



Teachers' Retirement System
of New York City
Performance Overview as of June 30, 2017

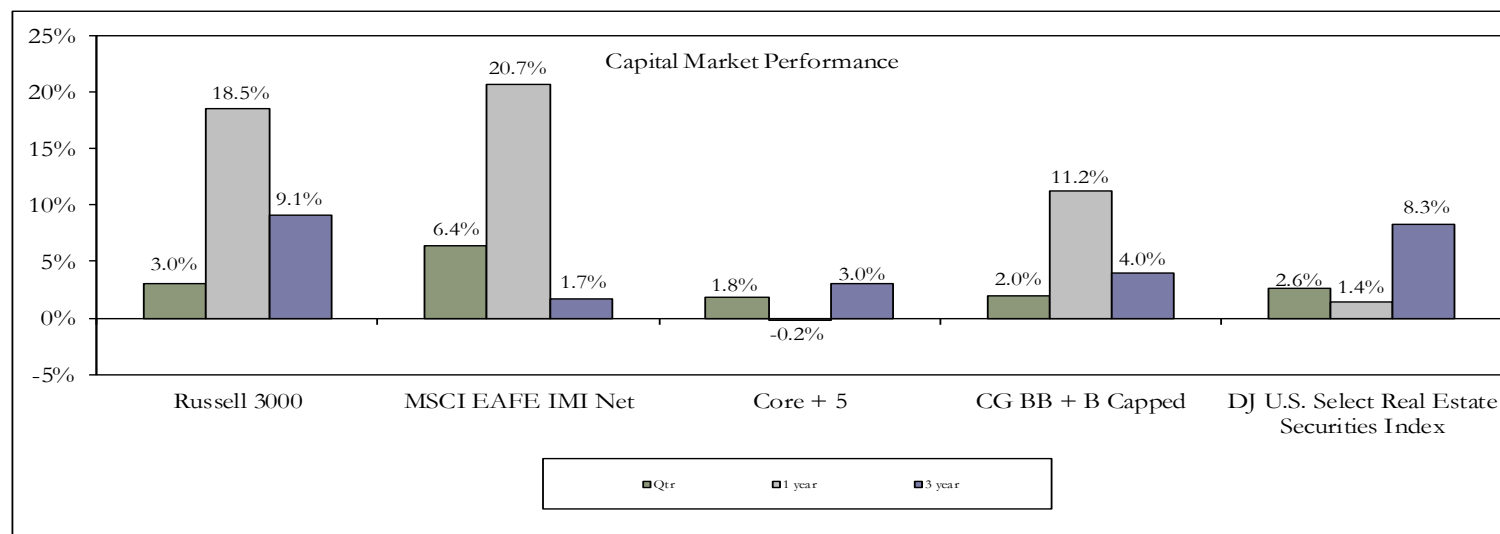
Total Fund Overview

Teachers' Retirement System of New York City

Table of Contents:

Consultant's Commentary & Performance Charts	p.3
Appendix A - Consolidated Performance Report	p.27
Appendix B - Public Markets Manager Performance Detail	p.35
Appendix C - Alternative Assets Manager Performance Detail	p.47
Appendix D - Footnotes	p.57

Through June 30, 2017



Market Backdrop: Global equity markets closed the second quarter with positive performance. U.S. equity markets continued their post-election run as the outlook for domestic growth improved. For the quarter, the U.S. equity market returned 3.0% (proxied by the Russell 3000 Index). Both non-U.S. developed and emerging equity markets outperformed the U.S. market in the quarter. Developed international equity returned 6.4% (MSCI EAFE Index in USD terms) during the quarter while emerging markets generated a similar 6.4% return (MSCI Emerging Markets Index in USD terms). Broad fixed income markets produced modest gains during the quarter as long-term yields moved down despite the Fed rate hike in June. The Bloomberg Barclays Aggregate Bond Index returned 1.5% in the quarter. High yield and bank loans also produced modest positive performance in the quarter with the Bloomberg Barclays High Yield Index returning 2.3% and the Credit Suisse Leveraged Loan Index returning 0.8%. Emerging Market Debt continued to show strong performance across USD denominated debt as well as bonds denominated in local currency. The JPM EMBI Global Diversified, an index composed of emerging debt denominated in USD, returned 2.0%, while locally denominated debt, measured by the JPM GBI-EM Global Diversified, produced even better performance (+2.5%). Commodities continued to show weak performance for the quarter as the S&P GSCI and Bloomberg Commodity indexes declined 5.5% and 3.0%, respectively.

Through June 30, 2017



Total Fund Performance: The Teachers' Total Fund returned 3.05% net of fees for the quarter ending June 30, 2017, underperforming the policy benchmark by 40 basis points due to modest losses from both asset allocation and active management. During the quarter, deviations from target allocations, primarily, an underweight to U.S. Treasuries had a negative impact of about 27 basis points. Active management also detracted slightly from returns for the quarter, almost entirely due to private equity detracting 14 basis points of Total Fund performance. Due primarily to very strong global equity market returns, the Total Fund experienced robust absolute returns for the Fiscal Year ending June 30, 2017, returning 12.66% net of fees, but underperformed the benchmark by 43 basis points. For the three-year period ending June 30, 2017, the Total Fund underperformed its benchmark, with a return of 5.59%, net of fees, versus the benchmark return of 6.09%. Please note that all composite and manager performance data in the sections below is reported net of fees. The Total Fund fees during the second quarter of 2017 have been estimated at approximately 6 basis points.

- **Total Fund Asset Allocation - \$66.0 Billion:** As of June 30, 2017, the Fund had total assets of \$66.0 billion, up from \$63.8 billion on March 31, 2017. In the Growth segment of the Total Fund, underweights to non-core and opportunistic private real estate of 5.0% were offset by overweights to REITs, consistent with the strategy to invest assets in more liquid assets while awaiting private real estate commitments and drawdowns. In the Deflation Protection segment of the Fund, U.S. Treasuries were almost 3% below long term targets, consistent with the decision to invest this new allocation over a period of time. Finally, in the Inflation Protection segment of the Fund, core real estate and infrastructure remain about 4.2% below target in aggregate, pending commitments to and capital calls from private funds. As of June 30, 2017, the private equity, infrastructure, and private real estate invested allocation was 9.1% versus their aggregate long-term allocation of 13.0%.
- **U.S. Equity - \$19.9 Billion, 30% of Fund:** The U.S. equity composite outperformed the broad U.S. equity market (proxied by the Russell 3000 Index) by 5 basis points with a return of 3.07%. Approximately 98% of the U.S. equity composite is allocated to passively managed mandates. The Small Cap active composite (the largest active composite with about 2% of U.S. equity assets) outperformed its benchmark by over 6%. For the Fiscal Year ending June 30, 2017 the U.S. equity composite returned 18.68% versus the Russell 3000 Index's return of 18.51%. Over the three-year period ending June 30, 2017, the U.S. equity composite has tracked the 9.10% return of the Russell 3000 Index closely, lagging by 10 basis points.
- **Developed International Equity - \$8.1 Billion, 12% of Fund:** Non-U.S. developed equity markets, as measured by the MSCI EAFE IMI Net Dividends Index, returned 6.40% in U.S. dollar terms during the second quarter of 2017 (3.03% in local currency terms). For the same time period, the Fund's total developed international equity composite returned 6.45%, outperforming by 5 basis points with gains from growth and small cap managers almost fully offset by underperformance from value managers and tracking error of the index strategy. In contrast with the U.S. equity composite, as of June 30, 2017, the developed international

Through June 30, 2017



equity composite was approximately 72% actively managed. For the Fiscal Year ending June 30, 2017, this composite returned 21.90%, outperforming the MSCI EAFE IMI Net Index by 123 basis points. Similarly over the three-year period ending June 30, 2017, the total developed international composite outperformed the index return of 1.73% with an annualized return of 2.78% as all active manager composites outperformed their respective benchmarks net of fees.

- **Emerging Markets Equity - \$6.3 Billion, 10% of Fund:** Emerging market equities, as measured by the MSCI EM Net Index, returned 6.27% during the first quarter (6.56% in local currency terms). Over the trailing one-year, the MSCI EM Net Index returned 23.75%. For the second quarter of 2017, the emerging markets equity composite, which is about 67% actively managed and 33% passively managed, returned 5.14% versus the Custom FTSE Benchmark's return of 5.43% over the same period. For the Fiscal Year ending June 30, 2017, the emerging markets equity composite returned 22.43%, slightly outperforming the benchmark return of 22.24%. For the three-year period ending June 30, 2017, the emerging markets equity composite returned -0.48% versus the benchmark return of 0.79%.
- **REITs - \$1.8 Billion, 3% of Fund:** The U.S. REIT market, as measured by the Dow Jones U.S. Select Real Estate Securities Index, returned 1.64%, in the second quarter of 2017. The Fund's REITs composite, which is fully actively managed, outperformed the benchmark during the second quarter of 2017, returning 1.94%. Over the three-year period ending June 30, 2017, this composite returned 7.23%, lagging the benchmark return by 79 basis points, primarily due to inclusion of non-US REITs which have underperformed the US REIT market over this period.
- **Structured Fixed Income – \$11.7 Billion, 18% of Fund:** The structured fixed income composite returned 1.74% during the second quarter of 2017, underperforming the Core + 5 benchmark return of 1.82% over the same time period. For the three-year period ending June 30, 2017, the program underperformed its benchmark by 9 basis points with a return of 2.88%.
- **Enhanced Yield - \$3.4 Billion, 5% of Fund:** During the second quarter of 2017, the broad high yield market posted positive returns as credit spreads tightened. This asset class, as measured by the BofA Merrill Lynch High Yield Master II Index, returned 2.14%. Over the same period, the higher quality enhanced yield composite benchmark, the Citigroup BB & B Capped Index, returned 2.01%. The actively managed enhanced yield composite slightly underperformed both benchmarks, returning 1.92%. For the Fiscal Year ending June 30, 2017, this composite returned 11.07% while the Citigroup BB & B Capped Index returned 11.19%. Over the three-year period ending June 30, 2017, the enhanced yield composite returned 3.61%, underperforming its benchmark, which returned 3.95%.
- **Bank Loans - \$1.7 Billion, 3% of Fund:** The bank loan composite modestly underperformed its benchmark for the second quarter of 2017 with the composite returning 0.73% and the benchmark returning 0.75%. For the Fiscal Year ending June 30, 2017,

Through June 30, 2017



the bank loans composite underperformed the benchmark by 119 basis points, returning 6.30%. For the three-year period ending June 30, 2017, the bank loans composite outperformed the benchmark by 30 basis points, returning 3.79%.

- **TIPS - \$2.7 Billion, 4% of Fund:** The broad U.S. TIPS market returned -0.40% during the second quarter of 2017. The composite of TIPS managers (75% passive/25% active) performed in line with the benchmark with an aggregate return of -0.40% for the quarter. For the Fiscal Year ending June 30, 2017, the TIPS composite returned -0.66%, slightly underperforming its benchmark return of -0.63%. For the three-year period ending June 30, 2017, the composite performed in line with its benchmark, as both the composite and benchmark returned 0.63%.
- **Convertibles - \$1.1 Billion, 2% of Fund:** The BofA ML All Convertibles ex-Mandatories Index, a measure of the broad convertibles market, returned 2.98% during the second quarter of 2017. The Fund's entirely actively managed convertibles composite returned 2.42% over the quarter, while the Custom Convertibles benchmark returned 2.80% over the same period. For the Fiscal Year ending June 30, 2017, the Fund's convertibles composite returned 11.12%, trailing the custom benchmark by 310 basis points. For the three years ending June 30, 2017, this composite has generated an absolute return of 4.26%, outperforming the Custom Benchmark by approximately 16 basis points.
- **Opportunistic Fixed Income - \$1.6 Billion, 3% of Fund:** The opportunistic fixed income composite is comprised of investments in 10 funds, representing about 22% of this composite's assets, and seven strategic separate account mandates, representing 78% of composite assets. These strategic mandates and funds call down capital as opportunities are identified and are still in the process of being funded. For the Fiscal Year ending June 30, 2017, the strategic mandate composite returned 11.16%, underperforming the blended benchmark of 50%/50% J.P Morgan Global High Yield Index and Credit Suisse Leveraged Loan Index +3% by 265 basis points. During the second quarter of 2017, the overall composite returned 0.39% versus the blended benchmark which returned 2.16% over the same period. Over the longer three-year period ending June 30, 2017, the opportunistic fixed income composite returned 4.02% versus the benchmark return of 7.15%.
- **Private Equity - \$3.3 Billion, 5% of Fund:** At the end of the second quarter of 2017, the private equity portfolio had \$3.3 billion in invested capital. The Fund currently has investments in 156 partnerships. Performance is reported separately by Teachers' Private Equity consultant.

Through June 30, 2017



- **Private Real Estate - \$2.3 Billion, 3% of Fund:** At the end of the second quarter of 2017, the private real estate portfolio had \$2.3 billion in invested capital, up slightly from its allocation at the end of the first quarter of 2017. The composite has investments in 58 partnerships. Performance is reported separately by Teachers' Private Real Estate consultant.
- **Private Infrastructure – \$375.9 Million, 0.6% of Fund:** At the end of the second quarter of 2017, the private infrastructure portfolio had \$375.9 million in invested capital, down slightly from its allocation at the end of the first quarter of 2016. The composite has investment in 9 partnerships. Performance is reported separately by Teachers' Private Infrastructure consultant.

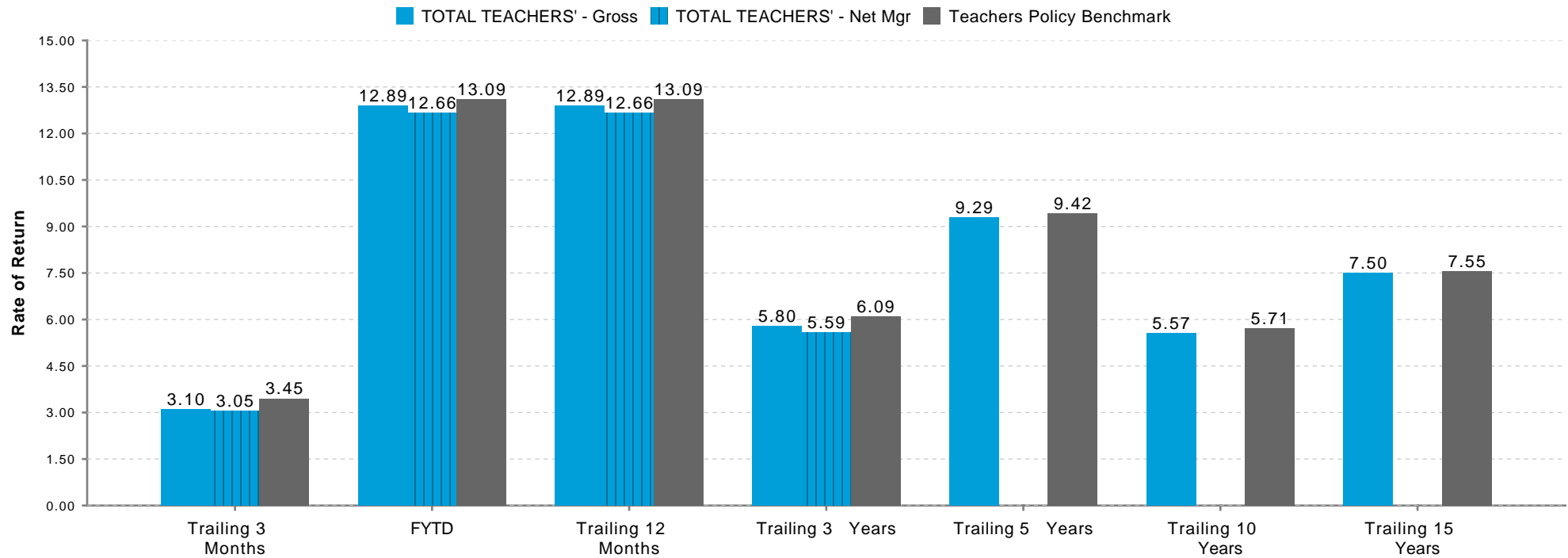
Total Portfolio Returns: June 30, 2017



Market Value (Billions)

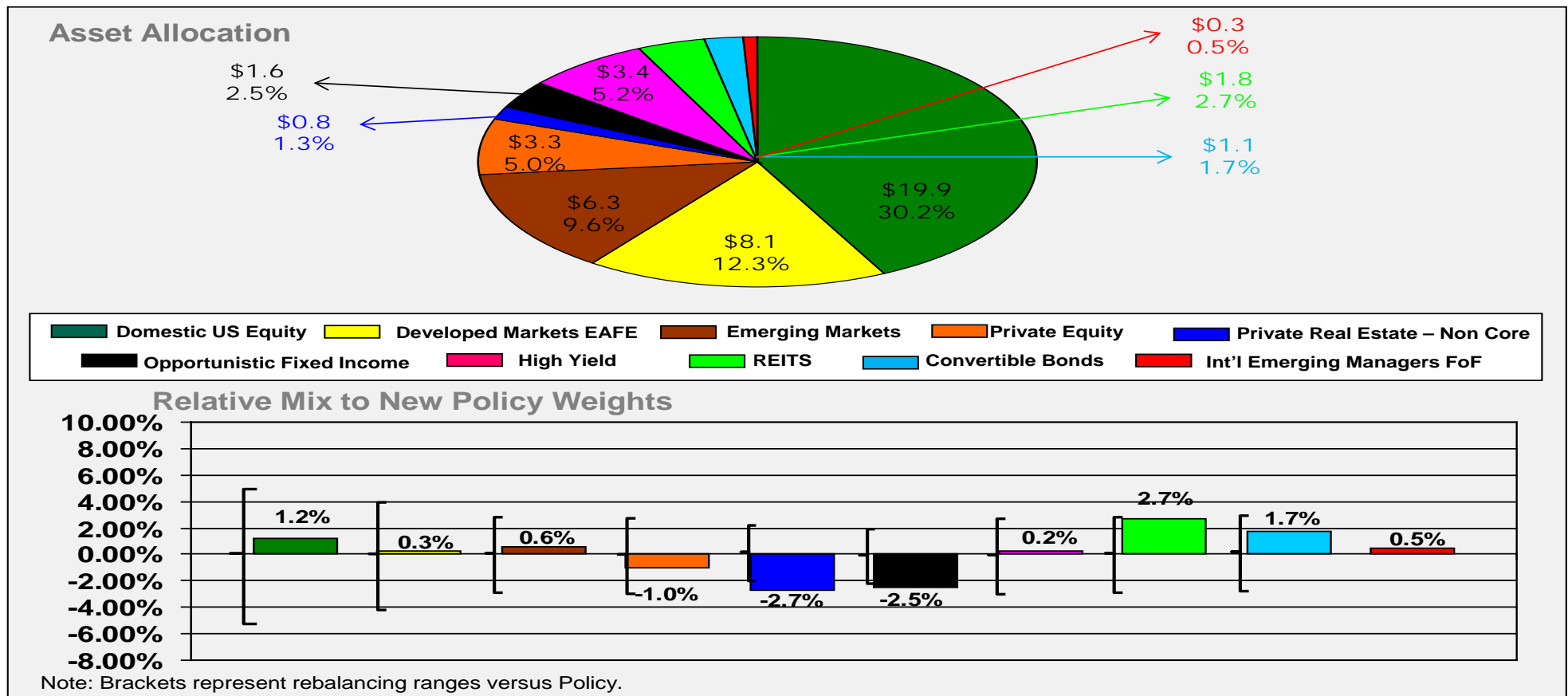
\$66.0

TOTAL TEACHERS'

