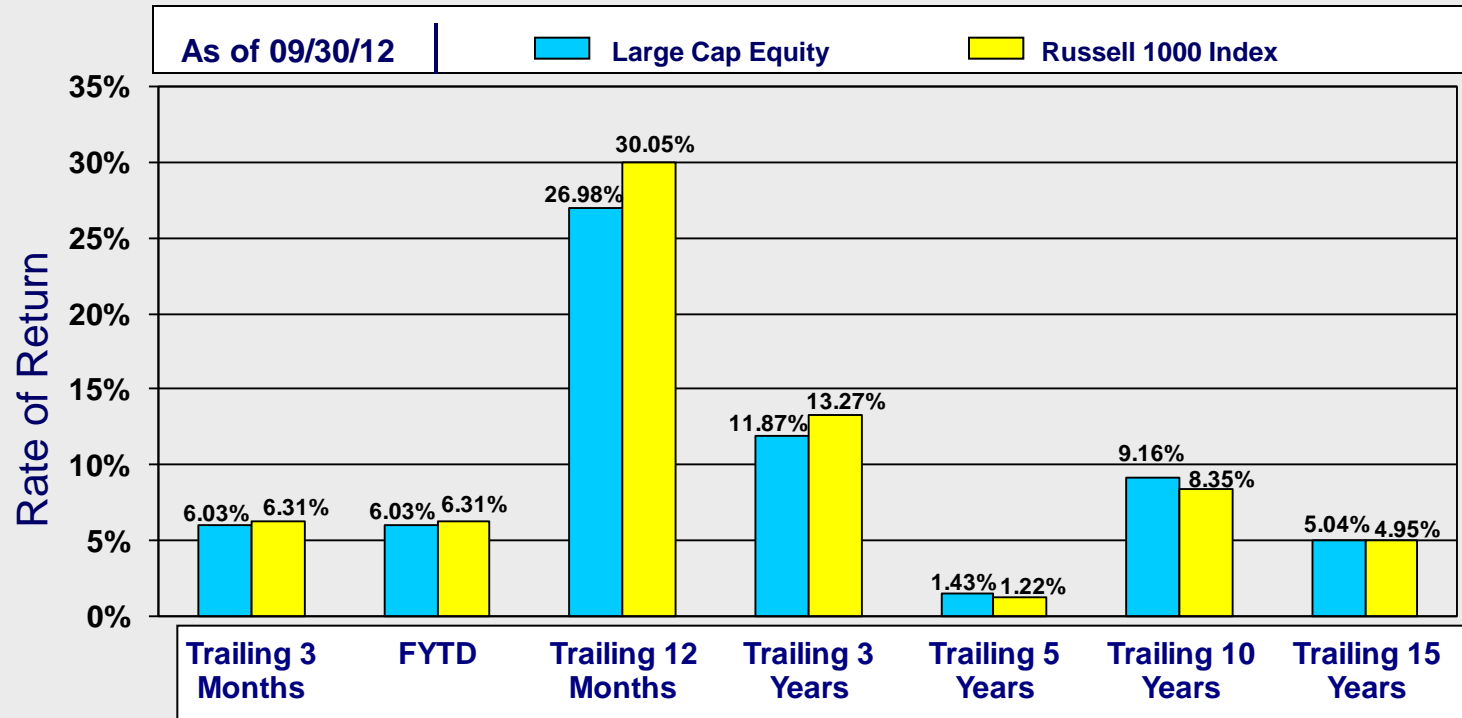
## Mid Cap Returns vs Russell MidCap Index

**\$138M** Under Management, **4%** of Total Funds



## Large Cap Returns vs Russell 1000 Index

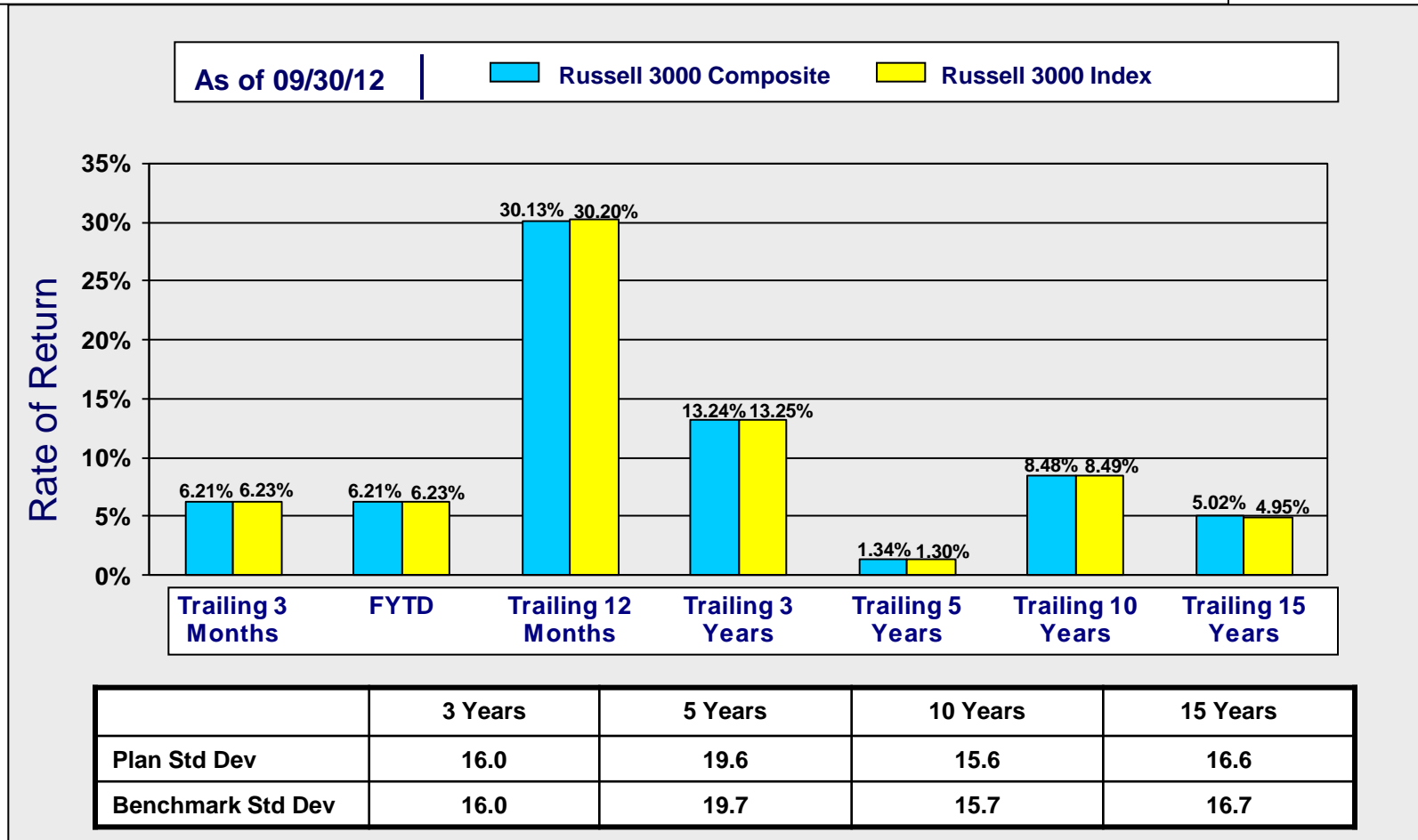
**\$150M** Under Management, **5%** of Total Funds