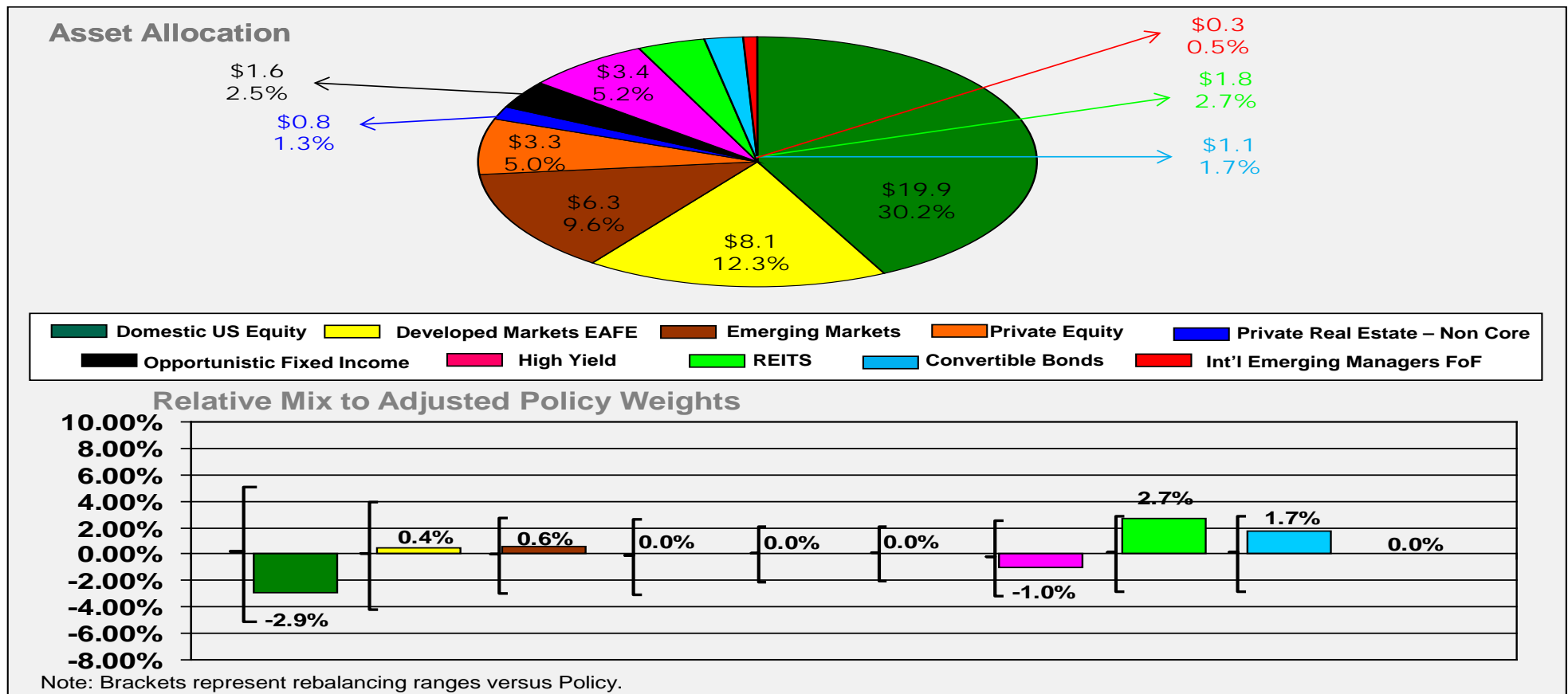


	Plan 3 Years	Benchmark 3 Years	Plan 5 Years	Benchmark 5 Years	Plan 7 Years	Benchmark 7 Years	Plan 10 Years
Standard Deviation							
TOTAL TEACHERS'	6.4	6.4	9.3	5.9	7.7	8.0	10.3

Portfolio Asset Allocation – Growth :

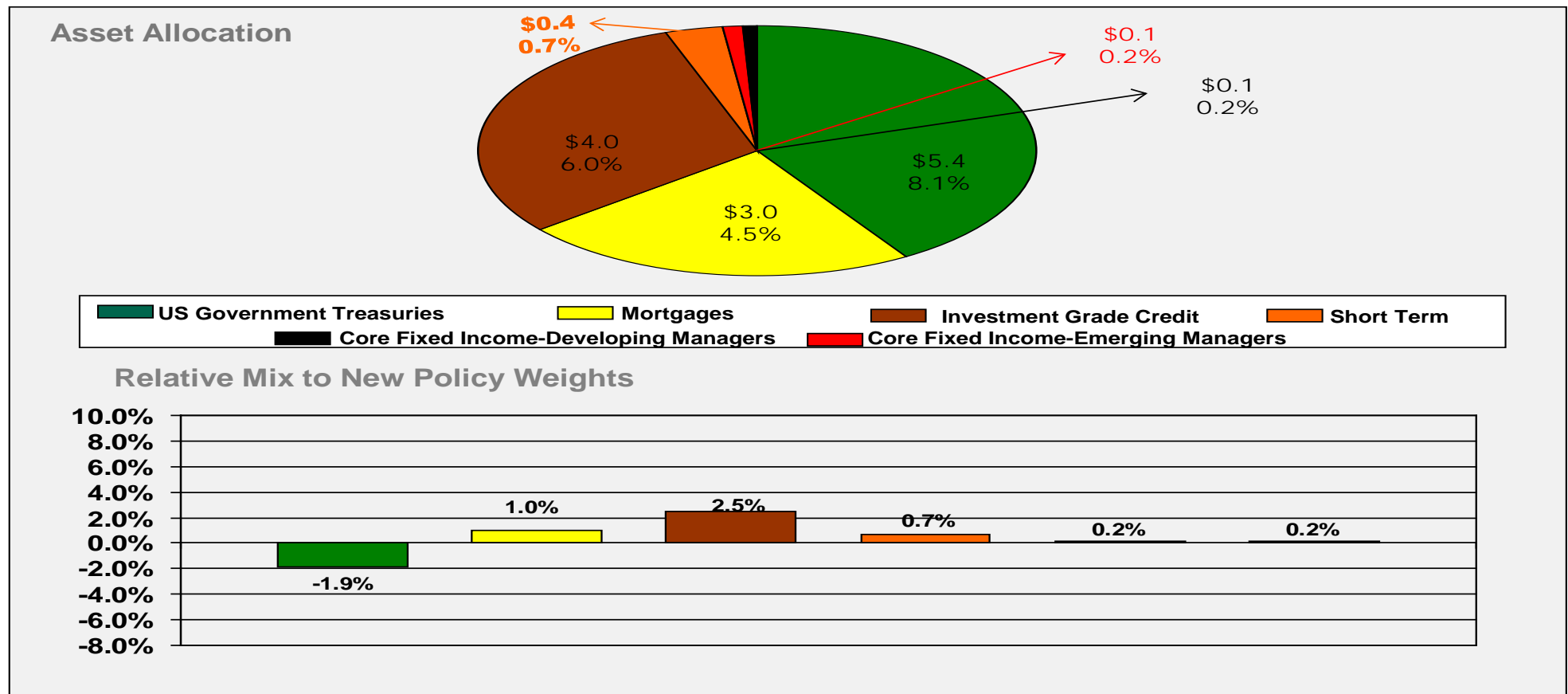


Portfolio Asset Allocation – Growth :

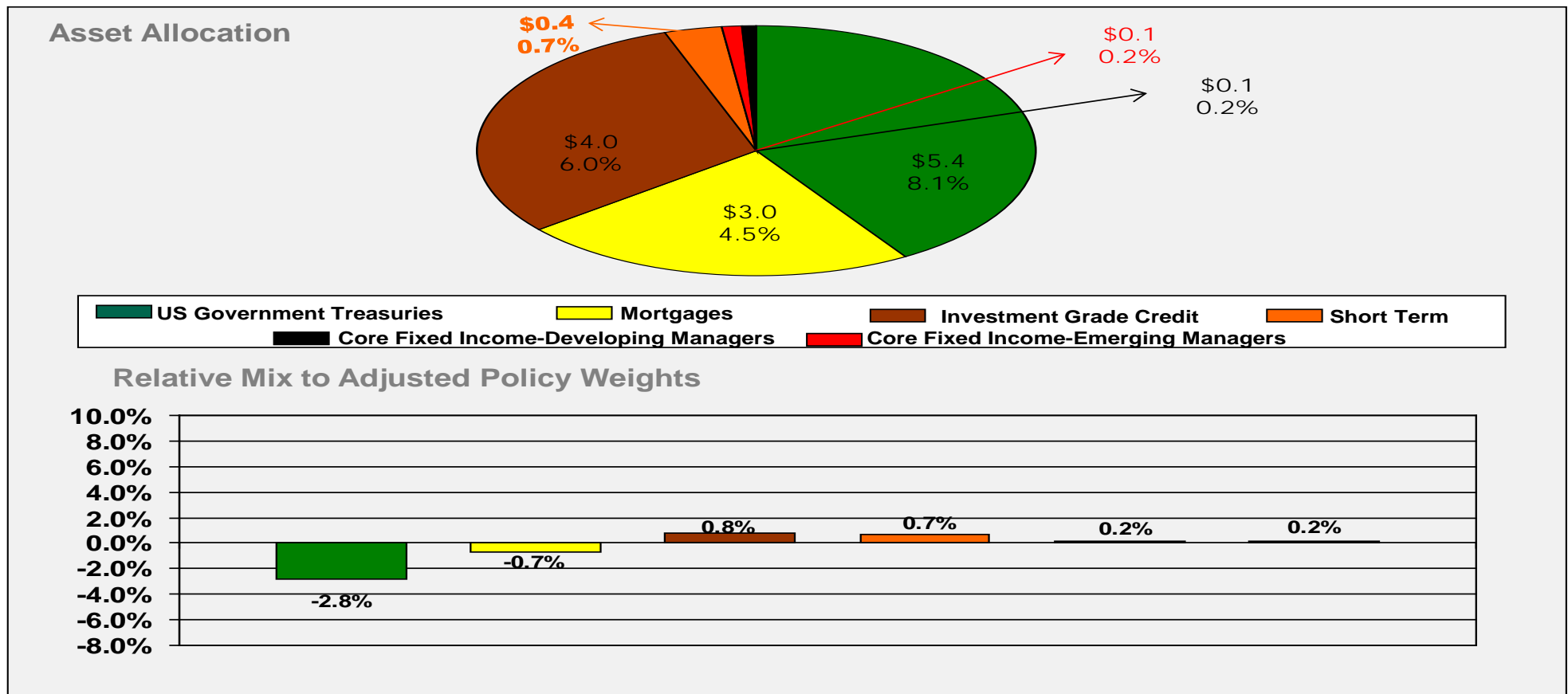


Note: On June 30, 2017 TRS' combined Fixed Income and Cash portfolios have a duration of 6.8 years. The duration of the Barclays US Aggregate Index was 6 years on that date.

Portfolio Asset Allocation – Deflation Protection :

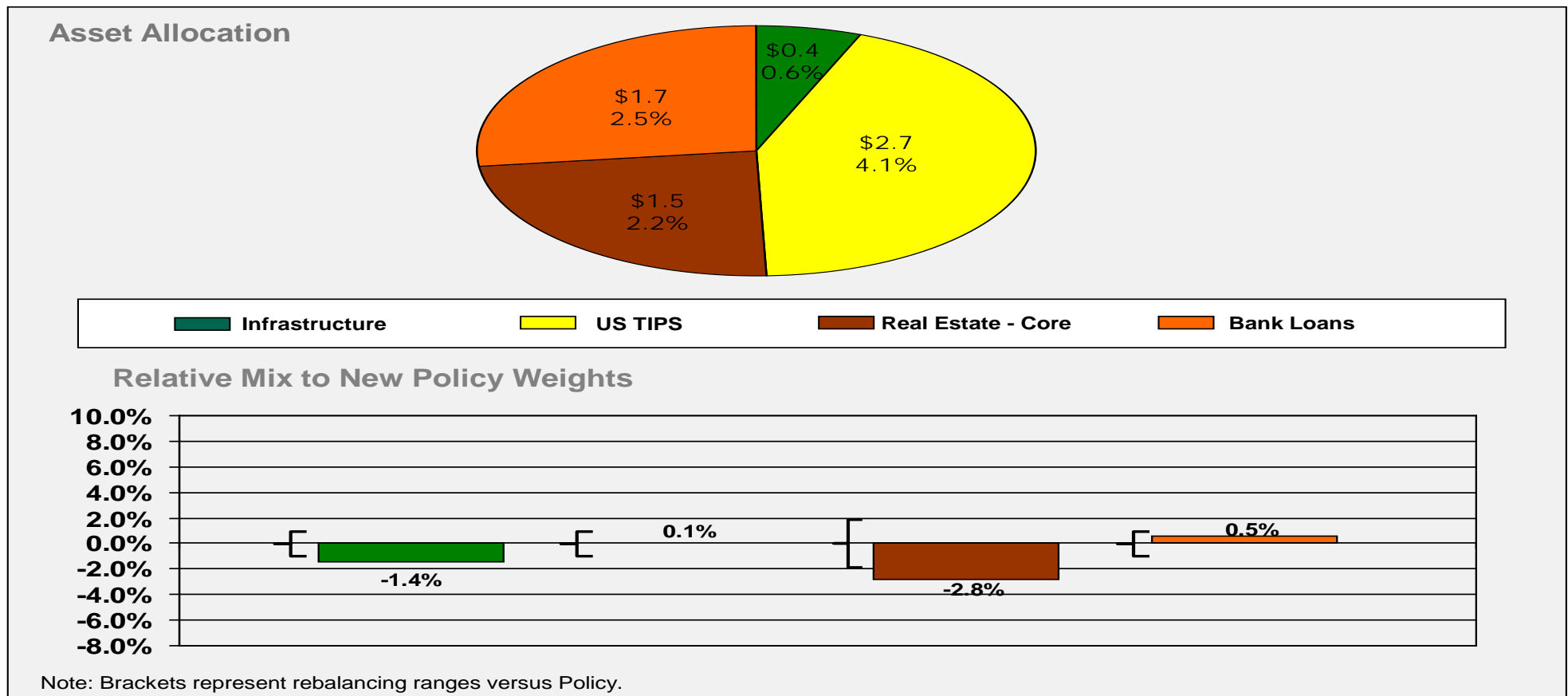


Portfolio Asset Allocation – Deflation Protection :

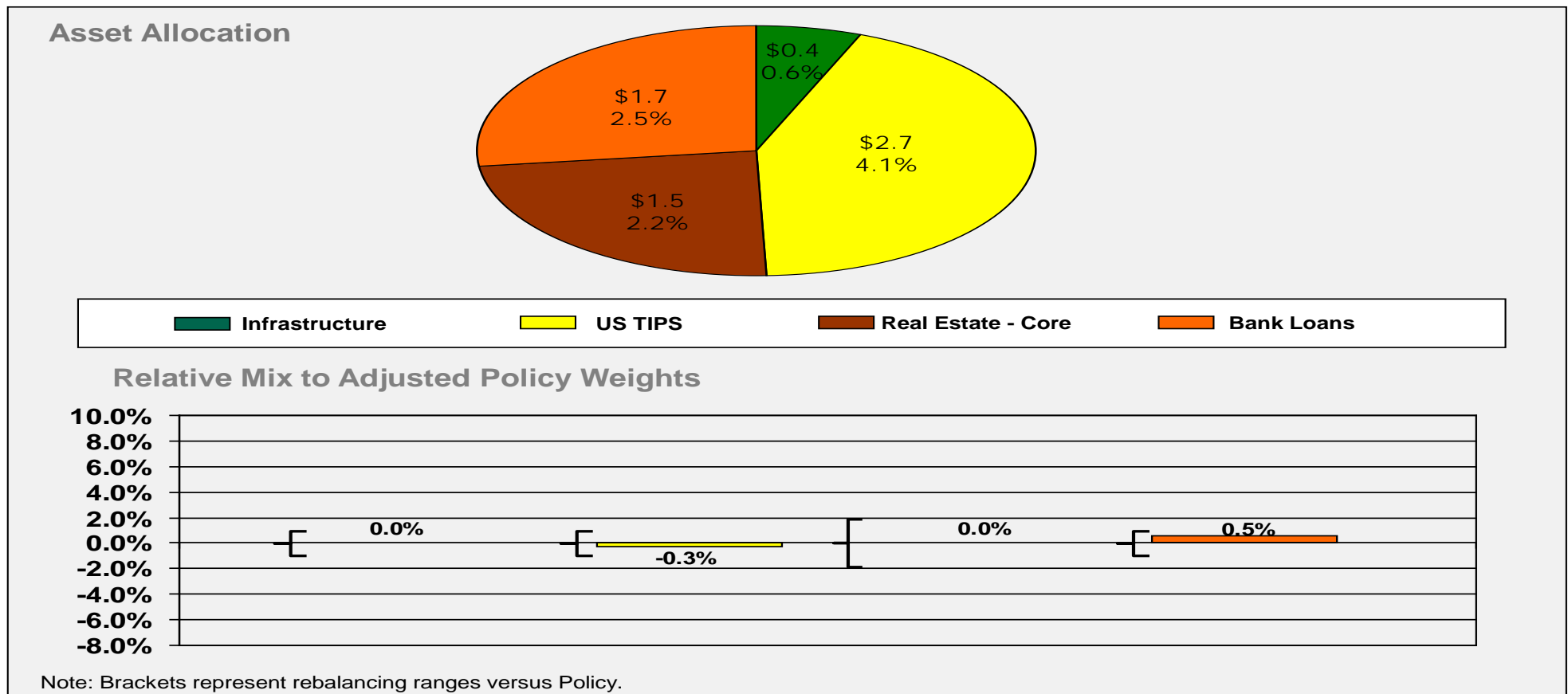


Note: On June 30, 2017 TRS' combined Fixed Income and Cash portfolios have a duration of 6.8 years. The duration of the Barclays US Aggregate Index was 6 years on that date.

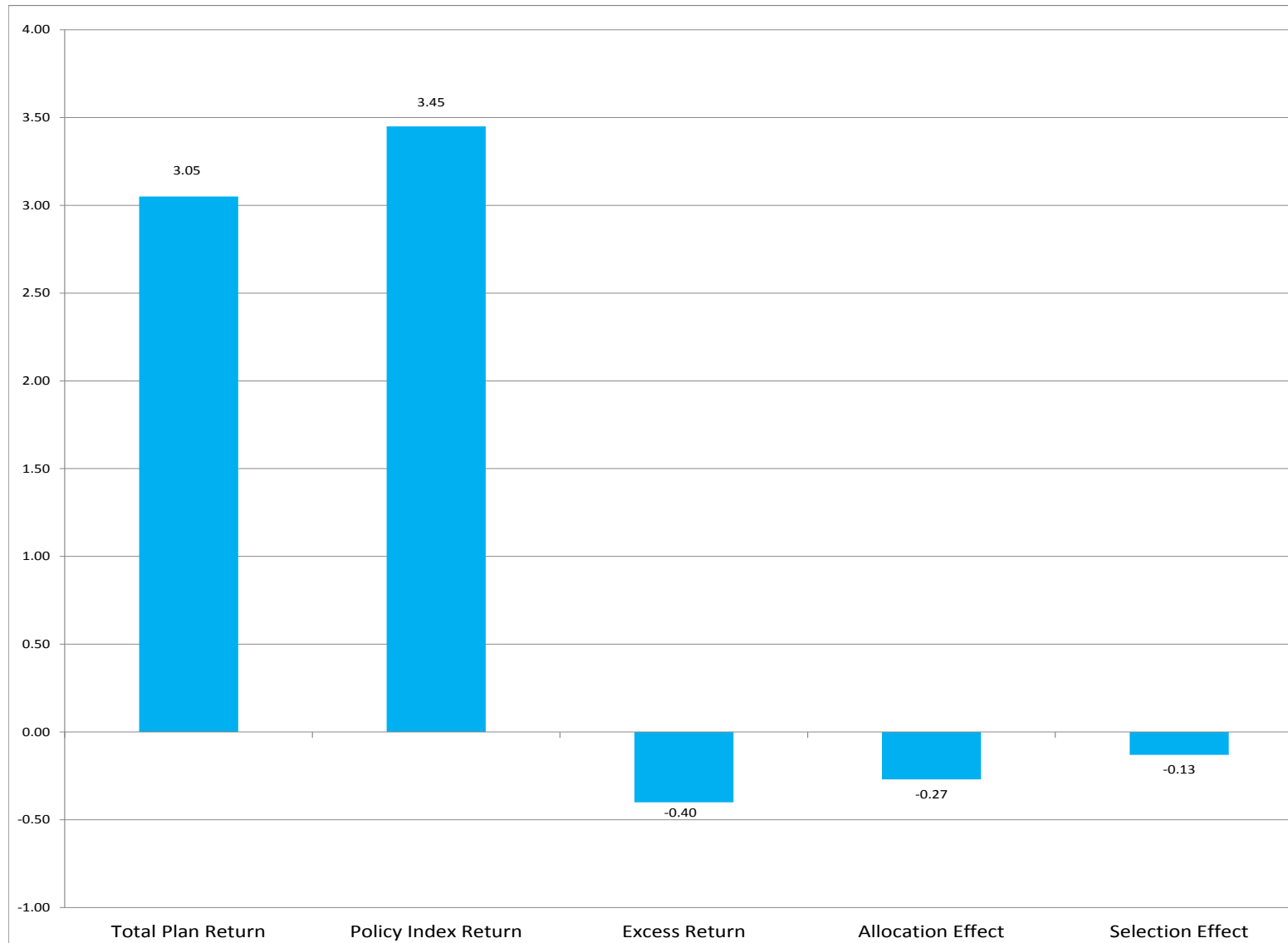
Portfolio Asset Allocation – Inflation Protection :

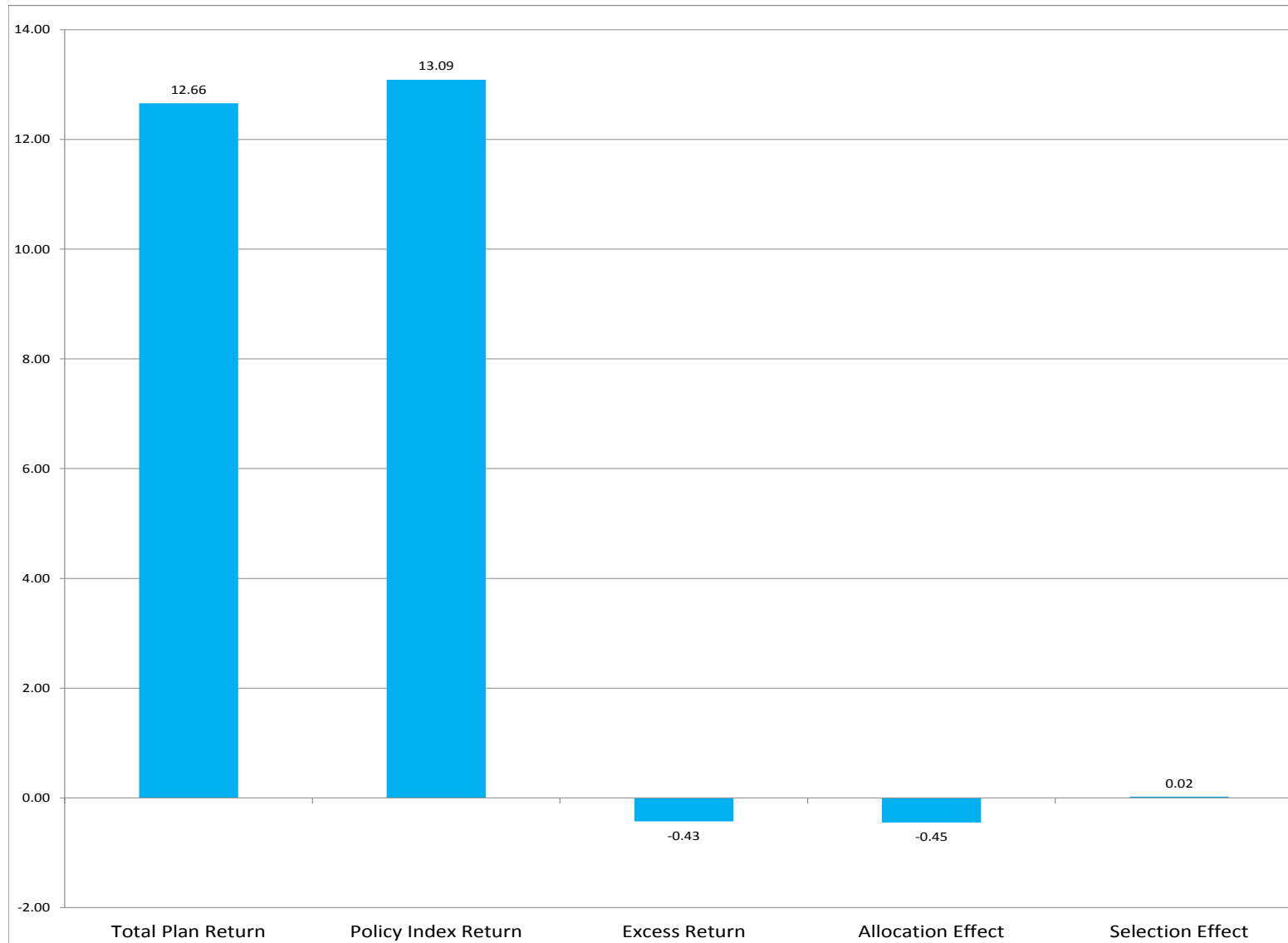


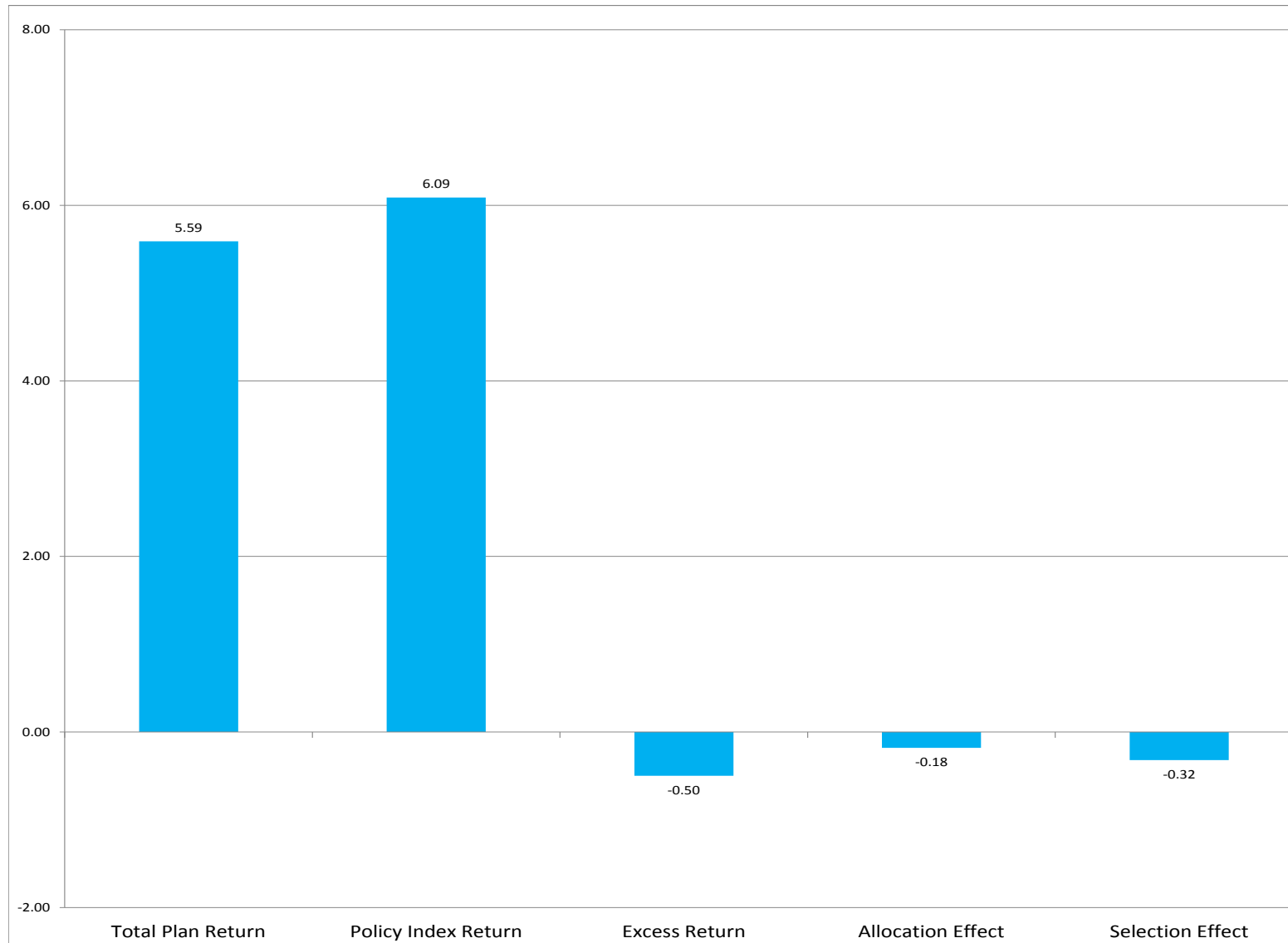
Portfolio Asset Allocation – Inflation Protection :



Note: On June 30, 2017 TRS' combined Fixed Income and Cash portfolios have a duration of 6.8 years. The duration of the Barclays US Aggregate Index was 6 years on that date.







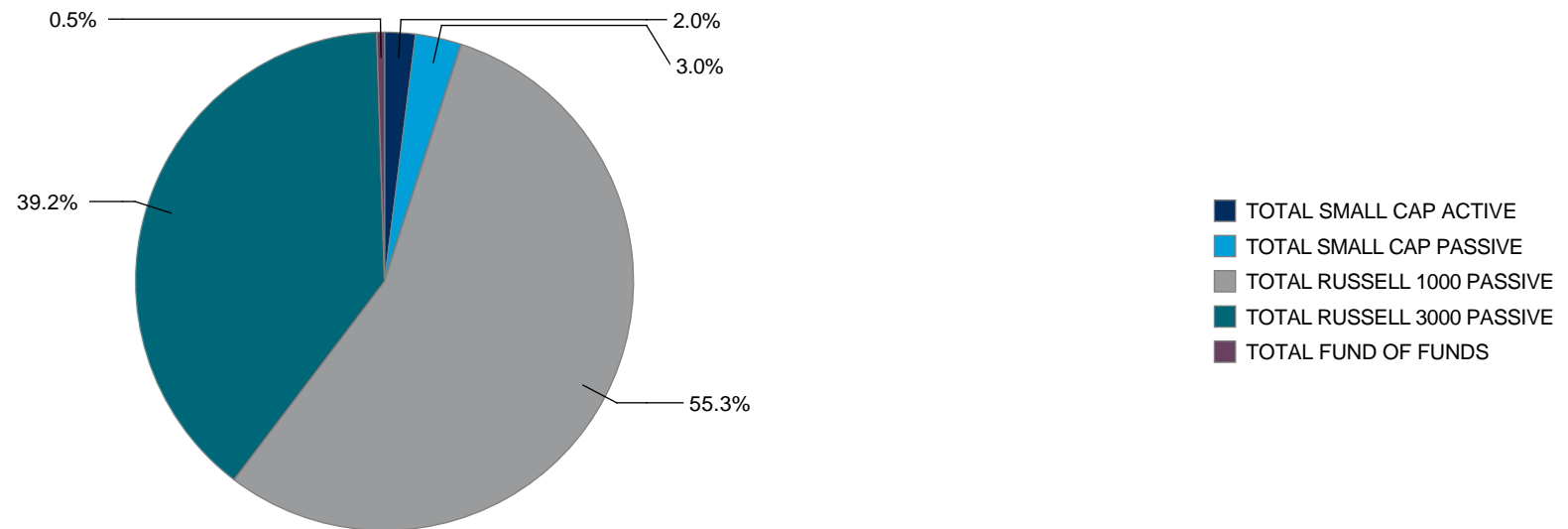
Allocation Effect - Asset Class Breakdown				
	Quarter	FYTD	3 Years	Benchmark
TOTAL TEACHERS'	-0.27	-0.45	-0.18	Teachers Policy Benchmark
TOTAL DOMESTIC EQUITY	0.01	-0.08	-0.02	RUSSELL 3000
TOTAL DEVELOPED MARKETS	0.00	-0.11	-0.04	MSCI EAFE IMI Net
TOTAL EMERGING MARKETS	0.02	0.02	-0.01	FTSE Custom NYC Teachers
TOTAL INTERNATIONAL FOF	0.00	0.00	0.00	NYC Blended Custom Benchmark for FoF
TOTAL REAL ESTATE SECURITIES	-0.06	-0.18	-0.05	Dow Jones US Select Securities Index
TOTAL PRIVATE EQUITY	0.00	0.00	0.00	Russell 3K + 300bps
TOTAL PRIVATE REAL ESTATE - CORE	0.00	-0.01	0.00	NCREIF ODCE net
TOTAL PRIVATE REAL ESTATE - NON CORE	0.00	0.01	0.00	NCREIF ODCE net + 200bps
TOTAL INFRASTRUCTURE	0.00	0.00	0.00	CPI + 4%
TOTAL US TREASURY SHORT TERM	-0.08	-0.23	-0.07	Citigroup USBIG Treasury 1-3 Y Index
TOTAL US TREASURY INTERMEDIATE	-0.02	-0.03	-0.01	Citigroup USBIG Treasury/Agency 1-10 y
TOTAL US TREASURY INTERMEDIATE LONG	-0.04	-0.17	-0.05	NYC - Treasury Agency Plus Five
TOTAL US TREASURY LONG DURATION	-0.06	0.54	0.17	Citigroup Treasury 10+
TOTAL INVESTMENT GRADE CREDIT	-0.01	-0.12	-0.04	NYC - Investment Grade Credit
TOTAL MORTGAGES	0.02	0.07	0.02	CITIGROUP MORTGAGE INDEX
TOTAL ETI	0.00	0.00	0.00	ETI Custom Benchmark
TOTAL CORE FI- DEVELOPING MGRS	0.00	-0.02	0.00	BBG BARC Agg
TOTAL CORE FI- EMERGING MGRS	0.00	-0.02	0.00	BBG BARC Agg
TOTAL HIGH YIELD	0.01	0.03	0.02	CITIGROUP BB&B
TOTAL BANK LOANS	-0.02	-0.04	-0.01	Credit Suisse Lev Loan Index
TOTAL TIPS MANAGERS	0.02	0.05	0.02	Lehman U.S. TIPS
TOTAL CONVERTIBLE BONDS	-0.01	-0.09	0.01	Merrill All US Converts
TOTAL OPPORTUNISTIC FIXED	0.00	0.00	0.00	OFI - JPMGHY / CSFB 50/50 Blend Plus 300
TOTAL CASH	-0.05	-0.22	-0.10	