	3 Years	5 Years	10 Years	15 Years
Plan Std Dev	17.1	19.9	16.1	20.4
Benchmark Std Dev	15.7	19.4	15.4	16.5

## Russell 3000 Passive Returns vs Russell 3000 Index

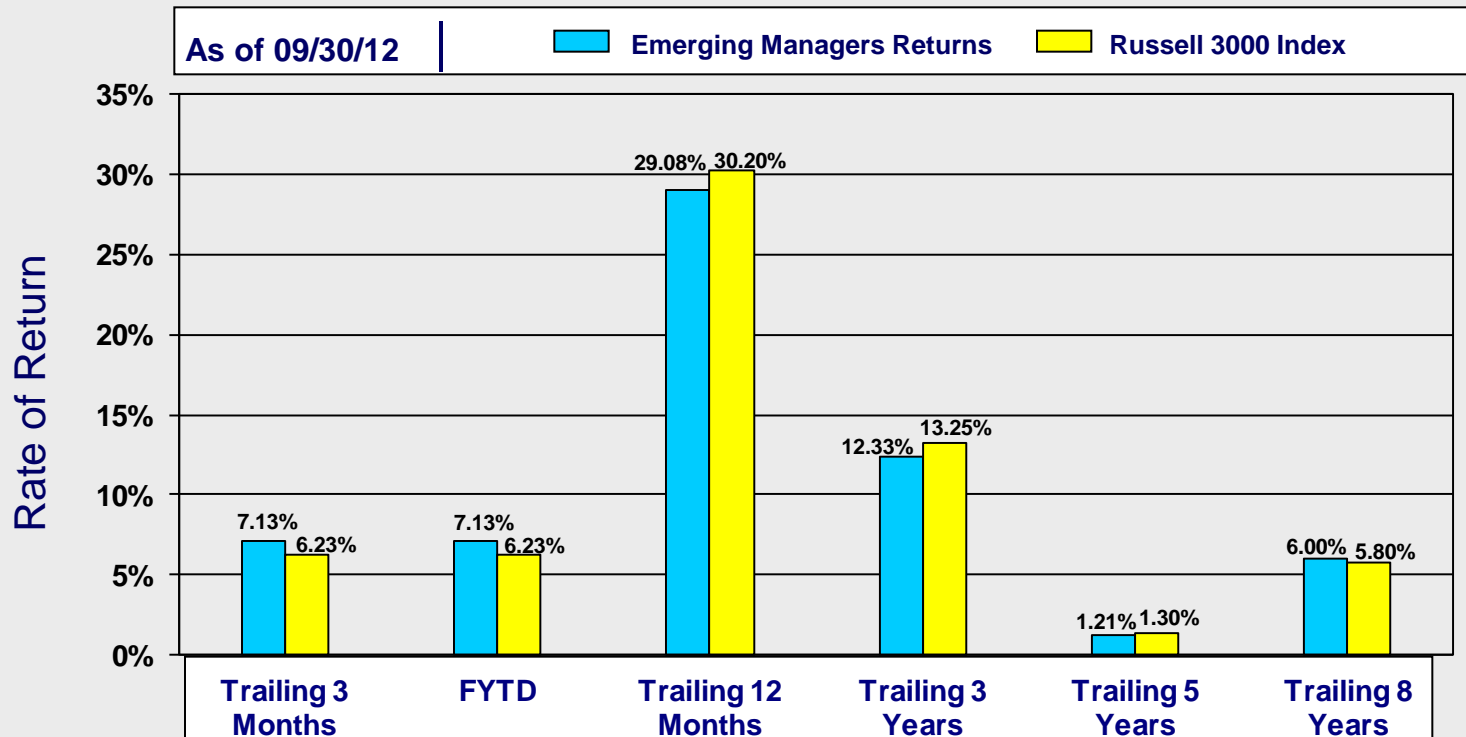
**\$764M** Under Management, **24%** of Total Funds





## Emerging Managers Returns vs Russell 3000 Index

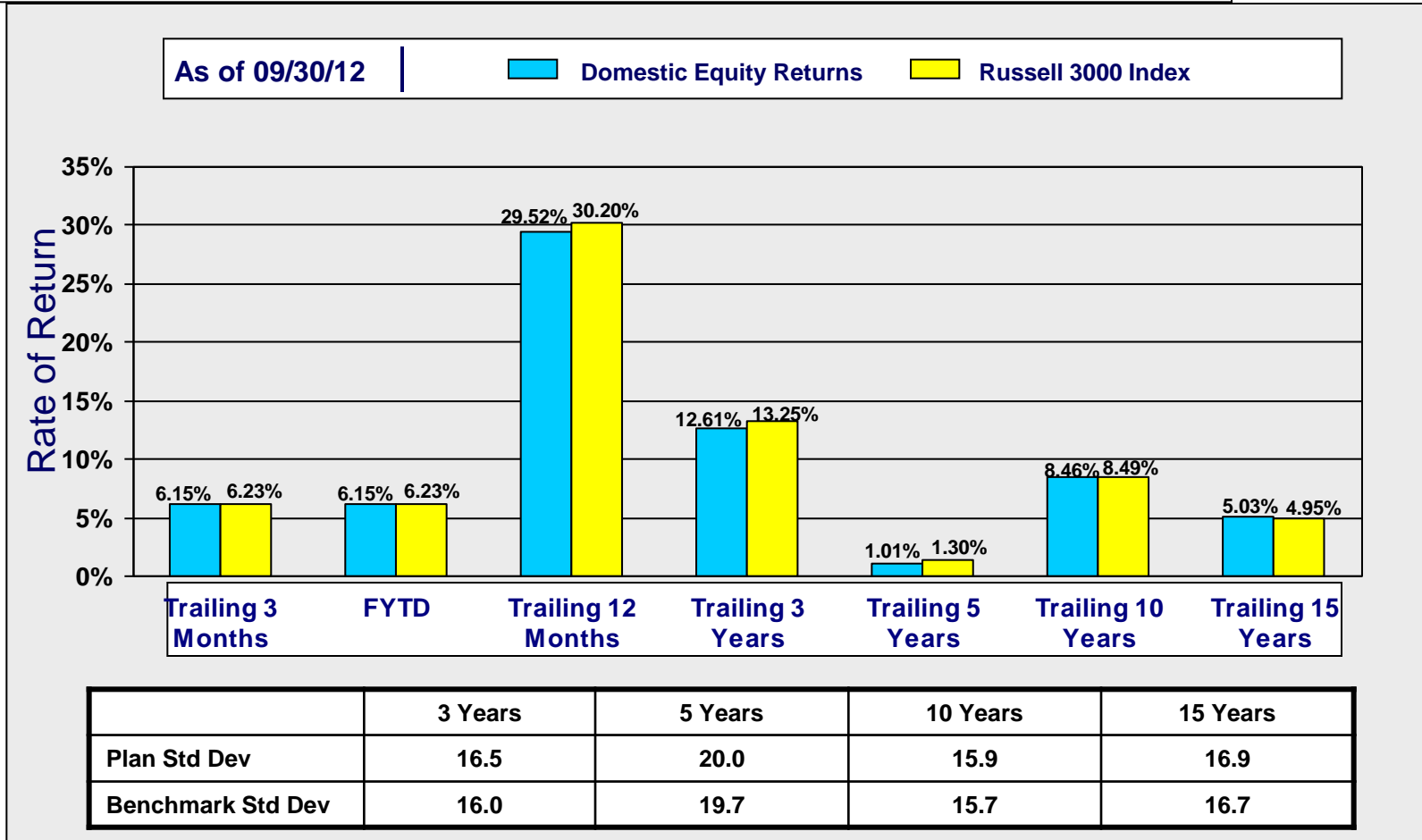
**\$104M** Under Management, **3%** of Total Funds



	3 Years	5 Years	8 Years
Plan Std Dev	17.7	21.0	17.5
Benchmark Std Dev	16.0	19.7	16.4

## Total Domestic Equity Returns vs Russell 3000 Index

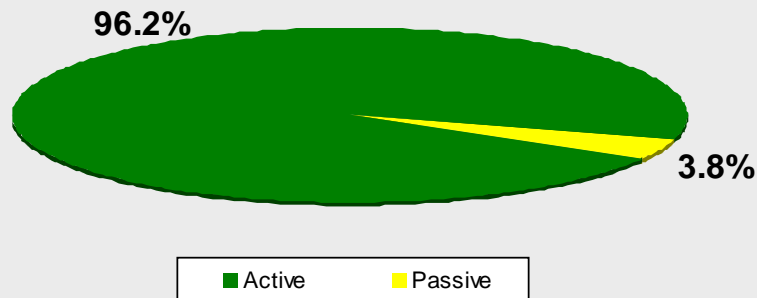
**\$1B** Under Management, **37%** of Total Funds



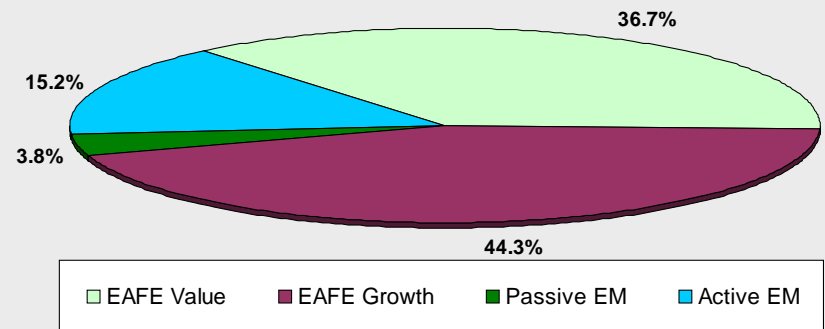
## International Equity Asset Allocation: September 30, 2012