Selection Effect - Asset Class Breakdown				
	Quarter	FYTD	3 Years	Benchmark
TOTAL TEACHERS'	-0.13	0.02	-0.32	Teachers Policy Benchmark
TOTAL DOMESTIC EQUITY	0.02	0.05	-0.04	RUSSELL 3000
TOTAL DEVELOPED MARKETS	0.00	0.10	0.14	MSCI EAFE IMI Net
TOTAL EMERGING MARKETS	-0.03	0.02	-0.11	FTSE Custom NYC Teachers
TOTAL INTERNATIONAL FOF	0.00	0.00	0.00	NYC Blended Custom Benchmark for FoF
TOTAL REAL ESTATE SECURITIES	0.01	0.08	-0.03	Dow Jones US Select Securities Index
TOTAL PRIVATE EQUITY	-0.14	-0.33	-0.15	Russell 3K + 300bps
TOTAL PRIVATE REAL ESTATE - CORE	0.01	0.02	0.01	NCREIF ODCE net
TOTAL PRIVATE REAL ESTATE - NON CORE	0.02	0.01	0.00	NCREIF ODCE net + 200bps
TOTAL INFRASTRUCTURE	0.03	0.03	0.02	CPI + 4%
TOTAL US TREASURY SHORT TERM	0.00	0.00	0.00	Citigroup USBIG Treasury 1-3 Y Index
TOTAL US TREASURY INTERMEDIATE	0.00	0.00	0.00	Citigroup USBIG Treasury/Agency 1-10 y
TOTAL US TREASURY INTERMEDIATE LONG	0.00	0.01	0.00	NYC - Treasury Agency Plus Five
TOTAL US TREASURY LONG DURATION	0.00	0.00	0.00	Citigroup Treasury 10+
TOTAL INVESTMENT GRADE CREDIT	0.01	0.04	0.01	NYC - Investment Grade Credit
TOTAL MORTGAGES	0.00	-0.01	0.00	CITIGROUP MORTGAGE INDEX
TOTAL ETI	0.01	0.00	0.00	ETI Custom Benchmark
TOTAL CORE FI- DEVELOPING MGRS	0.00	0.00	0.00	BBG BARC Agg
TOTAL CORE FI- EMERGING MGRS	0.00	0.00	0.00	BBG BARC Agg
TOTAL HIGH YIELD	-0.01	-0.02	-0.02	CITIGROUP BB&B
TOTAL BANK LOANS	0.00	-0.03	0.01	Credit Suisse Lev Loan Index
TOTAL TIPS MANAGERS	0.00	0.00	0.00	Lehman U.S. TIPS
TOTAL CONVERTIBLE BONDS	-0.01	-0.15	-0.02	Merrill All US Converts
TOTAL OPPORTUNISTIC FIXED	-0.04	0.00	-0.15	OFI - JPMGHY / CSFB 50/50 Blend Plus 300
TOTAL CASH	0.00	0.00	0.01	

Total Domestic Equity Asset Allocation: June 30, 2017



	<u>Market Value (Billions)</u>	<u>% of plan</u>
TOTAL DOMESTIC EQUITY	\$19.9	30.2

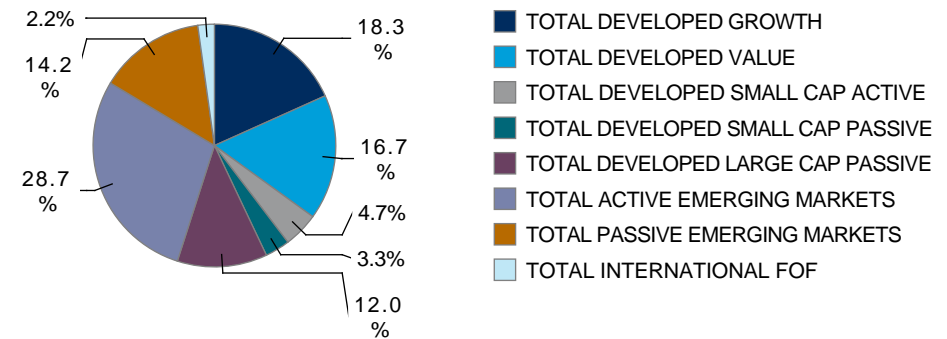
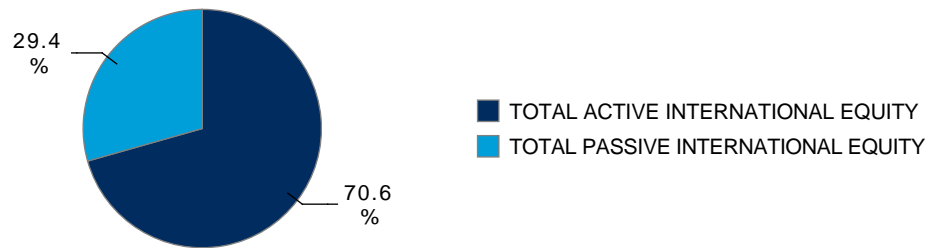


Sub Sector	Policy Weight	Actual Weight	Under/Over Weight	Index Return	Actual Return	Difference
TOTAL SMALL CAP ACTIVE	1.8	2.0	0.2	2.5	8.6	6.1
TOTAL SMALL CAP PASSIVE	2.8	3.0	0.2	2.5	2.0	-0.4
TOTAL RUSSELL 1000 ACTIVE	11.0	0.0	-11.0	3.1		-3.1
TOTAL RUSSELL 1000 PASSIVE	39.6	55.3	15.7	3.1	3.0	-0.1
TOTAL RUSSELL 3000 PASSIVE	44.2	39.2	-5.0	3.0	3.0	0.0
TOTAL EMERGING MANAGERS	0.6	0.5	-0.1	2.5		-2.5

International Equity Asset Allocation: June 30, 2017



	<u>Market Value (Billions)</u>	<u>% of plan</u>
TOTAL INTERNATIONAL EQUITY	\$14.7	22.4

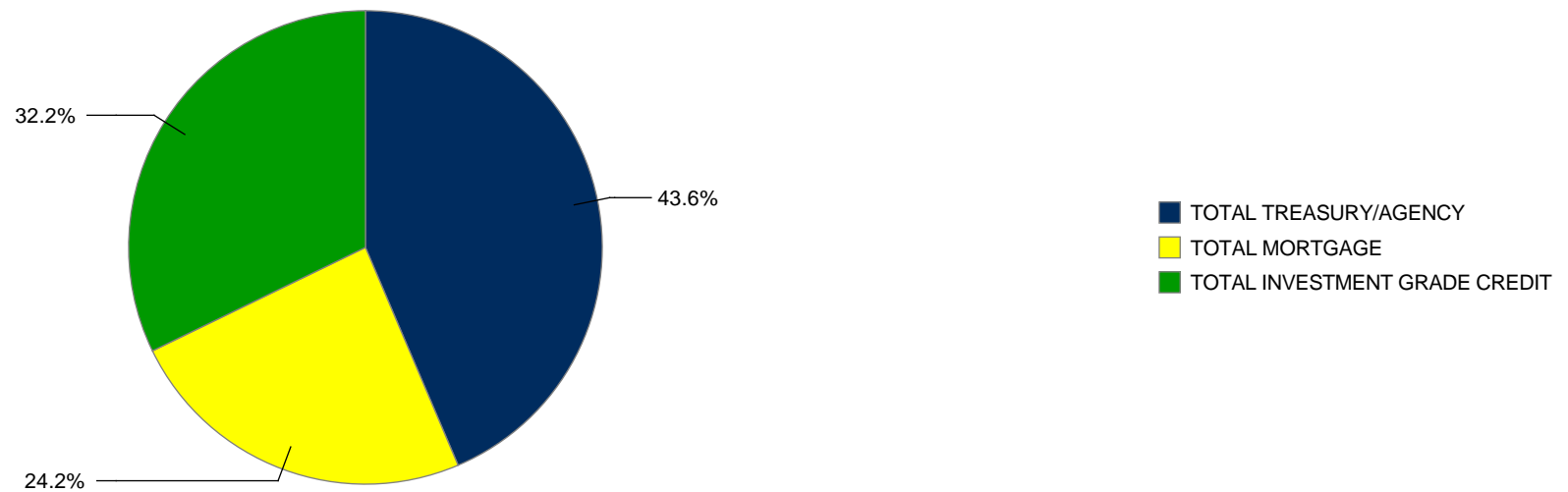


	<u>Asset Class Weight</u>	<u>Quarterly Returns - Fund and Benchmarks</u>		
		<u>Fund</u>	<u>Benchmark</u>	<u>Excess</u>
TOTAL DEVELOPED GROWTH	18.25	8.39	7.52	0.87
TOTAL DEVELOPED VALUE	16.69	4.39	4.78	(0.39)
TOTAL DEVELOPED SMALL CAP ACTIVE	4.65	9.56	8.65	0.91
TOTAL DEVELOPED SMALL CAP PASSIVE	3.28	8.20	8.10	0.10
TOTAL DEVELOPED LARGE CAP PASSIVE	11.96	5.81	5.63	0.18
TOTAL ACTIVE EMERGING MARKETS	28.73	5.13	5.43	(0.31)
TOTAL PASSIVE EMERGING MARKETS	14.18	5.49	5.50	(0.01)
TOTAL INTERNATIONAL FOF	2.25			
TOTAL INTERNATIONAL EQUITY	100.00	6.00	5.78	0.22

Structured Fixed Income Asset Allocation: June 30, 2017



	<u>Market Value (Billions)</u>	<u>% of plan</u>
TOTAL STRUCTURED+ETI	\$12.3	18.6



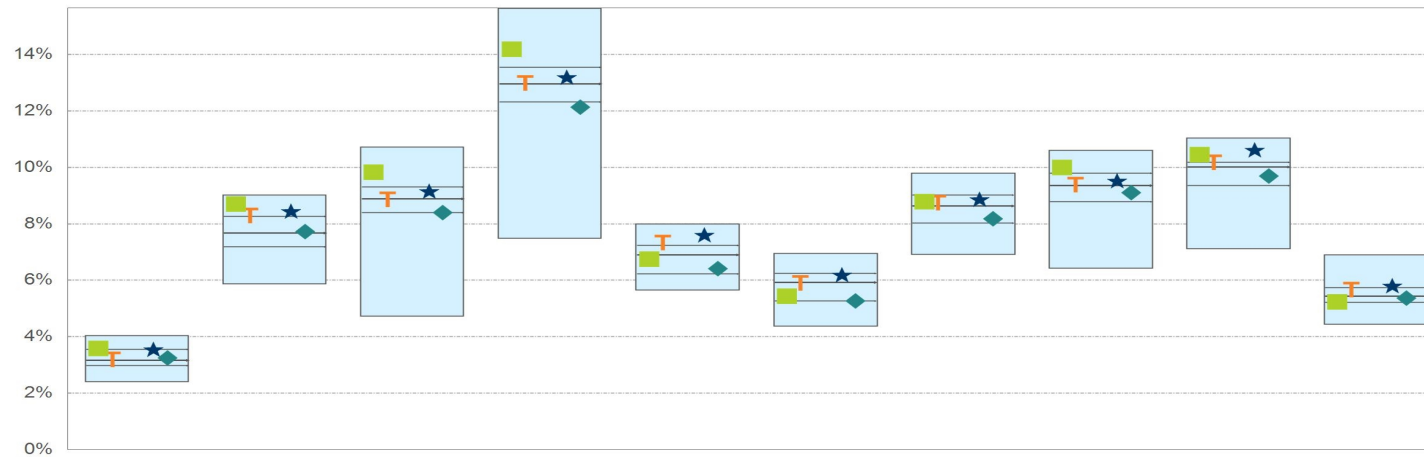
Sub Sector	Policy Weight	Actual Weight	Under/Over Weight	Index Return	Actual Return	Difference
TOTAL TREASURY/AGENCY	58.82	43.56	-15.26	4.00	1.52	-2.48
TOTAL MORTGAGE	20.59	24.20	3.61	0.92	1.21	0.29
TOTAL INV GRADE CREDIT	20.59	32.24	11.65	2.28	2.47	0.19

Through June 30, 2017



City of New York Performance Comparison

Total Returns of Master Trusts - Public : Plans > \$10 Billion
Cumulative Periods Ending : June 30, 2017



Percentile Rankings	1 Qtr	2 Qtrs	3 Qtrs	1 Year	2 Years	3 Years	4 Years	5 Years	7 Years	10 Years
5th	4.04	9.02	10.71	15.63	8.00	6.95	9.79	10.60	11.03	6.89
25th	3.55	8.26	9.31	13.54	7.23	6.25	9.01	9.79	10.18	5.73
50th	3.16	7.67	8.89	12.96	6.89	5.92	8.63	9.36	10.01	5.44
75th	2.97	7.19	8.40	12.31	6.22	5.26	8.03	8.79	9.35	5.22
95th	2.41	5.87	4.73	7.49	5.65	4.37	6.92	6.42	7.12	4.45
No. Of Obs	48	48	48	48	47	47	47	47	45	43
T Total System - Teacher	3.10 (60)	8.19 (29)	8.77 (62)	12.89 (54)	7.23 (25)	5.80 (56)	8.64 (45)	9.29 (52)	10.07 (38)	5.57 (45)
★ Teachers Policy Benchm	3.45 (31)	8.34 (23)	9.05 (43)	13.09 (41)	7.50 (11)	6.09 (33)	8.76 (35)	9.42 (45)	10.51 (17)	5.71 (25)
■ Public Mkt Equiv 25	3.49 (25)	8.59 (23)	9.73 (17)	14.09 (19)	6.65 (59)	5.33 (72)	8.68 (39)	9.89 (23)	10.35 (21)	5.13 (77)
◆ Public Mkt Equiv 35	3.14 (52)	7.62 (52)	8.29 (77)	12.03 (81)	6.31 (72)	5.17 (75)	8.08 (68)	9.00 (63)	9.59 (56)	5.27 (65)

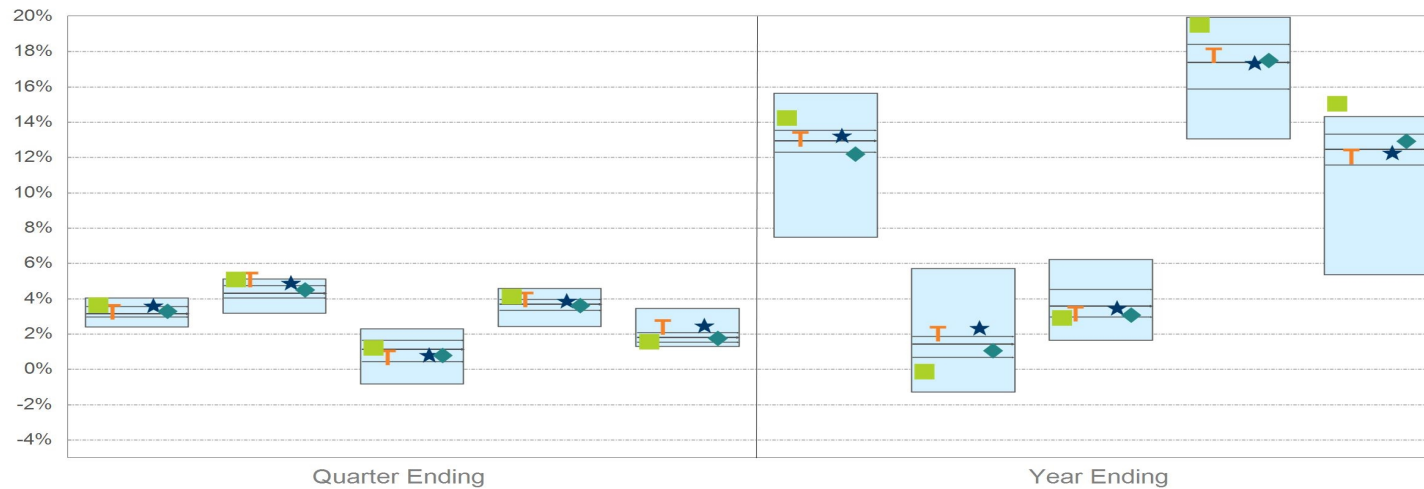
Wilshire Trust Universe Comparison Service® (TUCS®)

Through June 30, 2017



City of New York Performance Comparison

Total Returns of Master Trusts - Public : Plans > \$10 Billion
Consecutive Time Periods: June 30, 2017



Percentile Rankings	Jun 17	Mar 17	Dec 16	Sep 16	Jun 16	Jun 17	Jun 16	Jun 15	Jun 14	Jun 13
5th	4.04	5.13	2.29	4.59	3.44	15.63	5.71	6.23	19.94	14.32
25th	3.55	4.73	1.66	3.97	2.08	13.54	1.86	4.53	18.40	13.32
50th	3.16	4.31	1.14	3.68	1.81	12.96	1.44	3.58	17.40	12.46
75th	2.97	4.04	0.43	3.35	1.54	12.31	0.68	2.97	15.89	11.58
95th	2.41	3.17	-0.82	2.44	1.31	7.49	-1.28	1.66	13.06	5.35
No. Of Obs	48	48	48	48	48	48	47	47	47	47
T Total System - Teacher	3.10 (60)	4.94 (11)	0.53 (72)	3.79 (43)	2.23 (19)	12.89 (54)	1.86 (25)	2.99 (72)	17.62 (41)	11.90 (65)
★ Teachers Policy Benchm	3.45 (31)	4.73 (25)	0.66 (70)	3.71 (47)	2.33 (15)	13.09 (41)	2.19 (17)	3.31 (56)	17.19 (50)	12.12 (59)
■ Public Mkt Equiv 25	3.49 (25)	4.92 (13)	1.05 (56)	3.98 (25)	1.40 (94)	14.09 (19)	-0.30 (85)	2.74 (79)	19.36 (5)	14.88 (1)
◆ Public Mkt Equiv 35	3.14 (52)	4.34 (47)	0.62 (70)	3.46 (66)	1.60 (72)	12.03 (81)	0.89 (63)	2.91 (75)	17.33 (50)	12.76 (35)

Wilshire Trust Universe Comparison Service® (TUCS®)

TEACHERS' RETIREMENT SYSTEM
ACTUAL FEES FOR FISCAL YEAR ENDED JUNE 30, 2016 AND
ESTIMATED FEES FOR FY 2017 UPDATED THROUGH NOVEMBER 2016

INVESTMENT STYLE (EQUITIES)	Actual 2016		Estimates 2017	
	Avg MV 16 (\$MM)	Mgmt Fees BPS	MV 11-30-16 (\$MM)	Mgmt Fees BPS
US Equities	20,264	3.31	21,277	3.73
Small Cap Active	316	83.19	339	100.00
Small Cap Growth	316	83.19	339	100.00
Small Cap Value	-	-	-	-
Small Cap core	-	-	-	-
Small Cap Fundamental Index	-	-	-	-
Small/Mid Cap Active	-	-	-	-
Small/Mid Cap Growth	-	-	-	-
Small/Mid Cap Value	-	-	-	-
Mid Cap Active	-	-	-	-
Mid Cap Growth	-	-	-	-
Mid Cap Value	-	-	-	-
Mid Cap core	-	-	-	-
Russell 1000 Active	-	-	-	-
Russell 1000 Fundamental Index	-	-	-	-
Active Emerging Managers (U.S. Equities)	414	64.60	407	75.00
Total US Active Equities	730	72.65	746	86.37
Total US Passive Equities	19,458	0.55	20,443	0.54
Environmental US E. Strategies	76	45.13	88	43.19
International Equities	10,096	30.92	11,633	31.06
Active EAFE Equities	4,634	30.23	4,730	30.88
Growth	2,172	27.66	2,218	29.21
Value	1,911	27.71	1,949	27.59
Small Cap	551	49.10	562	48.87
Environmental-Non US E. Strategies	-	-	-	-
Active Emerging Markets	3,244	49.79	3,816	53.36
Total Int'l Active Equities	7,878	38.29	8,546	40.92
Total Int'l Passive Equities	2,218	4.74	3,087	3.77
Total Passive Developed Markets	575	2.52	1,253	1.07
Total Passive Emerging Markets	1,643	5.52	1,835	5.61
REITS Passive Index	1,991	35.69	2,021	37.56

Information provided by the New York City Comptroller

**TEACHERS' RETIREMENT SYSTEM
ACTUAL FEES FOR FISCAL YEAR ENDED JUNE 30, 2016 AND
ESTIMATED FEES FOR FY 2017 UPDATED THROUGH NOVEMBER 2016**

	Actual 2016	Actual 2016	Estimates 2017	Estimates 2017
INVESTMENT STYLE (FIXED INCOME)	Avg MV 16 (\$MM)	Mgmt Fees BPS	MV 11-30-16 (\$MM)	Mgmt Fees BPS
Fixed Income	20,560	14.12	21,628	14.38
Structured Program	10,672	7.31	10,045	7.86
Government Sector	1,205	4.35	1,281	4.62
SSGA Long Duration Treasury	-	-	381	1.00
Mortgage Sector	4,273	6.12	3,108	7.39
Investment Grade Credit Sector	5,194	8.99	5,276	9.41
Global Fixed Income	116	19.64	119	19.03
Progress Fixed Emerging Managers	127	31.48	119	37.50
TIPS	1,635	1.81	2,366	1.82
Active TIPS	409	5.73	590	5.76
Passive TIPS	1,226	0.50	1,776	0.51
Enhanced Yield	2,801	33.82	3,193	34.06
Bank Loans	1,537	34.17	1,625	33.86
Convertible Bonds	989	42.68	1,038	41.88
ETI - Access - RBC	103	23.78	158	17.78
ETI - AFL-CIO HIT	262	42.49	277	39.53
Total Public Markets (Externally managed)	50,594	14.64	53,869	15.36
Other ETI Programs	191	-	186	-
In-House Short Term	2,127	0.00	2503	0.00
Total Public Markets	52,912	14.00	56,559	14.63
INVESTMENT STYLE (PRIVATE)				
Hedge Funds	-	-	-	-
Private Equities	2,981	171.86	3,172	213.18 ¹
Private Real Estate	1,792	102.76	1,913	100.80
Infrastructure	279	68.64	358	103.17 ²
Opportunistic Fixed Income	1,413	87.81	1,541	88.78
Total Private Markets	6,465	134.64 ³	6,983	154.79
Total Overall	59,377	27.13	63,542	30.03

Footnotes

¹ -Private Equity estimates for FY 2017 are based on partnership terms. For funds in the investment period, management fees are based on the committed capital. For funds in the post-investment period, management fees are based on the Market Value as of 6/30/2016.

² - Infrastructure Fees are based on committed amounts for each investment which are higher than the market values.

³ - Private Markets Investments exclude GP CARRY & Incentive Fees.

⁴ -The Incentive Fees paid for theTEACHERS Fund in 2016 are 5.10 BPS.

**NYC TEACHERS' RETIREMENT SYSTEM
SECURITIES LENDING INCOME
June 30, 2017**

	<u>U. S. FIXED INCOME</u>	<u>U. S. EQUITY</u>	<u>INTERNATIONAL EQUITY</u>	<u>TOTAL</u>
1989	1,185,000	-	-	1,185,000
1990	885,000	-	-	885,000
1991	898,000	-	-	898,000
1992	1,692,000	193,000	300,000	2,185,000
1993	3,701,000	694,000	508,000	4,903,000
1994	4,314,000	1,360,000	696,000	6,370,000
1995	3,395,000	1,621,000	520,000	5,536,000
1996	2,874,000	1,738,000	879,000	5,491,000
1997	2,943,000	3,430,000	1,158,000	7,531,000
1998	4,793,000	4,549,000	1,499,000	10,841,000
1999	4,329,000	4,830,000	1,772,000	10,931,000
2000	4,282,000	4,963,000	2,300,000	11,545,000
2001	7,435,000	6,744,000	3,489,000	17,668,000
2002	4,401,000	5,578,000	2,530,000	12,509,000
2003	2,156,000	3,467,000	2,662,000	8,285,000
2004	2,949,000	4,413,000	2,550,000	9,912,000
2005	4,427,000	6,136,000	3,201,000	13,764,000
2006	4,282,000	9,789,000	2,868,000	16,939,000
2007	9,618,000	15,962,000	3,088,000	28,668,000
2008	27,299,000	27,400,000	5,129,000	59,828,000
2009	10,039,000	17,682,000	3,834,000	31,555,000
2010	4,271,000	11,122,000	3,200,000	18,593,000
2011	5,880,000	15,051,000	6,082,000	27,013,000
2012	8,113,000	18,853,000	4,915,000	31,881,000
2013	5,208,000	21,196,000	3,803,000	30,207,000
2014	2,195,000	9,191,000	6,079,000	17,465,000
2015	2,510,000	6,924,000	7,135,000	16,569,000
2016	2,861,000	10,325,000	5,376,000	18,562,000
2017 (6 months)	1,957,000	3,025,000	2,328,000	7,310,000
since Inception	<u>140,892,000</u>	<u>216,236,000</u>	<u>77,901,000</u>	<u>435,029,000</u>

**Teachers' Retirement System
of New York City**

Appendix A

Consolidated Performance Report

Consolidated Performance Report

Through June 30, 2017



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2016	2015	2014	2013	2012	3 Year	5 Year	10 Year	ITD	Inception Date
SYSTEM RETURN SUMMARY															
5 TRS-TOTAL PORTFOLIO - GROSS	65,965	100.00	3.10	12.89	8.19	8.93	(0.55)	7.75	15.91	13.09	5.80	9.29	5.57	8.53	07/01/1987
TRS - ESTIMATED INVESTMENT FEES			(0.06)	(0.23)	(0.11)	(0.21)	(0.20)	(0.22)			(0.21)				
EST MANAGEMENT FEES - PUBLIC MARKET (ACCRUAL)			(0.03)	(0.12)	(0.06)	(0.12)	(0.13)	(0.14)			(0.13)				
EST MANAGEMENT FEES - ALTERNATIVE MARKETS (CASH)			(0.03)	(0.11)	(0.05)	(0.09)	(0.07)	(0.08)			(0.08)				
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
TRS-TOTAL PORTFOLIO - NET MGR			3.05	12.66	8.08	8.73	(0.75)	7.53			5.59				
TRS POLICY BENCHMARK			3.45	13.09	8.34	9.53	(0.70)	8.50	14.99	13.77	6.09	9.42	5.71		
EXCESS RETURN			(0.40)	(0.44)	(0.26)	(0.80)	(0.05)	(0.97)	0.92	(0.68)	(0.50)	(0.14)	(0.14)		
EQUITY RETURN SUMMARY															
18 TRS-TOTAL EQUITY (INCL PE & RA) - GROSS	42,433	64.33	4.12	18.41	11.13	10.82	(0.93)	8.64	23.03	15.98	7.29	11.95	5.47	7.70	04/01/2004
ESTIMATED INVESTMENT FEES			(0.07)	(0.29)	(0.14)	(0.24)	(0.24)	(0.25)			(0.25)				
EST MANAGEMENT FEES			(0.07)	(0.29)	(0.14)	(0.24)	(0.24)	(0.25)							
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
TRS-TOTAL EQUITY (INCL PE & RA) - NET MGR			4.05	18.13	10.99	10.58	(1.18)	8.39			7.04				
26 TRS-TOTAL DOMESTIC EQUITY - GROSS	19,930	30.21	3.08	18.73	9.02	13.15	0.30	11.93	33.81	16.65	9.04	14.65	7.23	10.36	12/01/1990
ESTIMATED INVESTMENT FEES			(0.01)	(0.04)	(0.02)	(0.04)	(0.04)	(0.05)			(0.04)				
TRS-TOTAL DOMESTIC EQUITY - NET MGR			3.07	18.68	9.00	13.10	0.26	11.88			9.00				
RUSSELL 3000 (DAILY)			3.02	18.51	8.93	12.74	0.48	12.56	33.55	16.42	9.10	14.58	7.26	10.39	
EXCESS RETURN			0.06	0.17	0.07	0.37	(0.22)	(0.67)	0.25	0.23	(0.10)	0.06	(0.03)	(0.02)	
36 TRS-TOTAL SMALL CAP - GROSS	985	1.49	4.54	26.25	9.13	18.93	0.79	4.31	51.12	21.45	10.30	17.51		20.28	05/01/2009
ESTIMATED INVESTMENT FEES			(0.10)	(0.49)	(0.21)	(0.48)	(0.42)	(0.37)			(0.44)				
TRS-TOTAL SMALL CAP - NET MGR			4.44	25.76	8.92	18.45	0.37	3.93			9.86				
RUSSELL 2000 (DAILY)			2.46	24.60	4.99	21.31	(4.41)	4.89	38.82	16.35	7.36	13.70		15.51	
EXCESS RETURN			1.98	1.16	3.93	(2.86)	4.78	(0.96)	12.30	5.10	2.50	3.81		4.77	
46 TRS-TOTAL RUSSELL 1000 - GROSS	11,039	16.73	3.00	17.95	9.20	12.08	0.73	13.29	34.48	16.38	9.21	15.01		15.17	05/01/2009
ESTIMATED INVESTMENT FEES			(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.03)			(0.01)				
TRS-TOTAL RUSSELL 1000 - NET MGR			3.00	17.95	9.20	12.07	0.72	13.27			9.20				
RUSSELL 1000 (DAILY)			3.06	18.03	9.27	12.05	0.92	13.24	33.11	16.42	9.26	14.67		15.86	
EXCESS RETURN			(0.06)	(0.08)	(0.07)	0.02	(0.20)	0.03	1.37	(0.04)	(0.06)	0.34		(0.69)	

Consolidated Performance Report

Through June 30, 2017



		Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2016	2015	2014	2013	2012	3 Year	5 Year	10 Year	ITD	Inception Date
EQUITY RETURN SUMMARY																
58	TRS-TOTAL RUSSELL 3000 PASSIVE - GROSS	7,804	11.83	3.01	18.50	8.94	12.75	0.46	12.22	33.65	16.40	9.02	14.53	7.29	10.38	12/01/1990
	ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)			(0.01)				
	TRS-TOTAL RUSSELL 3000 PASSIVE - NET MGR			3.01	18.49	8.94	12.74	0.45	12.21			9.00				
	RUSSELL 3000 (DAILY)			3.02	18.51	8.93	12.74	0.48	12.56	33.55	16.42	9.10	14.58	7.26	10.39	
	EXCESS RETURN			(0.00)	(0.02)	0.01	0.00	(0.03)	(0.35)	0.10	(0.02)	(0.10)	(0.05)	0.03	(0.00)	
68	TRS-TOTAL EMERGING MANAGER - GROSS	102	0.15												0.65	05/01/2017
	ESTIMATED INVESTMENT FEES														(0.11)	
	TRS-TOTAL EMERGING MANAGER - NET MGR														0.53	
	RUSSELL 2000 (DAILY)														1.35	
	EXCESS RETURN														(0.82)	

Consolidated Performance Report

Through June 30, 2017



		Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2016	2015	2014	2013	2012	3 Year	5 Year	10 Year	ITD	Inception Date
EQUITY RETURN SUMMARY																
80	TRS-TOTAL INTERNATIONAL EQUITY - GROSS	14,746	22.35	6.00	22.54	17.17	7.98	(9.15)	(2.78)	9.75	16.67	1.67	6.72	0.98	6.01	08/01/1991
	ESTIMATED INVESTMENT FEES			(0.08)	(0.35)	(0.17)	(0.33)	(0.29)	(0.32)			(0.32)				
	TRS-TOTAL INTERNATIONAL EQUITY - NET MGR			5.92	22.18	17.00	7.65	(9.44)	(3.10)			1.35				
	MSCI AC WORLD EX US (NET)			5.78	20.45	14.10	4.50	(5.66)	(3.87)	15.29	16.83	0.80	7.22	1.13		
	EXCESS RETURN			0.14	1.73	2.91	3.16	(3.78)	0.76	(5.54)	(0.16)	0.55	(0.50)	(0.15)		
90	TRS-TOTAL DEVELOPED GROWTH ACTIVE - GROSS	2,691	4.08	8.39	22.56	19.20	3.45	(0.49)	(5.66)	22.48	21.44	4.47	10.03		3.72	09/01/2007
	ESTIMATED INVESTMENT FEES			(0.07)	(0.33)	(0.16)	(0.29)	(0.28)	(0.27)			(0.29)				
	TRS-TOTAL DEVELOPED GROWTH ACTIVE - NET MGR			8.32	22.23	19.04	3.15	(0.77)	(5.93)			4.17				
	MSCI EAFE GROWTH			7.52	15.70	16.68	(3.04)	4.09	(4.43)	22.55	16.86	2.81	9.19		2.28	
	EXCESS RETURN			0.80	6.53	2.36	6.20	(4.86)	(1.50)	(0.06)	4.58	1.36	0.84		1.44	
100	TRS-TOTAL DEVELOPED VALUE ACTIVE - GROSS	2,461	3.73	4.39	22.88	11.87	4.62	(4.53)	(4.52)	24.68	14.38	0.79	8.28	1.27	6.32	04/01/2004
	ESTIMATED INVESTMENT FEES			(0.07)	(0.34)	(0.15)	(0.29)	(0.27)	(0.26)			(0.28)				
	TRS-TOTAL DEVELOPED VALUE ACTIVE - NET MGR			4.32	22.54	11.72	4.33	(4.79)	(4.78)			0.51				
	MSCI EAFE VALUE NET (DAILY)			4.78	25.01	11.12	5.02	(5.68)	(5.39)	22.95	17.69	(0.59)	8.12	(0.08)	5.02	
	EXCESS RETURN			(0.46)	(2.46)	0.60	(0.70)	0.89	0.62	1.73	(3.30)	1.10	0.16	1.35	1.30	
110	TRS-TOTAL DEVELOPED SMALL CAP ACTIVE - GROSS	686	1.04	9.56	25.63	19.42	2.89	11.87	(3.38)			7.57			11.08	05/01/2013
	ESTIMATED INVESTMENT FEES			(0.12)	(0.58)	(0.26)	(0.50)	(0.55)	(0.48)			(0.52)				
	TRS-TOTAL DEVELOPED SMALL CAP ACTIVE - NET MGR			9.44	25.05	19.16	2.38	11.32	(3.86)			7.05				
	S&P EPAC SMALL CAP USD NET			8.65	22.97	17.38	1.34	8.58	(3.43)			5.52			9.01	
	EXCESS RETURN			0.80	2.09	1.78	1.05	2.74	(0.43)			1.53			2.07	
120	TRS-TOTAL DEVELOPED SMALL CAP PASSIVE - GROSS	483	0.73	8.20	23.80	16.93	2.95	9.97				6.14			7.61	02/01/2014
	ESTIMATED INVESTMENT FEES			(0.02)	(0.05)	(0.03)	(0.02)	(0.02)				(0.03)			(0.03)	
	TRS-TOTAL DEVELOPED SMALL CAP PASSIVE - NET MGR			8.18	23.75	16.89	2.93	9.95				6.11			7.59	
	MSCI EAFE SMALL CAP NET (DAILY)			8.10	23.18	16.72	2.18	9.59				5.60			7.05	
	EXCESS RETURN			0.08	0.57	0.18	0.75	0.37				0.51			0.53	
130	TRS-TOTAL DEVELOPED LARGE CAP PASSIVE - GROSS	1,764	2.67	5.81	19.47	13.01	1.35	(0.28)	(5.41)	22.92	17.58	0.94	8.62		4.60	07/01/2011
	ESTIMATED INVESTMENT FEES			(0.00)	(0.02)	(0.01)	(0.02)	(0.02)	(0.02)			(0.02)				
	TRS-TOTAL DEVELOPED LARGE CAP PASSIVE - NET MGR			5.80	19.45	13.00	1.34	(0.30)	(5.43)			0.92				
	NYC CUSTOM WORLD EX US INDEX			5.63	19.14	12.74	1.00	(0.81)	(4.90)	22.78	17.32	0.83	8.48		4.40	
	EXCESS RETURN			0.17	0.31	0.27	0.34	0.52	(0.52)	0.14	0.26	0.09	0.13		0.20	