**\$739M** Under Management, **23%** of Total Funds

Asset Allocation by Groups



Asset Allocation by Style

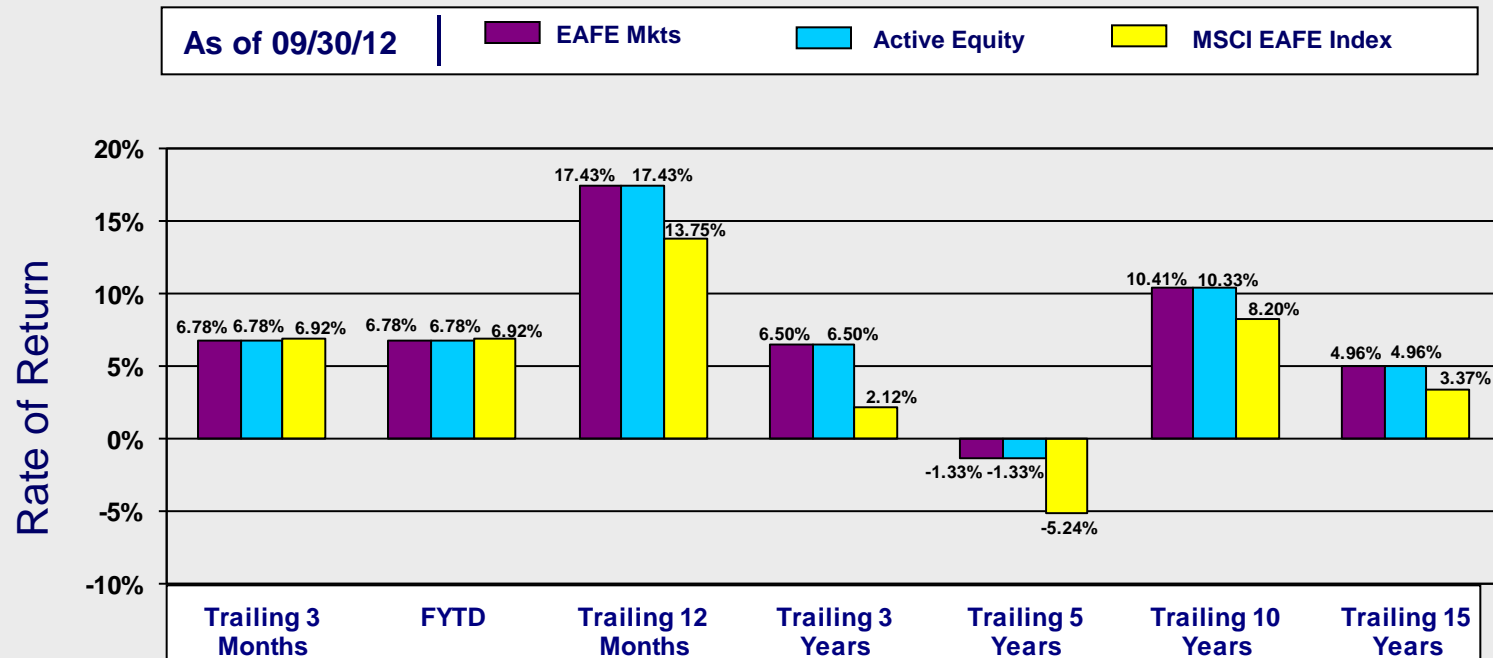


Value Added by Sectors

Sub Sector	Policy Weight	Actual Weight	Under/Over Weight	Index Return	Actual Return	Difference	Contribution to Out/Under Performance	
							Allocation	Management
EAFE Growth		44.32		6.40	7.39	0.99		0.72
EAFE Value		36.75		7.55	6.05	-1.50		0.60
ACTIVE EM		15.15		7.89	5.52	-2.37		0.06
PASSIVE EM		3.78		7.89	7.84	-0.04		-0.02

## EAFE Markets Returns vs MSCI EAFE Index

**\$599M** Under Management, **19%** of Total Funds



	3 Years	5 Years	10 Years	15 Years
EAFE Plan Std Dev	19.3	23.4	18.6	18.3
Active Plan Std Dev	19.3	23.4	18.6	18.5
Benchmark Std Dev	19.3	23.3	18.5	18.1

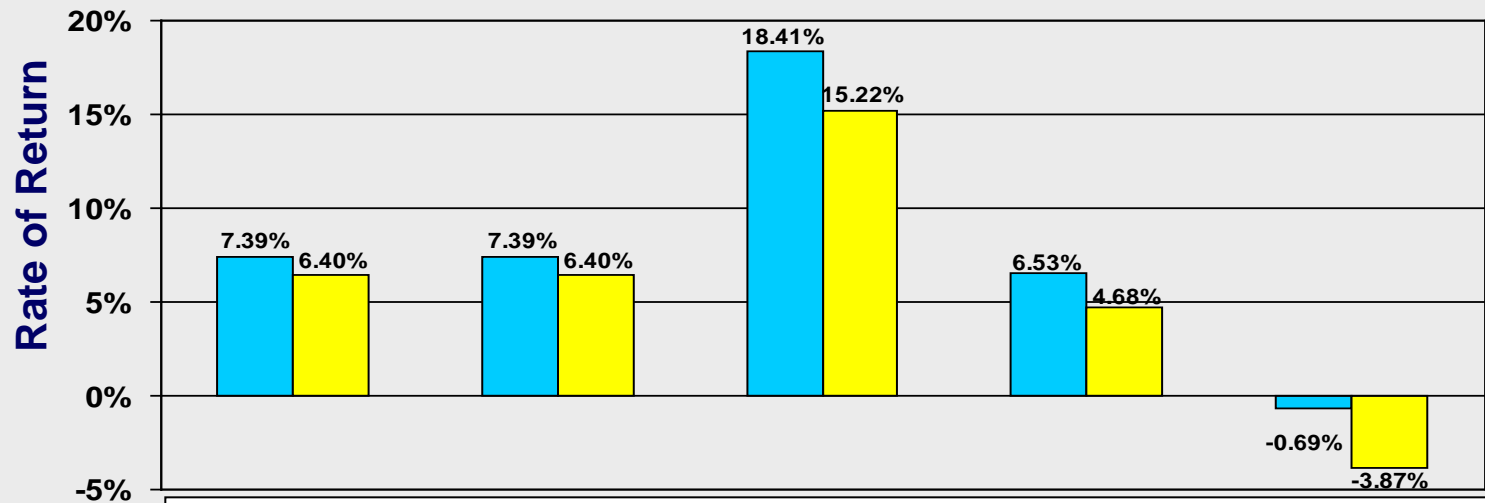
## International Growth Returns vs MSCI EAFE Growth Index