Consolidated Performance Report

Through June 30, 2017



		Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2016	2015	2014	2013	2012	3 Year	5 Year	10 Year	ITD	Inception Date
EQUITY RETURN SUMMARY																
142	TRS-TOTAL ACTIVE EMERGING MARKETS - GROSS	4,236	6.42	5.13	23.62	19.70	12.09	(18.05)	0.27	(4.66)		(0.01)	3.48		1.73	04/01/2012
	ESTIMATED INVESTMENT FEES			(0.15)	(0.61)	(0.30)	(0.54)	(0.44)	(0.53)			(0.52)				
	TRS-TOTAL ACTIVE EMERGING MARKETS - NET MGR			4.97	23.02	19.39	11.55	(18.49)	(0.26)			(0.53)				
	FTSE CUSTOM NYC TEACHERS EMERGING INDEX			5.43	22.24	18.41	13.91	(17.04)	0.67	(4.65)		0.79	4.04		1.94	
	EXCESS RETURN			(0.46)	0.77	0.98	(2.36)	(1.45)	(0.93)	(0.01)		(1.32)	(0.56)		(0.21)	
152	TRS-TOTAL PASSIVE EMERGING MARKETS - GROSS	2,092	3.17	5.49	21.28	18.39	12.98	(17.94)	(1.76)	(5.25)	15.88	(0.37)	2.77		(0.71)	04/01/2011
	ESTIMATED INVESTMENT FEES			(0.02)	(0.07)	(0.04)	(0.06)	(0.05)	(0.06)			(0.06)				
	TRS-TOTAL PASSIVE EMERGING MARKETS - NET MGR			5.48	21.21	18.36	12.92	(17.99)	(1.82)			(0.42)				
	MSCI CUSTOM TRS EMERGING MARKETS (NET)			5.50	21.32	18.09	13.10	(17.81)								
	EXCESS RETURN			(0.03)	(0.12)	0.27	(0.18)	(0.17)								
162	TRS-TOTAL INTERNATIONAL FUND OF FUNDS - GROSS	331	0.50												3.22	05/01/2017
	ESTIMATED INVESTMENT FEES														(0.09)	
	TRS-TOTAL INTERNATIONAL FUND OF FUNDS - NET MGR														3.13	
	NYC BLENDED CUSTOM BENCHMARK FOR FOF (TRS)														3.43	
	EXCESS RETURN														(0.31)	

Consolidated Performance Report

Through June 30, 2017



		Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2016	2015	2014	2013	2012	3 Year	5 Year	10 Year	ITD	Inception Date
EQUITY RETURN SUMMARY																
171	TRS-TOTAL REAL ESTATE SECURITIES - GROSS ESTIMATED INVESTMENT FEES	1,775	2.69	2.09 (0.16)	0.18 (0.34)	3.15 (0.24)	5.09 (0.30)	2.84 (0.37)	30.64 (0.48)	2.86	18.16	7.60 (0.38)	9.20	5.46	11.84	01/01/2003
	TRS-TOTAL REAL ESTATE SECURITIES - NET MGR			1.94	(0.16)	2.91	4.79	2.47	30.16			7.23				
	DJ US SELECT REAL ESTATE SECURITIES INDEX			1.64	(2.43)	1.36	6.65	4.46	31.85	1.31	17.09	8.02	8.97	5.32	10.94	
	EXCESS RETURN			0.30	2.27	1.54	(1.86)	(1.99)	(1.69)	1.54	1.07	(0.79)	0.22	0.14	0.89	
181	TRS-TOTAL PRIVATE EQUITY (TIME WEIGHTED) NYC R3000 +3% LAGGED	3,309	5.02	3.90 6.51	16.08 21.56	8.15 11.81	10.55 18.37	9.78 2.49	13.95 21.24	8.13 24.53	11.45 35.20	11.14 13.02	11.16 16.43	9.01 11.82	11.72 12.80	04/01/2004
	EXCESS RETURN			(2.61)	(5.48)	(3.65)	(7.83)	7.29	(7.29)	(16.40)	(23.75)	(1.89)	(5.27)	(2.81)	(1.07)	
191	TRS-TOTAL PRIVATE REAL ESTATE (TIME WEIGHTED) NCREIF NFI-ODCE NET + 100 BP	2,296	3.48	2.74 1.72	11.95 7.96	6.20 3.55	12.36 8.86	15.09 15.08	14.68 12.56	10.97 14.02	13.02 10.88	13.48 11.42	12.63 11.86	6.23	9.98	04/01/2004
	EXCESS RETURN			1.02	3.99	2.65	3.50	0.00	2.11	(3.05)	2.14	2.06	0.77			
201	TRS-TOTAL INFRASTRUCTURE (TIME WEIGHTED) CPI + 4%	376	0.57	6.69 1.00	12.94 5.71	8.75 2.39	9.47 6.18	12.33 4.68	18.76 4.69			11.87 4.98			13.79 5.19	12/01/2013
	EXCESS RETURN			5.68	7.23	6.36	3.29	7.64	14.07			6.89			8.60	

Consolidated Performance Report

Through June 30, 2017



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2016	2015	2014	2013	2012	3 Year	5 Year	10 Year	ITD	Inception Date
FIXED INCOME RETURN SUMMARY															
213 TRS-TOTAL FIXED INCOME - GROSS	23,510	35.64	1.36	3.64	3.03	5.66	(0.13)	6.01	1.58	7.89	3.07	4.00	5.63	8.13	02/01/1980
ESTIMATED INVESTMENT FEES			(0.03)	(0.14)	(0.07)	(0.15)	(0.14)	(0.17)			(0.15)				
EST MANAGEMENT FEES			(0.03)	(0.14)	(0.07)	(0.15)	(0.14)	(0.17)							
EST INCENTIVE FEES															
EST OTHER FEES															
EST FEE OFFSETS															
TRS-TOTAL FIXED INCOME - NET MGR			1.32	3.49	2.96	5.50	(0.27)	5.84			2.92				
221 TRS-TOTAL STRUCTURED FIXED INCOME - GROSS	11,723	17.77	1.76	0.62	2.86	3.75	0.23	7.54	(1.78)	6.62	2.95	3.08	5.34	7.58	01/01/1985
ESTIMATED INVESTMENT FEES			(0.02)	(0.06)	(0.03)	(0.07)	(0.07)	(0.08)			(0.07)				
TRS-TOTAL STRUCTURED FIXED INCOME - NET MGR			1.74	0.55	2.83	3.68	0.16	7.46			2.88				
NYC - CORE PLUS FIVE			1.82	(0.21)	2.82	3.20	0.41	7.66	(2.79)	5.41	2.97	2.68	5.20		
EXCESS RETURN			(0.08)	0.76	0.01	0.48	(0.25)	(0.20)	1.00	1.21	(0.09)	0.41	0.13		
231 TRS-TOTAL CORE FI- DEVELOPING MGRS - GROSS	122	0.19	1.56	1.41	2.81	4.00								3.01	06/01/2015
ESTIMATED INVESTMENT FEES			(0.04)	(0.19)	(0.09)	(0.20)								(0.20)	
TRS-TOTAL CORE FI- DEVELOPING MGRS - NET MGR			1.52	1.22	2.72	3.79								2.81	
BBG BARC AGG (DLY)			1.45	(0.31)	2.27	2.65								2.14	
EXCESS RETURN			0.07	1.53	0.45	1.15								0.67	
241 TRS-TOTAL CORE FI- EMERGING MGRS - GROSS	122	0.18	1.71	0.74	2.70	3.19	1.00	6.21	(1.58)		2.79	2.75		2.71	06/01/2012
ESTIMATED INVESTMENT FEES			(0.29)	(0.34)	(0.30)	(0.22)	(0.35)	(0.38)			(0.35)				
TRS-TOTAL CORE FI- EMERGING MGRS - NET MGR			1.41	0.40	2.40	2.97	0.65	5.83			2.44				
BBG BARC AGG (DLY)			1.45	(0.31)	2.27	2.65	0.55	5.97	(2.02)		2.48	2.21		2.18	
EXCESS RETURN			(0.03)	0.71	0.12	0.32	0.10	(0.13)	0.45		(0.04)	0.53		0.53	
251 TRS-TOTAL TIPS - GROSS	2,682	4.07	(0.39)	(0.64)	0.87	4.67	(1.22)	3.50	(8.53)	7.23	0.66	0.34	4.38	3.91	06/01/2005
ESTIMATED INVESTMENT FEES			(0.00)	(0.02)	(0.01)	(0.02)	(0.03)	(0.07)			(0.03)				
TRS-TOTAL TIPS - NET MGR			(0.40)	(0.66)	0.86	4.65	(1.25)	3.43			0.63				
BBG BARC GBL INF-LK: US TIPS (DLY)			(0.40)	(0.63)	0.85	4.68	(1.44)	3.64	(8.61)	6.98	0.63	0.27	4.27	3.75	
EXCESS RETURN			0.01	(0.03)	0.01	(0.03)	0.19	(0.21)	0.08	0.26	(0.00)	0.08	0.11	0.15	
261 TRS-TOTAL HIGH YIELD - GROSS	3,437	5.21	2.00	11.44	4.59	14.28	(3.27)	2.46	7.37	13.64	3.96	6.42	7.09	6.22	08/01/1998
ESTIMATED INVESTMENT FEES			(0.08)	(0.37)	(0.17)	(0.39)	(0.34)	(0.35)			(0.35)				
TRS-TOTAL HIGH YIELD - NET MGR			1.92	11.07	4.42	13.89	(3.60)	2.10			3.61				
CITIGROUP BB & B			2.07	11.47	4.40	15.48	(4.21)	2.78	6.17	14.45	4.07	6.21	6.25	5.91	
EXCESS RETURN			(0.15)	(0.39)	0.02	(1.59)	0.61	(0.68)	1.20	(0.81)	(0.46)	0.21	0.85	0.31	
271 TRS- TOTAL BANK LOANS - GROSS	1,669	2.53	0.81	6.66	1.85	8.55	1.84	2.78	6.38		4.14			4.70	11/01/2012
ESTIMATED INVESTMENT FEES			(0.08)	(0.36)	(0.17)	(0.37)	(0.35)	(0.35)			(0.35)				
TRS-TOTAL BANK LOANS - NET MGR			0.73	6.30	1.69	8.18	1.49	2.43			3.79				
CSFB LEVERAGED LOAN INDEX			0.75	7.49	1.96	9.88	(0.38)	2.06	6.15		3.49			4.41	
EXCESS RETURN			(0.02)	(1.19)	(0.28)	(1.70)	1.87	0.37	0.23		0.30			0.29	

Consolidated Performance Report

Through June 30, 2017



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2016	2015	2014	2013	2012	3 Year	5 Year	10 Year	ITD	Inception Date
FIXED INCOME RETURN SUMMARY															
283 TRS-TOTAL CONVERTIBLE BONDS - GROSS	1,114	1.69	2.52	11.58	6.51	6.38	0.17	8.57	15.96	12.08	4.70	8.71		6.87	07/01/2008
ESTIMATED INVESTMENT FEES			(0.10)	(0.46)	(0.21)	(0.45)	(0.43)	(0.47)			(0.44)				
TRS-TOTAL CONVERTIBLE BONDS - NET MGR			2.42	11.12	6.29	5.93	(0.25)	8.09			4.26				
BOFAML ALL CONVERTIBLE EX M AI (DAILY)			2.98	19.86	8.76	11.71	(2.75)	9.33	25.00	14.41	5.60	11.56		8.69	
EXCESS RETURN			(0.56)	(8.74)	(2.47)	(5.78)	2.49	(1.24)	(9.04)	(2.33)	(1.34)	(2.85)		(1.82)	
293 TRS-TOTAL OPPORTUNISTIC FIXED INCOME	1,643	2.49	0.38	11.26	4.78	7.31	(1.24)	9.07	17.03	15.56	4.19	8.25		7.27	10/01/2007
OPPORTUNISTIC FIXED INCOME JPMGHY / CSFB 50/50 BLEND PLUS 300			2.16	13.71	5.00	17.40	0.63	4.93	9.99	16.13	7.15	9.11		9.41	
EXCESS RETURN			(1.78)	(2.45)	(0.23)	(10.10)	(1.87)	4.14	7.04	(0.57)	(2.96)	(0.85)		(2.14)	
303 TRS-TOTAL TARGETED INVESTMENTS (NO CASH)	573	0.87	2.07	(0.73)	2.56	2.53	3.65	8.22	1.02	5.80	3.73	4.11	5.59	8.14	12/01/1984
TRS CUSTOM BENCHMARK (NO CASH)			1.19	0.08	1.88	2.39	1.30	6.00	(1.67)	3.55	2.52	2.24	4.43		
EXCESS RETURN			0.87	(0.81)	0.68	0.14	2.35	2.22	2.69	2.25	1.21	1.87	1.16		
CASH SUMMARY															
315 TEACHERS' SHORT TERM - GROSS	424	0.64	0.25	0.75	0.56	0.78	0.48	0.32	0.25	0.37	0.68	0.52	1.17		04/01/1982
ESTIMATED INVESTMENT FEES			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TEACHERS' SHORT TERM - NET MGR			0.25	0.75	0.56	0.78	0.48	0.32	0.25	0.37	0.68	0.52	1.17		
319 C/D - FAIL FLOAT EARNINGS	-	-													
321 SECURITIES LENDING	22	0.03													

**Teachers' Retirement System
of New York City**

Appendix B

Public Markets Manager Performance Detail

Public Markets Manager Performance Detail



Net Returns Through June 30, 2017

	Market Value (\$MM)	% of Total	3 Months	FYTD	CYTD	2016	2015	2014
EQUITY SUMMARY								
US EQUITY								
State Street Global Adv R3000	7,804	11.83	3.01	18.48	8.94	12.73	0.45	12.21
RUSSELL 3000 (DAILY)			3.02	18.51	8.93	12.74	0.48	12.56
Excess			(0.00)	(0.03)	0.00	(0.00)	(0.03)	(0.35)
BLACKROCK INST R 2000 GROWTH	210	0.32	4.38	24.50	10.02	11.26	(1.51)	5.90
RUSSELL 2000 GROWTH DAILY			4.39	24.40	9.97	11.32	(1.38)	5.60
Excess			(0.01)	0.10	0.05	(0.06)	(0.13)	0.30
BLACKROCK INST R 2000 VALUE	382	0.58	0.77	24.83	0.55	31.73	(7.49)	4.25
RUSSELL 2000 VALUE DAILY			0.67	24.86	0.54	31.74	(7.47)	4.22
Excess			0.10	(0.03)	0.01	(0.01)	(0.02)	0.03
Brown AM - SCG	393	0.60	8.32	27.37	17.85	10.35	8.62	2.92
RUSSELL 2000 GROWTH DAILY			4.39	24.40	9.97	11.32	(1.38)	5.60
Excess			3.93	2.97	7.87	(0.97)	10.00	(2.68)
BLACKROCK INST R 1000 GROWTH	5,580	8.46	4.66	20.39	13.98	7.06	5.61	13.03
RUSSELL 1000 GROWTH - DAILY			4.67	20.42	13.99	7.08	5.67	13.05
Excess			(0.01)	(0.03)	(0.02)	(0.01)	(0.06)	(0.02)
Blackrock Inst R 1000 Value	5,459	8.28	1.33	15.50	4.64	17.41	(3.84)	13.56
RUSSELL 1000 VALUE (DAILY)			1.34	15.53	4.66	17.34	(3.83)	13.45
Excess			(0.01)	(0.03)	(0.02)	0.07	(0.01)	0.11
EMERGING MANAGERS								
TOTAL EMERGING MANAGERS	102	0.15						
RUSSELL 2000 (DAILY)								
Excess								

Public Markets Manager Performance Detail



Net Returns Through June 30, 2017

	Market Value (\$MM)	% of Total	3 Months	FYTD	CYTD	2016	2015	2014
TRS-TOTAL LEGATO	102	0.15						
RUSSELL 2000 (DAILY)								
Excess								
NON - US EQUITY								
Causeway	1,192	1.81	4.96	21.31	12.51	(0.79)	(2.05)	(5.72)
MSCI EAFE VALUE NET (DAILY)			4.78	25.01	11.12	5.02	(5.68)	(5.39)
Excess			0.18	(3.70)	1.39	(5.81)	3.63	(0.32)
Sprucegrove MTA	1,270	1.92	3.73	23.26	10.89	8.56	(6.95)	(4.06)
MSCI EAFE VALUE NET (DAILY)			4.78	25.01	11.12	5.02	(5.68)	(5.39)
Excess			(1.05)	(1.75)	(0.22)	3.53	(1.27)	1.34
Baillie Gifford MTA	1,422	2.16	9.06	27.21	21.81	2.04	(2.85)	(7.83)
MSCI EAFE GROWTH			7.52	15.70	16.68	(3.04)	4.09	(4.43)
Excess			1.54	11.51	5.13	5.09	(6.94)	(3.40)
Walter Scott	1,269	1.92	7.50	17.09	16.08	4.37	1.60	(3.66)
MSCI EAFE GROWTH			7.52	15.70	16.68	(3.04)	4.09	(4.43)
Excess			(0.02)	1.39	(0.60)	7.41	(2.49)	0.77
Acadian	365	0.55	9.82	28.69	20.78	5.46	10.97	(2.33)
S&P EPAC Small Cap USD NET			8.65	22.97	17.38	1.34	8.58	(3.43)
Excess			1.18	5.72	3.40	4.12	2.38	1.10
Pyramis	321	0.49	9.01	21.16	17.36	(0.81)	11.69	(5.41)
S&P EPAC Small Cap USD NET			8.65	22.97	17.38	1.34	8.58	(3.43)
Excess			0.37	(1.81)	(0.02)	(2.15)	3.11	(1.98)
SSGA MTA	1,764	2.67	5.80	19.45	13.00	1.34	(0.30)	(5.43)
NYC Custom World ex US Index			5.63	19.14	12.74	1.00	(0.81)	(4.90)
Excess			0.17	0.31	0.27	0.34	0.52	(0.52)

Public Markets Manager Performance Detail



Net Returns Through June 30, 2017

	Market Value (\$MM)	% of Total	3 Months	FYTD	CYTD	2016	2015	2014
SSGA MSCI EAFE Small Cap Index	483	0.73	8.18	23.75	16.89	2.93	9.95	
MSCI EAFE SMALL CAP NET (DAILY)			8.10	23.18	16.72	2.18	9.59	
Excess			0.08	0.57	0.18	0.75	0.37	
EMERGING MARKETS								
Baillie Gifford EM Equities	1,535	2.33	6.90	25.53	23.69	4.02	(14.09)	4.83
FTSE Custom NYC Teachers Emerging Index			5.43	22.24	18.41	13.91	(17.04)	0.67
Excess			1.47	3.29	5.28	(9.90)	2.95	4.16
DFA MTA 325	1,207	1.83	2.69	25.90	17.53	20.88	(21.72)	(4.59)
FTSE Custom NYC Teachers Emerging Index			5.43	22.24	18.41	13.91	(17.04)	0.67
Excess			(2.74)	3.65	(0.88)	6.97	(4.68)	(5.26)
PARAMETRIC EM	1,163	1.76	5.22	18.36	17.34	11.47	(19.97)	(0.80)
FTSE Custom NYC Teachers Emerging Index			5.43	22.24	18.41	13.91	(17.04)	0.67
Excess			(0.21)	(3.88)	(1.07)	(2.44)	(2.94)	(1.47)
Lazard Emerging Markets	331	0.50	4.20		15.15			
FTSE Custom NYC Teachers Emerging Index			5.43		18.41			
Excess			(1.23)		(3.26)			
CONY GT TRS Blackrock-MSCI EM INDEX MTA	2,092	3.17	5.48	21.21	18.36	12.92	(17.99)	(1.82)
MSCI CUSTOM TRS EMERGING MARKETS (NET)			5.50	21.32	18.09	13.10	(17.81)	
Excess			(0.03)	(0.12)	0.27	(0.18)	(0.17)	
INTERNATIONAL FOF								
TRS-TOTAL INTERNATIONAL FOF	331	0.50						
NYC Blended Custom Benchmark for FoF (TRS)								
Excess								
TRS-TOTAL INTERNATIONAL BIVUM	110	0.17						
NYC Blended Custom Benchmark for FoF (TRS)								
Excess								

Public Markets Manager Performance Detail



Net Returns Through June 30, 2017

	Market Value (\$MM)	% of Total	3 Months	FYTD	CYTD	2016	2015	2014
TRS-TOTAL INTERNATIONAL FIS	110	0.17						
NYC Blended Custom Benchmark for FoF (TRS)								
Excess								
TRS-TOTAL INTERNATIONAL LEADING EDGE	111	0.17						
NYC Blended Custom Benchmark for FoF (TRS)								
Excess								
REAL ESTATE SECURITIES								
Adelante Capital Mgt. - REIT	354	0.54	2.84	(0.26)	3.42	3.90	4.81	33.05
DJ US SELECT REAL ESTATE SECURITIES INDEX			1.64	(2.43)	1.36	6.65	4.46	31.85
Excess			1.20	2.16	2.06	(2.75)	0.36	1.20
Center Square Investment Mgt. - REIT	260	0.39	0.88	(2.57)	1.24	7.98	5.87	32.56
DJ US SELECT REAL ESTATE SECURITIES INDEX			1.64	(2.43)	1.36	6.65	4.46	31.85
Excess			(0.76)	(0.14)	(0.13)	1.33	1.41	0.71
Cohen & Steers - REIT	248	0.38	2.51	0.71	3.46	4.96	5.59	31.67
DJ US SELECT REAL ESTATE SECURITIES INDEX			1.64	(2.43)	1.36	6.65	4.46	31.85
Excess			0.87	3.13	2.10	(1.69)	1.13	(0.18)
Morgan Stanley - REIT	664	1.01	2.02	1.36	3.89	3.49	(1.63)	30.72
Morgan Stanley Custom RESI Index			2.64	(0.85)	4.61	2.37	(1.53)	31.85
Excess			(0.62)	2.22	(0.72)	1.13	(0.11)	(1.13)
Security Capital - REIT	249	0.38	0.86	(2.48)	0.64	6.25	4.35	32.80
DJ US SELECT REAL ESTATE SECURITIES INDEX			1.64	(2.43)	1.36	6.65	4.46	31.85
Excess			(0.78)	(0.05)	(0.72)	(0.40)	(0.11)	0.95

Public Markets Manager Performance Detail

Net Returns Through June 30, 2017



	Market Value (\$MM)	% of Total	3 Months	FYTD	CYTD	2016	2015	2014
FIXED INCOME SUMMARY								
STRUCTURED FIXED INCOME								
Blackrock - Mortgage	1,201	1.82	1.03	0.54	1.59	2.17	1.76	6.56
CITIGROUP MORTGAGE INDEX			0.92	(0.08)	1.36	1.59	1.56	6.12
Excess			0.10	0.62	0.23	0.58	0.20	0.44
Blackrock - Special Purpose Mtge	7	0.01						
CITIGROUP MORTGAGE INDEX								
Excess								
Neuberger Berman - Mortgage	719	1.09	0.93	(0.12)	1.37	1.49	1.37	6.66
CITIGROUP MORTGAGE INDEX			0.92	(0.08)	1.36	1.59	1.56	6.12
Excess			0.00	(0.03)	0.01	(0.09)	(0.19)	0.54
Amundi Smith Breeden - Mortgage	476	0.72	0.91	0.25	1.30	2.02	1.68	6.41
CITIGROUP MORTGAGE INDEX			0.92	(0.08)	1.36	1.59	1.56	6.12
Excess			(0.01)	0.34	(0.06)	0.44	0.12	0.29
Blackrock - Credit	555	0.84	2.43	2.31	3.93	5.57	(0.71)	7.43
NYC - Investment Grade Credit			2.28	1.90	3.69	5.56	(0.65)	7.04
Excess			0.15	0.41	0.25	0.01	(0.06)	0.39
Taplin Canida Habacht - Credit	663	1.01	2.60	5.37	4.55	9.02	(4.10)	7.34
NYC - Investment Grade Credit			2.28	1.90	3.69	5.56	(0.65)	7.04
Excess			0.32	3.46	0.86	3.46	(3.46)	0.30
T. Rowe Price - Credit	1,264	1.92	2.60	2.70	4.16	5.96	0.09	7.82
NYC - Investment Grade Credit			2.28	1.90	3.69	5.56	(0.65)	7.04
Excess			0.32	0.79	0.47	0.41	0.73	0.77
Prudential - Credit	800	1.21	2.27	1.91	3.56	5.84	(0.16)	7.19
NYC - Investment Grade Credit			2.28	1.90	3.69	5.56	(0.65)	7.04
Excess			(0.01)	0.01	(0.13)	0.28	0.49	0.14

Public Markets Manager Performance Detail



Net Returns Through June 30, 2017

	Market Value (\$MM)	% of Total	3 Months	FYTD	CYTD	2016	2015	2014
Barrow Hanley - Credit	542	0.82	2.44	2.34	3.74	5.88	(0.11)	7.39
NYC - Investment Grade Credit			2.28	1.90	3.69	5.56	(0.65)	7.04
Excess			0.16	0.44	0.06	0.32	0.54	0.35
Prudential-Privest - Credit	140	0.21	1.91	2.82	3.62	4.24	1.63	7.20
NYC - Investment Grade Credit			2.28	1.90	3.69	5.56	(0.65)	7.04
Excess			(0.37)	0.91	(0.07)	(1.32)	2.28	0.16
State Street - Gov't	1,229	1.86	2.36	(3.98)	3.80	1.48	0.50	12.08
NYC - Treasury Agency Plus Five			2.30	(4.60)	3.42	1.21	0.72	12.38
Excess			0.06	0.62	0.39	0.26	(0.23)	(0.29)
Blackrock - Gov't	674	1.02	2.30	(4.18)	3.74	1.25	0.69	11.96
NYC - Treasury Agency Plus Five			2.30	(4.60)	3.42	1.21	0.72	12.38
Excess			0.00	0.43	0.32	0.03	(0.03)	(0.42)
SSGA 1-3 Treasury Index	879	1.33	0.17		0.42			
Citigroup USBIG Treasury 1-3 Y Index			0.18		0.44			
Excess			(0.01)		(0.02)			
SSGA Long Duration Treasury	2,005	3.04	3.92		5.38			
Citigroup Treasury 10+			4.00		5.47			
Excess			(0.08)		(0.09)			
SSgA Int Gov Bond Index	569	0.86	0.63					
Citigroup USBIG Treasury/Agency 1-10 y			0.64					
Excess			(0.01)					
HIGH YIELD								
Loomis Sayles - High Yield	436	0.66	1.65	13.67	5.07	18.62	(6.49)	3.55
BofAML HIGH YIELD MASTER II (DAILY)			2.14	12.75	4.91	17.49	(4.64)	2.50
Excess			(0.49)	0.92	0.16	1.13	(1.85)	1.04

Public Markets Manager Performance Detail



Net Returns Through June 30, 2017

	Market Value (\$MM)	% of Total	3 Months	FYTD	CYTD	2016	2015	2014
Neuberger Berman - High Yield	682	1.03	1.43	10.38	3.85	14.89	(3.96)	1.85
BofAML HIGH YIELD MASTER II (DAILY)			2.14	12.75	4.91	17.49	(4.64)	2.50
Excess			(0.72)	(2.37)	(1.06)	(2.60)	0.68	(0.65)
Oaktree - High Yield	342	0.52	2.25	11.06	4.20	14.96	(4.70)	1.33
BofAML HYM CONSTRAINED (DAILY)			2.14	12.74	4.90	17.49	(4.61)	2.51
Excess			0.11	(1.68)	(0.71)	(2.53)	(0.08)	(1.18)
Stone Harbor - High Yield	500	0.76	1.51	10.22	3.82	13.10	(4.47)	0.79
BofA ML MST II 7-12/BB&B Prior			2.14	12.75	4.91	17.49	(4.64)	2.50
Excess			(0.63)	(2.53)	(1.09)	(4.39)	0.17	(1.72)
T. Rowe Price - High Yield	749	1.14	2.49	11.12	5.06	12.17	(1.17)	2.96
CITIGROUP BB & B			2.07	11.47	4.40	15.48	(4.21)	2.78
Excess			0.42	(0.34)	0.67	(3.30)	3.04	0.18
Penn Capital Mgt - High Yield	203	0.31	1.98	11.69	4.48	11.96	(1.32)	0.92
CITIGROUP BB & B			2.07	11.47	4.40	15.48	(4.21)	2.78
Excess			(0.09)	0.23	0.09	(3.52)	2.89	(1.86)
Fort Washington - High Yield	202	0.31	2.48	10.86	5.05	12.71	(4.37)	2.37
CITIGROUP BB & B			2.07	11.47	4.40	15.48	(4.21)	2.78
Excess			0.41	(0.60)	0.65	(2.76)	(0.16)	(0.42)
Shenkman - High Yield	324	0.49	1.92	10.02	4.01	11.64	(2.16)	2.75
CITIGROUP BB & B			2.07	11.47	4.40	15.48	(4.21)	2.78
Excess			(0.15)	(1.44)	(0.39)	(3.83)	2.05	(0.03)
BANK LOANS								
Babson BL	412	0.62	0.67	6.82	1.74	8.47	0.12	1.99
CSFB LEVERAGED LOAN INDEX			0.75	7.49	1.96	9.88	(0.38)	2.06
Excess			(0.09)	(0.67)	(0.23)	(1.41)	0.50	(0.07)

Public Markets Manager Performance Detail



Net Returns Through June 30, 2017

	Market Value (\$MM)	% of Total	3 Months	FYTD	CYTD	2016	2015	2014
Credit Suisse BL	427	0.65	1.03	7.02	2.23	8.96	2.57	2.67
CSFB LEVERAGED LOAN INDEX			0.75	7.49	1.96	9.88	(0.38)	2.06
Excess			0.28	(0.47)	0.26	(0.92)	2.96	0.61
Guggenheim BL	423	0.64	0.70	5.85	1.55	7.84	2.07	2.88
CSFB LEVERAGED LOAN INDEX			0.75	7.49	1.96	9.88	(0.38)	2.06
Excess			(0.06)	(1.64)	(0.42)	(2.03)	2.45	0.83
Voya BL	208	0.31	0.59	5.84	1.31	7.71	1.21	2.66
CSFB LEVERAGED LOAN INDEX			0.75	7.49	1.96	9.88	(0.38)	2.06
Excess			(0.17)	(1.65)	(0.65)	(2.17)	1.60	0.60
Wells BL	200	0.30	0.45	5.19	1.13	7.18	1.17	1.68
CSFB LEVERAGED LOAN INDEX			0.75	7.49	1.96	9.88	(0.38)	2.06
Excess			(0.30)	(2.30)	(0.83)	(2.70)	1.55	(0.38)
TIPS								
State Street TIPS Passive	2,013	3.05	(0.40)	(0.67)	0.86	4.66	(1.35)	3.57
BBG BARC Gbl Inf-Lk: US TIPS (Dly)			(0.40)	(0.63)	0.85	4.68	(1.44)	3.64
Excess			0.01	(0.04)	0.01	(0.03)	0.09	(0.07)
Blackrock TIPS	669	1.01	(0.39)	(0.63)	0.87	4.64	(1.24)	3.74
BBG BARC Gbl Inf-Lk: US TIPS (Dly)			(0.40)	(0.63)	0.85	4.68	(1.44)	3.64
Excess			0.01	(0.01)	0.01	(0.05)	0.20	0.10
CONVERTIBLE BONDS								
F&C Conv Bonds	251	0.38	1.57	9.65	4.20	2.49	3.21	7.73
UBS Global Focus Customized			1.60	8.71	3.99	0.90	4.32	3.80
Excess			(0.03)	0.94	0.21	1.59	(1.12)	3.92
Advent Conv Bonds	513	0.78	1.37	9.33	4.82	7.34	(1.98)	4.63
BofA ML U.S. Convertible Yield Alternative			2.47	12.56	6.29	9.96	(8.77)	2.75
Excess			(1.11)	(3.23)	(1.47)	(2.62)	6.80	1.88

Public Markets Manager Performance Detail



Net Returns Through June 30, 2017

	Market Value (\$MM)	% of Total	3 Months	FYTD	CYTD	2016	2015	2014
Victory - Conv Bonds	351	0.53	4.63	14.98	10.13	6.47	(0.20)	13.72
BofA Merrill Lynch US Investment Grade Convertible Bond Index			4.02	20.40	9.76	14.23	1.68	15.69
Excess			0.60	(5.42)	0.37	(7.76)	(1.88)	(1.98)
CORE FI - EMERGING MANAGERS								
Hillswick	12	0.02	1.13	(0.90)	1.92	2.61	0.61	7.08
BBG BARC Agg (Dly)			1.45	(0.31)	2.27	2.65	0.55	5.97
Excess			(0.31)	(0.59)	(0.35)	(0.03)	0.06	1.11
Integrity	11	0.02	1.25	0.06	2.32			
BBG BARC Agg (Dly)			1.45	(0.31)	2.27			
Excess			(0.19)	0.37	0.05			
NEW CENTURY	32	0.05	1.42	0.45	2.49	2.37	(0.30)	6.51
BBG BARC Agg (Dly)			1.45	(0.31)	2.27	2.65	0.55	5.97
Excess			(0.03)	0.76	0.21	(0.28)	(0.85)	0.55
Ramirez Asset	30	0.05	1.45	0.88	2.33	3.64	1.12	
BBG BARC Agg (Dly)			1.45	(0.31)	2.27	2.65	0.55	
Excess			0.01	1.19	0.06	0.99	0.57	
PUGH CAP	37	0.06	1.51	0.49	2.55	3.48	0.79	5.86
BBG BARC Agg (Dly)			1.45	(0.31)	2.27	2.65	0.55	5.97
Excess			0.07	0.80	0.28	0.84	0.24	(0.10)
CORE FI - DEVELOPING MANAGERS								
LM CAPITAL	74	0.11	1.46	0.92	2.53	3.50		
BBG BARC Agg (Dly)			1.45	(0.31)	2.27	2.65		
Excess			0.02	1.24	0.26	0.86		
GIA	48	0.07	1.60	1.68	3.02	4.24		
BBG BARC Agg (Dly)			1.45	(0.31)	2.27	2.65		
Excess			0.16	1.99	0.75	1.59		

Public Markets Manager Performance Detail



Net Returns Through June 30, 2017

	Market Value (\$MM)	% of Total	3 Months	FYTD	CYTD	2016	2015	2014
ECONOMICALLY TARGETED INVESTMENTS								
AFL-CIO HOUSING INV TRUST	282	0.43	1.32	(0.38)	2.14	1.94	1.13	6.10
BBG BARC Agg (Dly)			1.45	(0.31)	2.27	2.65	0.55	5.97
Excess			(0.13)	(0.07)	(0.13)	(0.71)	0.58	0.14
ACCESS RBC	96	0.15	1.13	(0.13)	1.62	1.61	1.83	6.66
Access RBC Benchmark			0.80	(0.51)	1.27	1.52	1.40	5.08
Excess			0.33	0.38	0.35	0.09	0.43	1.58
CPC CONST FACILITY	7	0.01	0.61	1.99	2.66	(3.95)	12.90	
CPC CONST BENCHMARK			0.81	3.09	1.58	3.03	2.90	
Excess			(0.20)	(1.10)	1.08	(6.99)	10.00	
BOA-PPAR (FNMA)	7	0.01	4.52	(2.31)	4.77	4.07	42.03	13.31
FNMA Plus 85bps			1.28	0.77	1.99	2.38	2.50	7.13
Excess			3.24	(3.08)	2.77	1.69	39.53	6.19
CCD-PPAR (FNMA)	10	0.01	3.46	(2.15)	3.82	3.71	6.69	25.71
FNMA Plus 85bps			1.28	0.77	1.99	2.38	2.50	7.13
Excess			2.18	(2.92)	1.83	1.33	4.20	18.58
CCD-PPAR (GNMA)	6	0.01	2.69	(3.10)	2.75	2.78	5.08	15.37
GNMA Plus 65bps			0.77	0.47	1.19	2.28	2.02	6.65
Excess			1.92	(3.57)	1.56	0.50	3.06	8.72
CFSB-PPAR (GNMA)	2	0.00	3.32	(2.30)	3.55	3.21	5.90	15.34
GNMA Plus 65bps			0.77	0.47	1.19	2.28	2.02	6.65
Excess			2.55	(2.77)	2.36	0.93	3.88	8.69
CPC-PPAR (FNMA)	71	0.11	4.14	(1.89)	3.31	6.15	8.96	13.91
FNMA Plus 85bps			1.28	0.77	1.99	2.38	2.50	7.13
Excess			2.87	(2.66)	1.32	3.77	6.46	6.78