**\$328M** Under Management, **10%** of Total Funds

As of 09/30/12

International Growth Returns

MSCI EAFE Growth Index



Trailing 3  
Months

FYTD

Trailing 12  
Months

Trailing 3 Years

Trailing 5 Years

	3 Years	5 Years
Plan Std Dev	20.7	25.5
Benchmark Std Dev	18.8	22.4

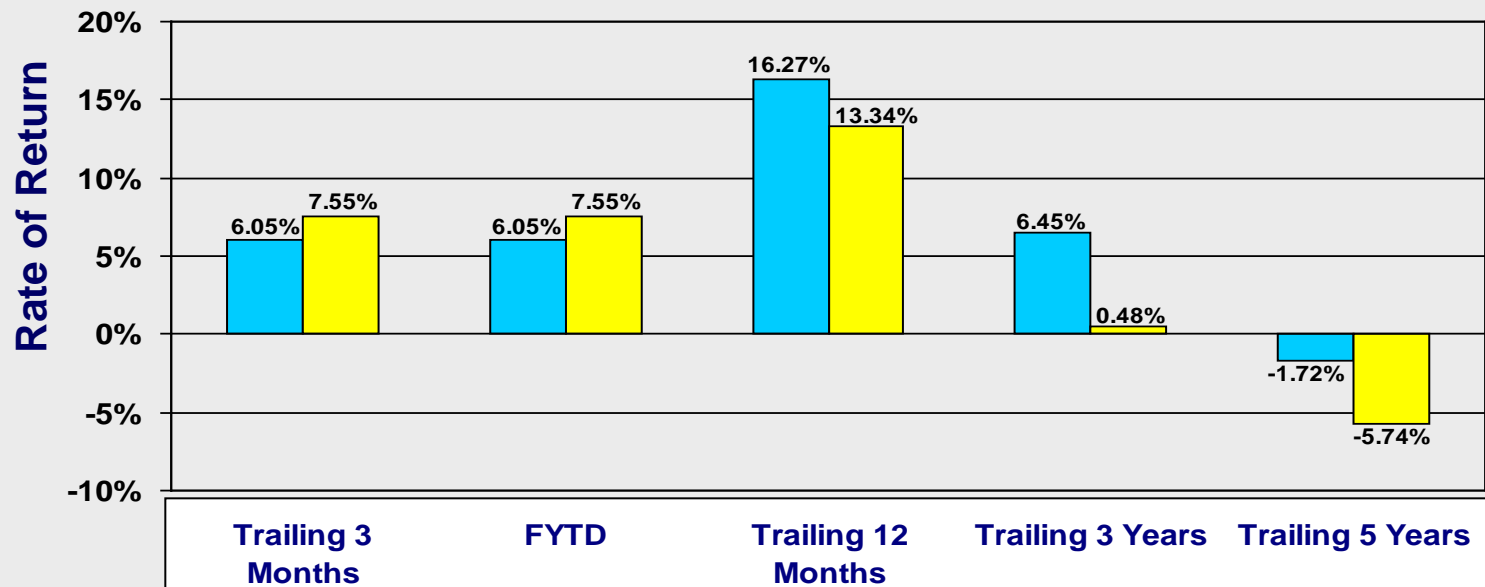
## International Value Returns vs MSCI EAFE Value Index

**\$271M** Under Management, **9%** of Total Funds

As of 09/30/12

International Value Returns

MSCI EAFE Value Index



	3 Years	5 Years
Plan Std Dev	17.9	21.3
Benchmark Std Dev	20.1	24.8

# Emerging Markets Returns vs MSCI Emerging Markets Index

**\$140M** Under Management, **4%** of Total Funds

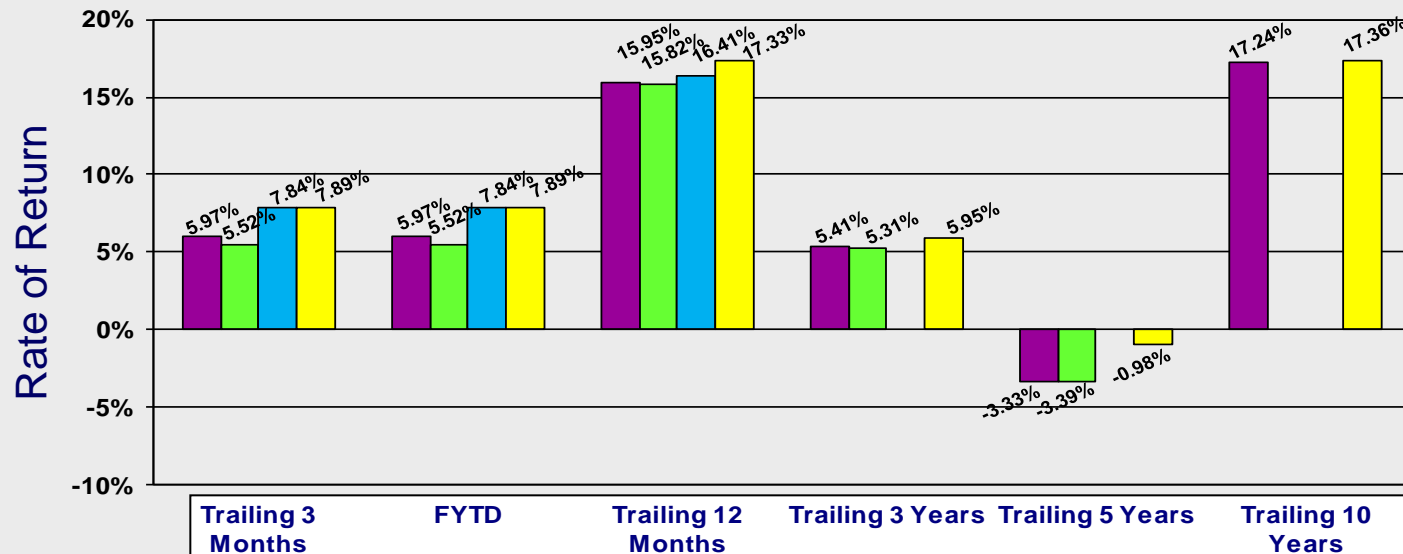
As of 09/30/12

Emerging Mkts Returns

Active Equity

Passive Equity

MSCI Emerging Mkts Index



	3 Years	5 Years	10 Years
Plan Std Dev	22.3	29.5	24.1
Active Plan Std Dev	22.4	29.6	****
Passive Plan Std Dev	****	****	****
Benchmark Std Dev	21.5	29.3	24.2

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

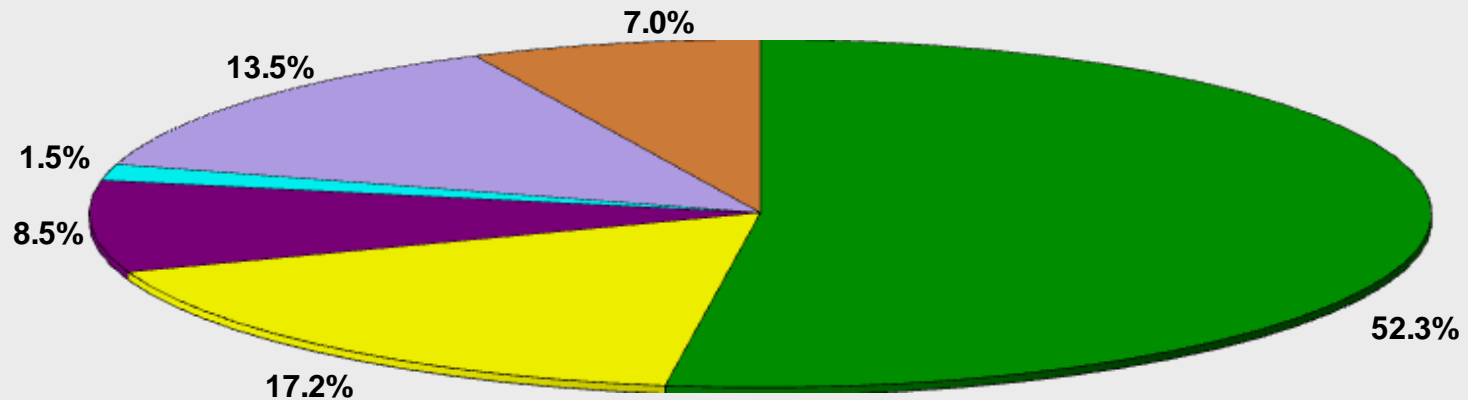
# **Fixed Income Analysis**



## Total Fixed Income Asset Allocation: September 30, 2012

**\$981M** Under Management, **33%** 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 September 30, 2012

**\$561M** Under Management, **18%** of Total Funds

### Asset Allocation by Groups



■ Treasury/Agency

■ Mortgage

■ Credit

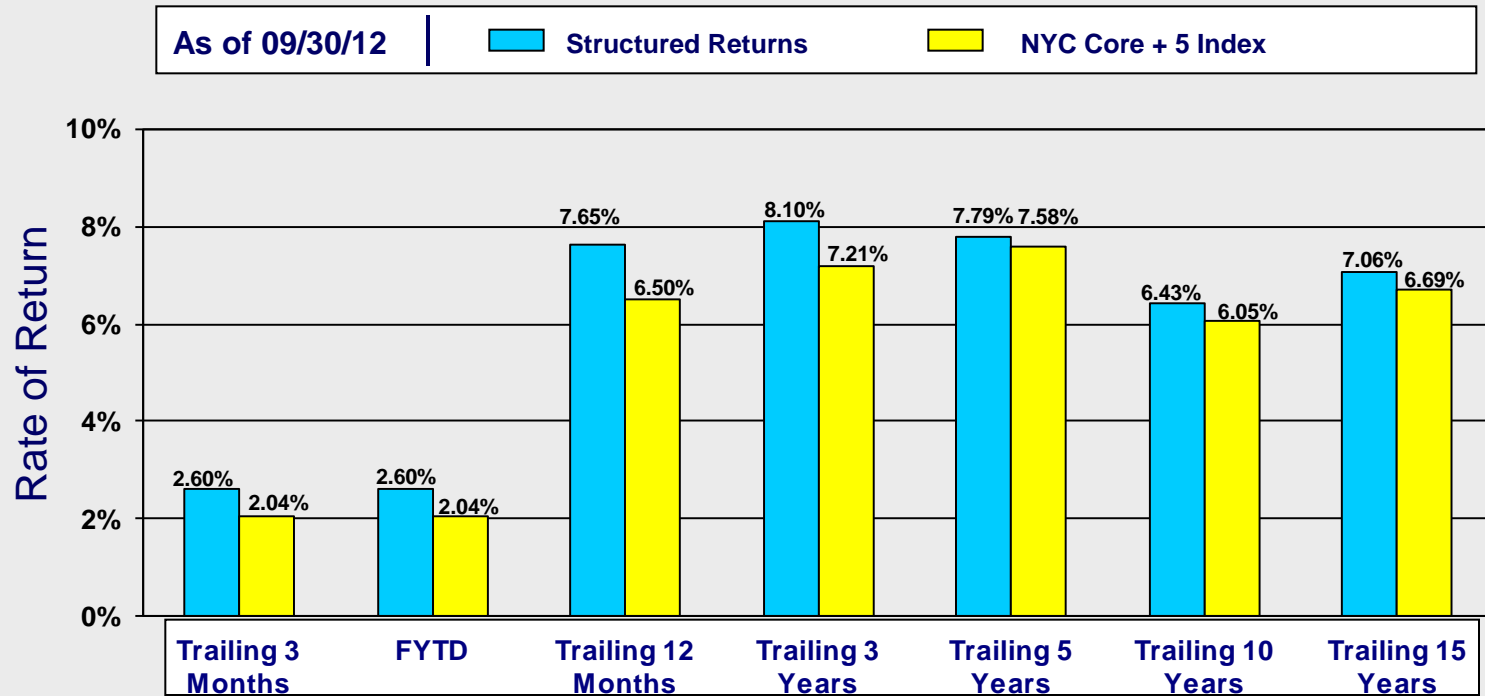
### Asset Allocation by Sectors

Sub Sector	Policy Weight	Actual Weight	Under/Over Weight	Index Return	Actual Return	Difference	Contribution to Out/Under Performance	
							Allocation	Management
Treasury/Agency	20.15	16.56	-3.59	0.82	0.79	-0.03	0.05	-0.01
Mortgage	40.68	43.49	2.81	1.11	2.03	0.92	-0.03	0.44
Credit	39.17	39.95	0.78	3.71	4.00	0.29	0.02	0.12

\*NYC Core +5 Breakdown

## Structured Returns vs NYC Core + 5 Index

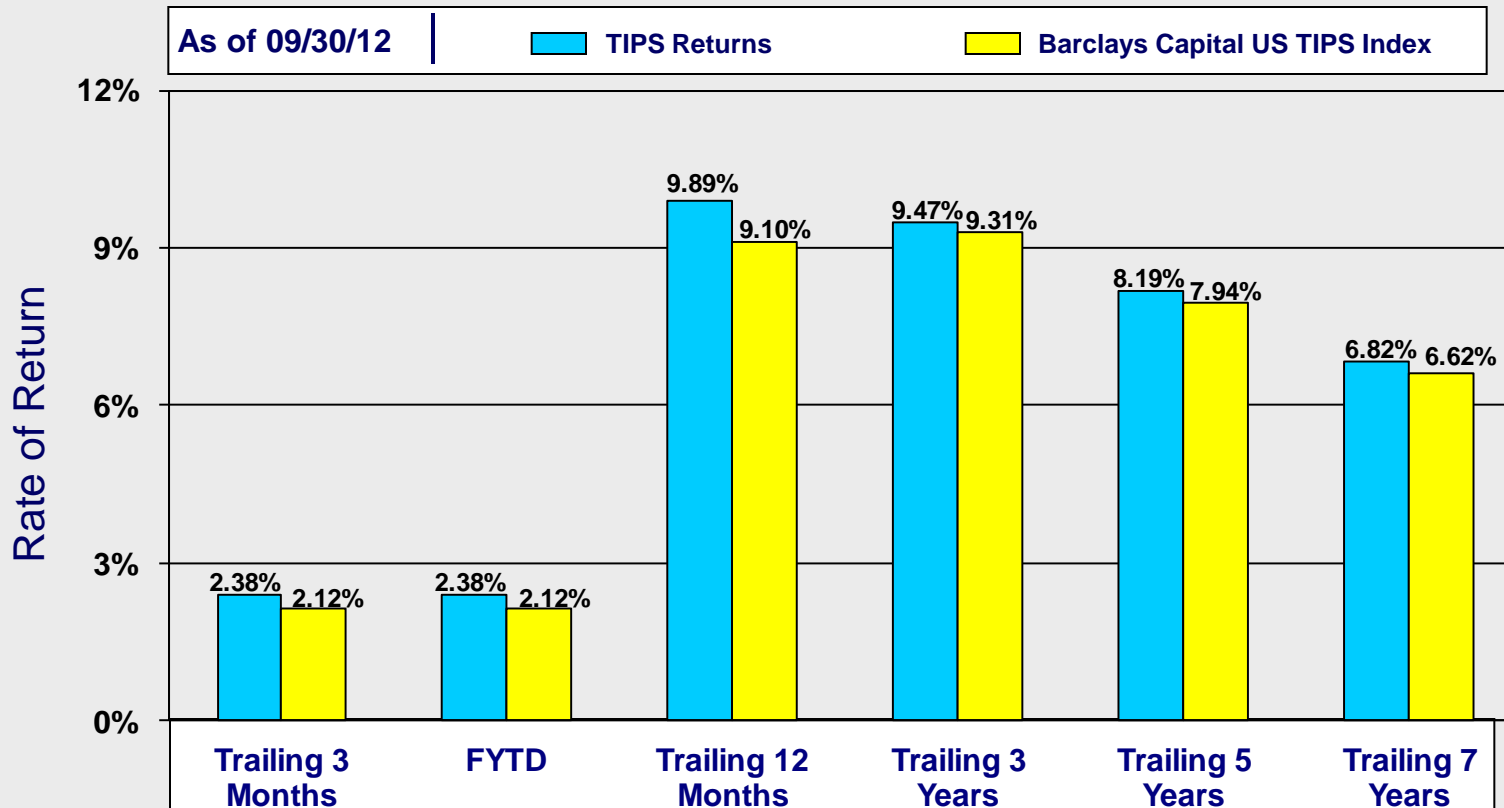
**\$561M** Under Management, **18%** of Total Funds



	3 Years	5 Years	10 Years	15 Years
Plan Std Dev	3.0	4.2	4.1	3.9
Benchmark Std Dev	3.2	4.4	4.3	4.1

## TIPS Returns vs Barclays Capital US TIPS Index

**\$145M** Under Management, **5%** of Total Funds



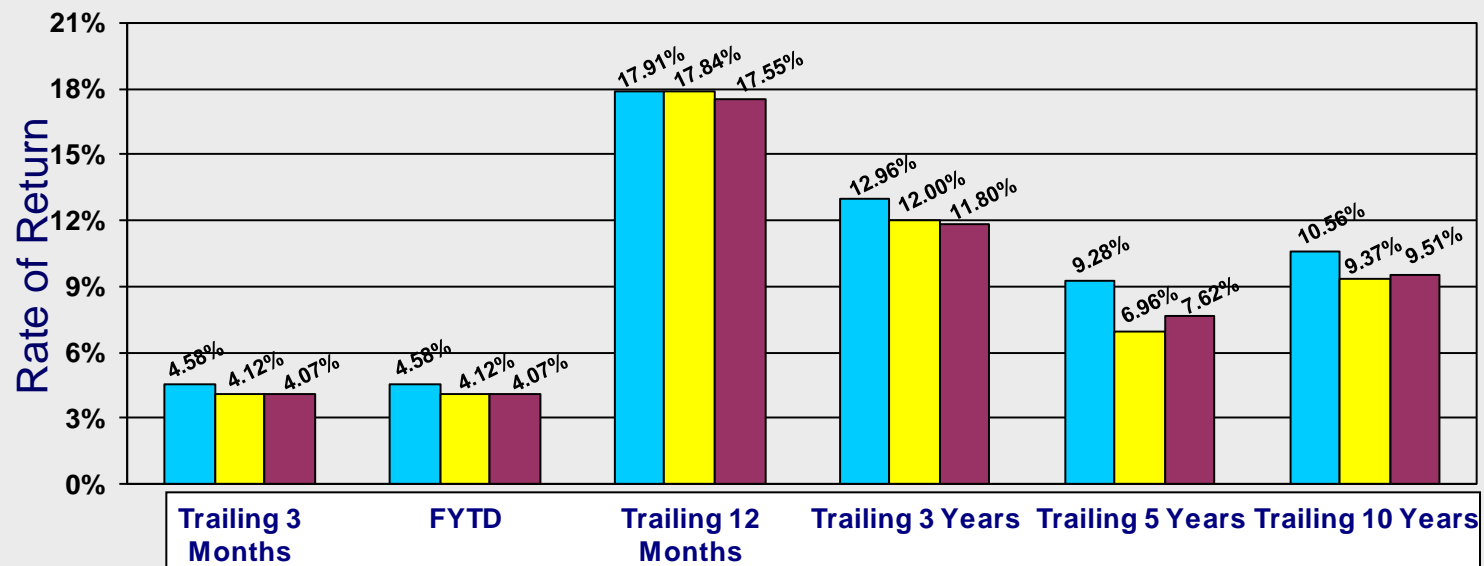
	3 Years	5 Years	7 Years
Plan Std Dev	4.6	7.6	6.8
Benchmark Std Dev	4.8	7.4	6.7

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

**\$185M** Under Management, **6%** of Total Funds

As of 09/30/12

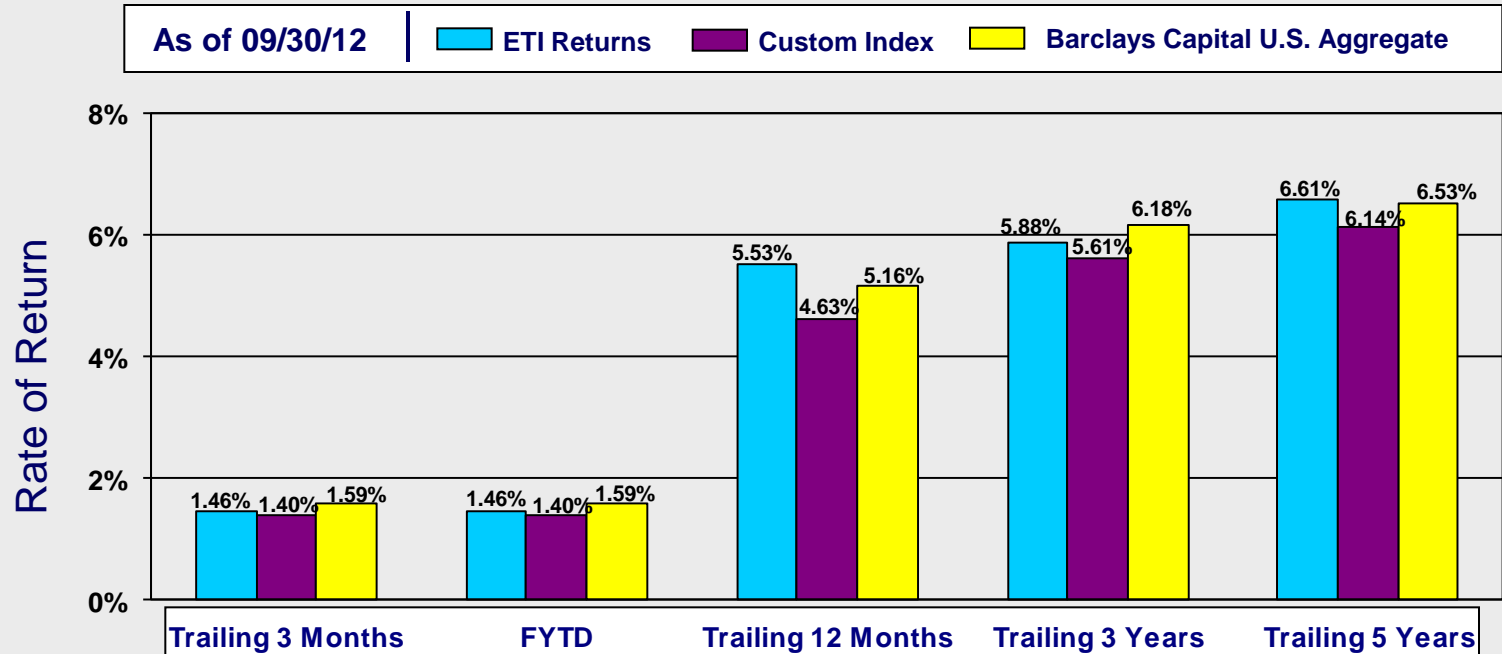
Enhanced Yield Citigroup BB& B Index Citigroup BB& B Capped Index



	3 Years	5 Years	10 Years
Plan Std Dev	6.6	11.3	8.9
Citigroup BB&B	6.2	11.8	9.3
Citigroup BB&B Capped	6.0	11.5	9.0

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

**\$16.1M** Under Management, **0.51%** of Total Funds



	3 Years	5 Years
Plan Std Dev	2.1	2.7
Custom Index Std Dev	2.3	2.9
BC US Aggreg Std Dev	2.7	3.5

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

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

# Appendix

---

# Consolidated Performance Report

Through September 30, 2012

Assets (\$MM)	% Total		3 Mos Jul-12 Sep-12	YTD Jan-12 Sep-12	1 Yr Oct-11 Sep-12	3 Yrs Oct-09 Sep-12	5 Yrs Oct-07 Sep-12	10 Yrs Oct-02 Sep-12	15 Yrs Oct-97 Sep-12
<b>EQUITY MANAGEMENT</b>									
<b>SMALL CAP</b>									
21.95	0.69	DARUMA -SCC	6.01	13.42	25.72	****	****	****	****
21.95	0.69	<b>TOTAL SMALL CAP CORE</b>	6.01	13.42	25.72	****	****	****	****
		RUSSELL 2000	5.25	14.23	31.91	****	****	****	****
		SMALL CAP CORE MEDIAN	5.37	13.25	29.61	****	****	****	****
21.95	0.69	<b>TOTAL SMALL CAP</b>	6.01	13.42	25.72	9.64	-1.79	6.83	****
		RUSSELL 2000	5.25	14.23	31.91	12.98	2.21	10.17	****
85.56	2.71	WELLINGTON MID CAP	5.13	17.48	31.20	****	****	****	****
85.56	2.71	<b>TOTAL MID CAP CORE</b>	5.13	17.48	31.20	****	****	****	****
		S&P MIDCAP 400	5.44	13.77	28.54	****	****	****	****
51.96	1.64	STATE STREET GA S&P 400	5.42	13.80	28.50	****	****	****	****
51.96	1.64	<b>TOTAL MID CAP PASSIVE</b>	5.42	13.80	28.50	****	****	****	****
		S&P MIDCAP 400	5.44	13.77	28.54	****	****	****	****
137.52	4.35	<b>TOTAL MID CAP</b>	5.24	16.06	30.17	****	****	****	****
		RUSSELL MIDCAP	5.59	14.00	28.03	****	****	****	****
<b>LARGE CAP</b>									
48.67	1.54	ZEVENBERGEN	3.79	8.81	17.27	9.51	2.29	11.27	5.91
		RUSSELL 3000 GROWTH	6.01	16.59	29.35	14.69	3.21	8.56	3.72
48.67	1.54	<b>TOTAL LARGE CAP GROWTH</b>	3.79	8.81	17.27	8.15	0.88	8.28	4.48
		LARGE CAP GROWTH MEDIAN	6.28	15.98	27.34	13.28	2.63	9.06	
101.29	3.21	ARONSON JOHNSON	7.14	16.73	32.23	13.44	0.77	****	****
		RUSSELL 1000 VALUE	6.51	15.75	30.92	11.83	-0.90	****	****
101.29	3.21	<b>TOTAL LARGE CAP VALUE</b>	7.14	16.73	32.23	13.44	0.77	****	****
		LARGE CAP VALUE MEDIAN	6.08	12.71	27.7	11.58	0.10	****	****
149.96	4.75	<b>TOTAL LARGE CAP</b>	6.03	14.04	26.98	11.87	1.43	9.16	5.04
		RUSSELL 1000	6.31	16.28	30.05	13.27	1.22	8.35	4.95



# Consolidated Performance Report

Through September 30, 2012

Assets (\$MM)	% Total		3 Mos Jul-12 Sep-12	YTD Jan-12 Sep-12	1 Yr Oct-11 Sep-12	3 Yrs Oct-09 Sep-12	5 Yrs Oct-07 Sep-12	10 Yrs Oct-02 Sep-12	15 Yrs Oct-97 Sep-12
<b>PROGRESS MANAGERS</b>									
2.46	0.08	FAN ASSET MGMT -LCG	5.91	16.02	26.95	12.96	2.09	7.92	****
12.46	0.39	JOHN HSU -LCC	4.63	12.48	24.19	11.07	1.42	11.38	****
20.26	0.64	HERNDON CAPITAL MGMT-LCV	6.01	17.92	27.31	14.06	5.65	****	****
3.96	0.13	HIGH POINTE LLC -LCG	6.35	16.87	32.51	****	****	****	****
4.71	0.15	LOMBARDIA CAPITAL -SCV	5.55	9.45	32.14	13.19	****	****	****
4.11	0.13	NICHOLS ASSET MGMT -SCG	7.13	15.65	35.95	****	****	****	****
14.22	0.45	REDWOOD INV -LCG	8.08	19.95	29.64	****	****	****	****
14.25	0.45	SEIZERT CAPITAL PTNRS -LCV	11.04	14.51	28.20	****	****	****	****
76.43	2.42	<b>TOTAL PROGRESS</b>	7.11	15.93	28.35	12.07	1.38	8.74	****
		RUSSELL 3000	6.23	16.13	30.20	13.25	1.30	8.49	****
<b>F.I.S. MANAGEMENT</b>									
2.71	0.09	APEX SCG	7.64	****	****	****	****	****	****
5.11	0.16	CHANNING -SCV	8.37	12.86	30.51	****	****	****	****
1.88	0.06	CUPPS CAPITAL SCG	5.94	18.24	25.49	17.66	****	****	****
1.07	0.03	CWC SCC	4.93	****	****	****	****	****	****
1.12	0.04	EUDAIMONIA -MICRO CG	6.42	17.27	33.27	12.20	****	****	****
2.87	0.09	HUBER CAP MGMT -SCV	9.21	22.47	42.93	****	****	****	****
3.37	0.11	NICHOLAS SCG	8.30	****	****	****	****	****	****
5.49	0.17	OPUS SCV	4.64	****	****	****	****	****	****
4.26	0.13	PUNCH SCC	7.90	****	****	****	****	****	****
27.87	0.88	<b>TOTAL F.I.S FUND MGMT</b>	7.17	13.40	31.13	13.09	****	****	****
		RUSSELL 2000	5.25	14.23	31.91	12.98	****	****	****
104.30	3.30	<b>TOTAL EMERGING MANAGERS</b>	7.13	15.24	29.08	12.33	1.21	****	****
		RUSSELL 3000	6.23	16.13	30.20	13.25	1.30	****	****

# Consolidated Performance Report

Through September 30, 2012

Assets (\$MM)	% Total		3 Mos Jul-12 Sep-12	YTD Jan-12 Sep-12	1 Yr Oct-11 Sep-12	3 Yrs Oct-09 Sep-12	5 Yrs Oct-07 Sep-12	10 Yrs Oct-02 Sep-12	15 Yrs Oct-97 Sep-12
		<b>RUSSELL 3000</b>							
764.43	24.20	BLACKROCK R3000	6.21	16.10	30.13	13.24	1.34	8.48	****
764.43	24.20	<b>TOTAL RUSSELL 3000</b>	6.21	16.10	30.13	13.24	1.34	8.48	5.02
		RUSSELL 3000	6.23	16.13	30.20	13.25	1.30	8.49	4.95
361.78	11.45	<b>TOTAL ACTIVE DOMESTIC EQUITY</b>	6.13	15.10	28.41	11.62	0.56	8.57	3.76
816.38	25.84	<b>TOTAL PASSIVE DOMESTIC EQUITY</b>	6.16	15.95	30.02	13.09	1.26	8.45	5.34
1178.16	37.29	<b>TOTAL DOMESTIC EQUITY</b>	6.15	15.69	29.52	12.61	1.01	8.46	5.03
		<b>INTERNATIONAL EQUITY</b>							
		<b>DEVELOPED MARKETS</b>							
327.53	10.37	BAILLIE	7.39	11.65	18.41	6.53	-0.69	****	****
		MSCI EAFE GROWTH	6.40	10.86	15.22	4.68	-3.87	****	****
271.39	8.59	SPRUCEGROVE	6.05	11.30	16.27	6.45	-1.72	****	****
		MSCI EAFE VALUE	7.55	10.23	13.34	0.48	-5.74	****	****
599.07	18.96	<b>TOTAL ACTIVE DEVELOPED MARKETS</b>	6.78	11.49	17.43	6.50	-1.33	10.33	4.96
599.07	18.96	<b>TOTAL DEVELOPED MARKETS</b>	6.78	11.49	17.43	6.50	-1.33	10.41	4.96
		MSCI EAFE (NET DIVIDEND)	6.92	10.08	13.75	2.12	-5.24	8.20	3.37
		INTERNATIONAL EQUITY MEDIAN	7.19	11.87	16.98	4.50	-3.10	9.63	5.76
		<b>EMERGING MARKETS</b>							
111.95	3.54	STATE STREET EMERGING MARKETS	5.52	9.38	15.82	5.32	-3.39	****	****
111.95	3.54	<b>TOTAL ACTIVE EMERGING MARKETS</b>	5.52	9.38	15.82	5.31	-3.39	****	****
		MSCI EMERGING MARKET FREE	7.89	12.33	17.33	5.95	-0.98	****	****
27.91	0.88	BLACKROCK EMERGING MARKETS	7.84	12.07	16.41	****	****	****	****
27.91	0.88	<b>TOTAL PASSIVE EMERGING MARKETS</b>	7.84	12.07	16.41	****	****	****	****
		MSCI EMERGING MARKET FREE	7.89	12.33	17.33	****	****	****	****
139.86	4.43	<b>TOTAL EMERGING MARKETS</b>	5.97	9.91	15.95	5.41	-3.33	17.24	****
		MSCI EMERGING MARKET FREE	7.89	12.33	17.33	5.95	-0.98	17.36	****
		EMERGING MARKET MEDIAN	7.22	12.61	17.69	6.64	0.52	18.11	****
738.93	23.39	<b>TOTAL INTERNATIONAL EQUITY</b>	6.62	11.19	17.14	6.24	-1.78	11.62	5.42

# Consolidated Performance Report

Through September 30, 2012

Assets (\$MM)	% Total		3 Mos Jul-12 Sep-12	YTD Jan-12 Sep-12	1 Yr Oct-11 Sep-12	3 Yrs Oct-09 Sep-12	5 Yrs Oct-07 Sep-12	10 Yrs Oct-02 Sep-12	15 Yrs Oct-97 Sep-12
<b>PRIVATE EQUITY INVESTMENTS</b>									
13.04	0.41	FAIRVIEW PRIVATE EQUITY FD	****	****	****	****	****	****	****
55.13	1.75	MESIROW PTNRS FD III	****	****	****	****	****	****	****
16.31	0.52	MESIROW PTNRS FD IV	****	****	****	****	****	****	****
11.77	0.37	MESIROW PTNRS FD V	****	****	****	****	****	****	****
4.19	0.13	WARBURG PINCUS XI	****	****	****	****	****	****	****
100.44	3.18	<b>TOTAL PRIVATE EQUITY</b>	<b>0.53</b>	<b>5.21</b>	<b>3.50</b>	<b>15.24</b>	<b>3.49</b>	<b>****</b>	<b>****</b>
<b>PRIVATE REAL ESTATE</b>									
0.66	0.02	BROOKFIELD STRATEGIC RE PTNRS	****	****	****	****	****	****	****
4.33	0.14	FRANKIN TEMPLETON FD	****	****	****	****	****	****	****
15.73	0.50	LASALLE US PROPERTY FD	****	****	****	****	****	****	****
48.23	1.53	UBS TRUMBULL PROPERTY FD	****	****	****	****	****	****	****
68.95	2.18	<b>TOTAL PRIVATE REAL ESTATE</b>	<b>0.16</b>	<b>10.45</b>	<b>13.54</b>	<b>****</b>	<b>****</b>	<b>****</b>	<b>****</b>
2086.49	66.05	<b>TOTAL EQUITY - PUBLIC &amp; PRIVATE</b>	<b>5.84</b>	<b>13.38</b>	<b>23.02</b>	<b>10.35</b>	<b>0.08</b>	<b>9.32</b>	<b>5.28</b>

# Consolidated Performance Report

Through September 30, 2012

Assets (\$MM)	% Total		3 Mos Jul-12 Sep-12	YTD Jan-12 Sep-12	1 Yr Oct-11 Sep-12	3 Yrs Oct-09 Sep-12	5 Yrs Oct-07 Sep-12	10 Yrs Oct-02 Sep-12	15 Yrs Oct-97 Sep-12
<b>FIXED INCOME MANAGEMENT</b>									
<b>GOVERNMENT</b>									
92.84	2.94	STATE STREET	0.79	4.15	5.72	9.39	9.42	6.86	7.77
92.84	2.94	ALL TREASURY / AGENCY	0.79	4.15	5.72	9.39	9.42	6.69	7.63
		NYC - TREASURY AGENCY PLUS 5	0.82	4.11	5.67	9.37	9.28	6.68	7.67
<b>MORTGAGE</b>									
243.76	7.72	PIMCO	2.03	4.66	5.55	6.61	7.12	5.86	6.70
		CITIGROUP MORTGAGE INDEX	1.11	2.82	3.76	5.07	6.42	5.29	6.06
<b>CREDIT</b>									
128.84	4.08	PRUDENTIAL CREDIT	3.64	8.40	10.54	8.77	****	****	****
95.05	3.01	TAPLIN, CANIDA	4.50	9.37	11.48	9.94	7.57	7.14	7.21
223.89	7.09	ALL INVESTMENT GRADE CREDIT	4.00	8.81	10.95	9.26	7.32	7.01	7.05
		NYC - INVESTMENT GRADE CREDIT	3.71	8.34	10.21	8.47	7.57	6.40	6.62
560.49	17.74	TOTAL STRUCTURED	2.60	6.19	7.65	8.10	7.79	6.43	7.06
		NYC - CORE PLUS FIVE	2.04	5.10	6.50	7.21	7.58	6.05	6.69
<b>ACTIVE TIPS MANAGERS</b>									
144.68	4.58	PIMCO-TIPS-MTA	2.38	6.77	9.89	9.47	8.19	****	****
144.68	4.58	TOTAL ACTIVE TIPS MANAGERS	2.38	6.77	9.89	9.47	8.19	****	****
		BARCLAYS CAPITAL US TIPS INDEX	2.12	6.25	9.10	9.31	7.94	****	****
<b>ENHANCED YIELD</b>									
97.63	3.09	LOOMIS SAYLES & CO	5.21	13.78	19.05	14.20	10.33	11.97	7.88
		BofA(ML-MST II 7-03/BB&B PRIOR)	4.61	12.02	18.94	12.61	9.06	10.72	7.10
86.95	2.75	SHENKMAN ENHANCED YIELD	****	****	****	****	****	****	****
184.59	5.84	ALL ENHANCED YIELD	4.58	12.28	17.91	12.96	9.28	10.56	6.09
		CITIGROUP BB & B	4.12	11.12	17.84	12.00	6.96	9.37	6.23
		CITIGROUP BB & B CAPPED	4.07	10.77	17.55	11.80	7.62	9.51	****
		ENHANCED YIELD MEDIAN	4.39	11.05	17.42	12.14	8.88	9.91	7.91

# Consolidated Performance Report

Through September 30, 2012

Assets (\$MM)	% Total		3 Mos Jul-12 Sep-12	YTD Jan-12 Sep-12	1 Yr Oct-11 Sep-12	3 Yrs Oct-09 Sep-12	5 Yrs Oct-07 Sep-12	10 Yrs Oct-02 Sep-12	15 Yrs Oct-97 Sep-12
		<b>BANK LOANS</b>							
75.10	2.38	BABSON BL MTA	****	****	****	****	****	****	****
75.10	2.38	<b>TOTAL BANK LOANS</b>	****	****	****	****	****	****	****
		CREDIT SUISSE LEVERAGED LOAN INDEX	3.14	7.80	10.74	7.75	4.46	5.57	4.92
		<b>ETI</b>							
2.78	0.09	ACCESS/RBC	1.49	3.99	5.23	5.27	7.29	****	****
11.76	0.37	AFL-CIO HOUSING INV TRUST	1.48	4.16	5.73	6.07	6.55	****	****
0.12	0.00	CFSB-PPAR	1.07	5.46	6.71	7.90	7.87	****	****
0.28	0.01	CCD-PPAR	2.49	8.71	10.24	9.25	9.54	****	****
0.10	0.00	LIIF-PPAR	1.41	4.46	5.64	5.38	****	****	****
0.07	0.00	NCBCI-PPAR	2.85	6.85	10.32	7.27	****	****	****
1.03	0.03	CPC TERM LOAN	0.62	1.89	2.45	2.19	2.96	****	****
16.14	0.51	<b>TOTAL ETI (WITH CASH)</b>	1.44	4.05	5.48	5.65	6.44	4.93	5.15
		BERS CUSTOM ETI INDEX (NO CASH)	1.40	3.57	4.63	5.61	6.14	****	****
		BARCLAYS CAPITAL AGGREGATE	1.59	3.99	5.16	6.18	6.53	5.32	6.15
1072.36	33.94	<b>TOTAL FIXED INCOME</b>	2.46	6.20	7.97	8.08	7.39	6.69	6.68
0.27	0.01	SECURITIES LENDING	****	****	****	****	****	****	****
91.31	2.89	SHORT TERM INVESTMENTS	0.12	0.39	0.55	0.58	1.67	2.41	3.42
0.05	0.00	BNY - CD	****	****	****	****	****	****	****
3159.12	100.00	<b>TOTAL BOARD OF EDUCATION</b>	4.67	10.91	17.67	9.67	2.41	8.56	6.02
		BOARD OF ED POLICY BENCHMARK	5.28	11.97	19.69	9.69	2.30	8.47	5.76

## Actual And Estimated Fees

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM				
ACTUAL FEES FOR FISCAL YEAR ENDING JUNE 30, 2011 AND ESTIMATED FEES FOR FY 2012 UPDATED THROUGH DECEMBER 2011				
	Actual			Estimated
	2011			2012
INVESTMENT STYLE (EQUITIES)	BASIS POINTS			BASIS POINTS
Small Cap	49.92			59.93
Small Cap Core	49.92			59.93
Mid Cap	24.01			59.09
Small Cap Core	24.01			59.09
Large Cap	17.92			24.95
Large Cap Growth	15.61			23.60
Large Cap Value	19.26			25.64
Emerging Managers (U.S. Equities)	52.99			92.72
Passive Equities	0.30			0.39
Int'l Active Equities (EAFE)	22.81			29.22
Growth	24.52			27.44
Value	20.72			31.37
Emerging Markets	21.14			45.50

## Actual And Estimated Fees

NEW YORK CITY BOARD OF EDUCATION RETIREMENT SYSTEM				
ACTUAL FEES FOR FISCAL YEAR ENDING JUNE 30, 2011 AND ESTIMATED FEES FOR FY 2012 UPDATED THROUGH DECEMBER 2011				
	Actual			Estimated
	2011			2012
INVESTMENT STYLE (Fixed Income)	BASIS POINTS			BASIS POINTS
Structured Program	11.70			7.89
Government Sector	4.63			5.00
Mortgage Sector	17.39			8.80
Investment Grade Credit Sector	7.86			8.12
TIPS	8.17			10.00
Active TIPS	8.17			10.00
Enhanced Yield	36.39			25.32
Targeted - Access Voyageur	26.29			28.75
Targeted - AFL-CIO	38.50			44.00
In-House Short Term	0.00			0.00
Total Overall*	14.29			18.55
*Only Public Markets fees are calculated in the overall total				

## Securities Lending Income

Through September 30, 2012

	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 (9 Months)	406,000	812,000	400,000
Since Inception	<u>\$7,696,000</u>	<u>\$10,509,000</u>	<u>\$3,929,000</u>

Note: Inception 4/89



## Footnotes

### Through September 30, 2012

- 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 September 30, 2012

## **General Notes**

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

## **Page Specific**

### **Page 18- 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 September 30, 2012

## Page 20- 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 \* 42.70%*  
*International Developed (EAFE) Markets: MSCI EAFE \* 17%*  
*International Emerging Markets: MSCI Emerging Markets \* 5%*  
*Private Equity: Russell 3000 + 500 b.p. per annum \* 3.18%*  
*Private Real Estate: NFI - ODCE Net \* 2.12%*  
*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 September 30, 2012

### **Page 23 - 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 29- 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 43 – Structured Fixed Income Asset Allocation**

- See Domestic Equity Asset Allocation for explanation

### **Page 47 – 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