Public Markets Manager Performance Detail



Net Returns Through June 30, 2017

	Market Value (\$MM)	% of Total	3 Months	FYTD	CYTD	2016	2015	2014
CPC - PPAR (GNMA)	77	0.12	2.72	(3.21)	2.68	1.83	5.33	11.79
GNMA Plus 65bps			0.77	0.47	1.19	2.28	2.02	6.65
Excess			1.95	(3.68)	1.49	(0.44)	3.31	5.14
LIIF-PPAR (FNMA)	10	0.02	8.05	(4.70)	8.46	5.03	6.29	38.12
FNMA Plus 85bps			1.28	0.77	1.99	2.38	2.50	7.13
Excess			6.77	(5.47)	6.47	2.65	3.79	30.99
LIIF-PPAR (GNMA)	3	0.00	1.84	(0.64)	2.20	3.88	3.92	9.74
GNMA Plus 65bps			0.77	0.47	1.19	2.28	2.02	6.65
Excess			1.07	(1.11)	1.01	1.61	1.91	3.09
NCBCI-PPAR (FNMA)	0	0.00	0.87	(4.87)	0.26	3.46	4.97	14.93
FNMA Plus 85bps			1.28	0.77	1.99	2.38	2.50	7.13
Excess			(0.41)	(5.64)	(1.73)	1.07	2.47	7.81
NCBCI-PPAR (GNMA)	1	0.00	2.61	(2.89)	2.57	3.51	5.53	16.66
GNMA Plus 65bps			0.77	0.47	1.19	2.28	2.02	6.65
Excess			1.84	(3.36)	1.37	1.23	3.52	10.01
NHS-PPAR (GNMA)	0	0.00	2.31	(7.48)	(3.32)	3.58	4.90	13.73
GNMA Plus 65bps			0.77	0.47	1.19	2.28	2.02	6.65
Excess			1.55	(7.95)	(4.51)	1.30	2.89	7.08
CASH								
TEACHERS' SHORT TERM	424	0.64	0.25	0.75	0.56	0.78	0.48	0.32
91 DAY TREASURY BILL (DAILY)			0.20	0.49	0.31	0.33	0.05	0.03
Excess			0.05	0.27	0.26	0.45	0.43	0.29
C/D - Fail Float Earnings	0	0.00						
SECURITY LENDING	22	0.03						

**Teachers' Retirement System
of New York City**

Appendix C

Alternative Assets Manager Performance Detail

Alternative Assets Manager Performance Detail

Through March 31, 2017



	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
TOTAL PRIVATE EQUITY		7,653,589,971	5,606,343,523	4,295,337,130	3,360,721,751	1.37	9.4%
TOTAL LIQUIDATED		485,402,290	451,058,218	575,210,728	-	1.28	
TOTAL ACTIVE		7,168,187,681	5,155,285,305	3,720,126,403	3,360,721,751	1.37	
TOTAL ACTIVE							
Cypress Merchant Banking Partners II, LP	1999	50,000,000	53,983,573	50,576,167	84,201	0.94	-1.2%
FdG Capital Partners, L.P.	1999	30,000,000	34,754,703	59,960,876	3,789,190	1.83	15.3%
Lincolnshire Equity Fund II, L.P.	1999	15,000,000	14,446,100	27,354,923	1,043,109	1.97	24.6%
SCP Private Equity Partners II, L.P.	2000	20,000,000	22,196,012	8,429,680	2,792,195	0.51	-8.1%
Solera Partners, L.P.	2000	15,000,000	19,882,869	31,226,365	2,385,343	1.69	8.3%
Apollo Investment Fund V, L.P.	2001	30,000,000	46,758,049	92,101,606	588,335	1.98	38.8%
RRE Ventures III, L.P.	2001	20,000,000	26,269,971	34,025,652	1,367,442	1.35	5.6%
Coller International Partnership IV, L.P.	2002	35,000,000	31,222,054	42,125,089	65,226	1.35	11.5%
Landmark Equity Partners XI, L.P.	2002	20,000,000	21,259,660	30,552,766	1,115,374	1.49	23.4%
Thomas McNerney & Partners, L.P.	2002	15,000,000	15,000,000	7,543,579	1,516,324	0.60	-8.8%
Ares Corporate Opportunities Fund, L.P.	2003	15,000,000	18,004,666	26,835,382	1,063,054	1.55	13.6%
Blackstone Capital Partners IV L.P.	2003	30,000,000	30,690,321	74,396,943	2,585,321	2.51	37.8%
FS Equity Partners V, L.P.	2003	25,000,000	20,193,803	40,564,528	1,960,145	2.11	15.5%
Leeds Weld Equity Partners IV, L.P.	2003	15,000,000	15,356,325	17,201,020	3,190,664	1.33	4.5%
Aurora Equity Partners III, L.P.	2004	20,000,000	21,708,976	35,032,609	1,073,877	1.66	13.9%
Celtic Pharmaceutical Holdings, L.P.	2004	15,000,000	15,241,256	241,256	13,818,472	0.92	-0.8%
FdG Capital Partners II, L.P.	2004	35,000,000	37,688,035	42,562,842	3,001,960	1.21	3.7%
Lincolnshire Equity Fund III, L.P.	2004	25,000,000	24,726,449	35,192,220	9,436,416	1.80	29.5%
Markstone Capital Partners, L.P.	2004	35,000,000	40,766,689	17,074,753	238,188	0.42	-60.5%
New York/Fairview Emerging Managers (Tranche A), L.P.	2004	24,000,000	24,646,553	21,593,939	7,437,658	1.18	2.9%
Paladin Homeland Security Fund (NY), L.P.	2004	15,000,000	16,495,862	6,058,052	421,246	0.39	-13.7%
Trilantic Capital Partners III (fka LBMB III), L.P.	2004	30,000,000	23,796,780	35,225,212	651,759	1.51	12.4%
Yucaipa American Alliance Fund I, L.P.	2004	55,000,000	80,828,995	69,484,670	19,743,282	1.10	2.8%
Blackstone Mezzanine Partners II, L.P.	2005	20,000,000	19,334,599	25,624,926	208,317	1.34	7.8%
GI Partners Fund II, L.P.	2005	25,000,000	25,329,874	38,995,657	1,388,214	1.59	7.6%
JP Morgan Fleming (Tranche A), L.P.	2005	31,000,000	30,514,688	24,695,429	17,238,974	1.37	6.6%
NB NYC Growth Fund, LLC	2005	30,000,000	26,117,536	26,189,841	-	1.00	0.1%
New Mountain Partners II, L.P.	2005	23,225,800	21,337,552	40,880,962	449,761	1.94	13.7%
Palladium Equity Partners III, L.P.	2005	35,000,000	37,364,874	52,282,542	20,843,827	1.96	16.1%
Prism Venture Partners V-A, L.P.	2005	20,000,000	20,931,568	11,565,613	2,382,290	0.67	-8.1%

Information provided by the New York City Teachers' Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2017



	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
Psilos Group Partners III, L.P.	2005	25,000,000	26,575,585	12,820,541	18,457,526	1.18	3.0%
Snow Phipps Group, L.P.	2005	15,000,000	17,706,967	13,600,992	8,314,609	1.24	5.5%
USPF II Institutional Fund, L.P.	2005	35,000,000	46,164,567	34,978,385	27,357,282	1.35	5.5%
VSS Communications Partners IV, L.P.	2005	10,000,000	11,373,809	7,657,529	767,807	0.74	-5.2%
Aisling Capital II, L.P.	2006	4,500,000	5,097,713	3,689,704	1,446,865	1.01	0.2%
Ampersand 2006, L.P.	2006	15,000,000	15,000,000	24,873,025	9,500,004	2.29	15.2%
Apollo Investment Fund VI, L.P.	2006	35,000,000	45,048,207	57,030,966	10,706,847	1.50	8.9%
Ares Corporate Opportunities Fund II, L.P.	2006	30,000,000	32,905,774	53,009,913	2,760,987	1.69	13.4%
Arsenal Capital Partners II, L.P.	2006	13,500,000	16,219,343	21,470,779	5,561,681	1.67	10.5%
Avista Capital Partners, L.P.	2006	30,000,000	39,453,585	37,725,144	13,572,889	1.30	5.5%
BDCM Opportunity Fund II, L.P.	2006	25,000,000	36,886,205	49,351,514	29,984,122	2.15	17.3%
Blackstone Capital Partners V, L.P.	2006	75,600,000	76,405,974	116,591,298	11,052,561	1.67	8.5%
Catterton Partners VI, L.P.	2006	30,000,000	33,686,974	41,713,320	19,745,812	1.82	12.2%
CCMP Capital Investors II, L.P.	2006	20,000,000	21,898,169	31,724,692	5,625,471	1.71	13.4%
Cinven Fourth Fund	2006	43,801,265	45,601,948	58,883,902	4,790,477	1.40	6.9%
CLP 2014 (fka Perseus VII)	2006	381,908	22,640,234	7,966,323	215,960	0.36	-22.1%
Fairview Ventures Fund III, L.P.	2006	20,000,000	20,636,759	18,357,892	21,138,503	1.91	14.6%
First Reserve Fund XI, L.P.	2006	30,000,000	34,241,400	20,529,179	3,281,907	0.70	-9.2%
GF Capital Private Equity Fund, L.P.	2006	15,000,000	15,479,430	16,955,452	10,756,928	1.79	13.9%
GSC Recovery III, L.P.	2006	10,000,000	11,260,507	12,719,590	206,360	1.15	3.6%
InterMedia Partners VII, L.P.	2006	25,000,000	29,198,197	29,591,746	2,341,083	1.09	1.4%
Landmark Equity Partners XIII, L.P.	2006	25,000,000	23,654,752	21,200,211	8,455,470	1.25	4.6%
MidOcean Partners III, L.P.	2006	40,000,000	45,851,561	49,899,875	28,041,512	1.70	10.7%
RRE Ventures IV, L.P.	2006	25,000,000	31,387,259	15,824,696	31,394,551	1.50	7.2%
Terra Firma Capital Partners III, L.P.	2006	31,053,155	31,565,548	3,493,722	11,575,638	0.48	-10.4%
Thomas, McNerney & Partners II, L.P.	2006	15,000,000	14,867,607	28,768,518	4,942,110	2.27	17.2%
Carlyle Partners V, L.P.	2007	50,000,000	49,814,918	66,172,443	19,560,642	1.72	13.3%
Co-Investment Partners Europe, L.P.	2007	26,395,687	29,047,423	29,053,467	7,553,440	1.26	4.8%
Constellation Ventures III, L.P.	2007	15,000,000	16,378,475	3,405,627	8,920,804	0.75	-5.1%
Craton Equity Investors I, L.P.	2007	10,000,000	9,266,168	1,076,950	1,423,440	0.27	-19.0%
FTVentures III, L.P.	2007	14,081,947	14,882,466	16,453,436	10,668,767	1.82	11.5%
GSO Capital Opportunities Fund, L.P.	2007	30,000,000	48,238,754	66,881,559	1,022,406	1.41	17.5%
Halyard Capital Fund II, L.P.	2007	15,000,000	12,845,419	13,588,989	4,827,060	1.43	6.9%
Montreux Equity Partners IV, L.P.	2007	15,000,000	14,930,359	11,239,048	13,174,982	1.64	10.4%
Nautic Partners VI, L.P.	2007	20,000,000	21,437,126	43,407,671	7,145,334	2.36	19.0%

Information provided by the New York City Teachers' Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2017



	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
New Mountain Partners III, L.P.	2007	35,000,000	35,734,290	39,070,066	24,687,446	1.78	12.9%
PCG Clean Energy & Technology Fund East, L.P.	2007	60,000,000	51,080,592	6,928,710	14,550,524	0.42	-14.9%
Pegasus Partners IV, L.P.	2007	20,000,000	25,249,973	15,701,117	8,438,024	0.96	-1.0%
Pine Brook Capital Partners, L.P.	2007	22,500,000	23,861,590	16,775,367	15,576,108	1.36	8.8%
Quaker BioVentures II, L.P.	2007	15,000,000	14,302,775	10,272,239	6,168,106	1.15	3.6%
RLJ Equity Partners Fund I, L.P.	2007	15,000,000	14,951,009	11,110,667	16,039,496	1.82	14.7%
SCP Vitalife Partners II, L.P.	2007	15,000,000	15,074,774	1,184	8,578,670	0.57	-9.2%
StarVest Partners II, L.P.	2007	20,000,000	19,934,407	912,803	17,720,288	0.93	-1.3%
Trilantic Capital Partners IV L.P.	2007	53,311,339	55,656,111	75,977,068	13,722,409	1.61	14.8%
USPF III Institutional Fund, L.P.	2007	30,000,000	35,493,985	27,418,430	21,776,496	1.39	6.4%
Vista Equity Partners Fund III, L.P.	2007	25,000,000	26,652,967	56,918,081	10,877,377	2.54	27.8%
Aisling Capital III, L.P.	2008	10,500,000	11,528,578	12,169,609	7,735,505	1.73	21.9%
Apollo Investment Fund VII, L.P.	2008	50,000,000	59,532,294	91,414,901	14,312,928	1.78	24.6%
Ares Corporate Opportunities Fund III, L.P.	2008	60,000,000	69,869,806	82,991,302	50,926,798	1.92	21.2%
Avista Capital Partners II, L.P.	2008	50,000,000	61,810,801	82,118,289	30,253,117	1.82	16.9%
Blue Wolf Capital Fund II, L.P.	2008	20,000,000	21,734,323	12,370,824	16,421,332	1.32	7.8%
Bridgepoint Europe IV, L.P.	2008	26,404,422	24,402,227	24,244,558	11,650,006	1.47	10.2%
Carpenter Community BancFund-A, L.P.	2008	15,000,000	14,639,741	8,743,840	15,619,104	1.66	8.6%
First Reserve Fund XII, L.P.	2008	30,000,000	31,802,637	15,165,463	8,067,123	0.73	-8.3%
GCM Grosvenor TRSCNY Emerging Manager Fund, L.P.	2008	59,373,737	66,354,023	46,991,170	44,519,462	1.38	11.3%
GI Partners III, L.P.	2008	30,000,000	32,296,128	35,347,339	13,153,707	1.50	12.7%
Landmark Equity Partners XIV, L.P.	2008	50,000,000	47,490,778	40,560,169	20,050,641	1.28	9.7%
Lee Equity Partners, L.P.	2008	30,000,000	35,293,165	42,970,110	78,795	1.22	6.3%
Leeds Equity Partners V, L.P.	2008	40,000,000	41,465,558	37,657,558	30,665,590	1.65	16.0%
Levine Leichtman Capital Partners IV, L.P.	2008	25,000,000	24,993,216	37,280,288	6,788,273	1.76	19.8%
New York/Fairview Emerging Managers (Tranche B), L.P.	2008	35,000,000	33,627,382	23,453,944	29,748,677	1.58	13.7%
NGN BioMed Opportunity II, L.P.	2008	15,000,000	14,363,866	4,459,657	10,785,235	1.06	1.1%
Onex Partners III, L.P.	2008	40,000,000	43,219,704	35,075,713	38,988,879	1.71	14.9%
Paladin III (NY City), L.P.	2008	20,000,000	24,187,495	12,625,120	18,934,587	1.30	7.2%
Relativity Fund, L.P.	2008	15,000,000	8,181,270	1,827,612	2,420,192	0.52	-10.8%
Riverstone/Carlyle Global Energy & Power Fund IV	2008	32,500,000	34,073,913	24,674,915	16,894,730	1.22	6.0%
Yucaipa American Alliance Fund II, L.P.	2008	75,000,000	102,882,362	70,305,991	81,383,882	1.47	10.0%
Yucaipa Corporate Initiatives Fund II, L.P.	2008	35,000,000	31,974,104	9,866,113	19,771,147	0.93	-1.5%
Lincolnshire Equity Fund IV, L.P.	2009	12,500,000	12,413,302	6,222,960	10,900,457	1.38	9.7%
Welsh, Carson, Anderson & Stowe XI, L.P.	2009	30,000,000	29,773,577	26,277,401	20,659,273	1.58	13.2%

Information provided by the New York City Teachers' Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2017



	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
JP Morgan Fleming (Tranche B), L.P.	2010	10,000,000	9,632,160	4,950,114	8,663,669	1.41	10.2%
Trident V, L.P.	2010	35,000,000	38,749,902	16,195,928	38,233,672	1.40	10.2%
American Securities Partners VI, L.P.	2011	100,000,000	106,655,137	39,398,818	131,567,997	1.60	20.2%
Ampersand 2011, L.P.	2011	17,500,000	16,887,500	13,326,078	21,708,324	2.07	19.0%
AXA Secondary Fund V L.P.	2011	160,000,000	83,466,592	71,058,055	55,891,512	1.52	14.4%
BC European Capital IX, L.P.	2011	65,166,246	64,614,846	28,024,276	58,829,758	1.34	11.8%
Blackstone Capital Partners VI, L.P.	2011	60,000,000	56,202,089	21,393,103	52,737,640	1.32	11.5%
EQT VI, L.P.	2011	48,178,550	48,474,032	9,940,018	54,061,053	1.32	9.7%
Pegasus Partners V, L.P.	2011	20,789,916	19,995,975	4,271,495	25,832,461	1.51	15.4%
Vista Equity Partners IV, L.P.	2011	100,000,000	96,704,505	54,458,402	127,926,069	1.89	20.7%
Ares Corporate Opportunities Fund IV, L.P.	2012	105,000,000	94,155,545	25,194,069	103,438,464	1.37	15.2%
Green Equity Investors VI, L.P.	2012	100,000,000	107,409,640	21,095,501	115,011,192	1.27	13.0%
<u>NYCTRS - 2012 Emerging Manager Program</u>	<u>2012</u>	<u>175,000,000</u>	<u>120,728,936</u>	<u>22,848,380</u>	<u>124,727,700</u>	<u>1.23</u>	<u>12.4%</u>
Platinum Equity Capital Partners III, L.P.	2012	115,000,000	109,009,907	90,662,865	89,937,783	1.66	48.3%
Trilantic Capital Partners V (North America), L.P.	2012	70,000,000	46,988,371	10,381,070	47,883,970	1.24	11.2%
Warburg Pincus Private Equity XI, L.P.	2012	175,000,000	152,708,592	27,033,160	146,192,270	1.13	5.7%
Apollo Investment Fund VIII, L.P.	2013	200,000,000	131,508,064	17,878,508	137,446,366	1.18	14.0%
Carlyle Partners VI, L.P.	2013	125,000,000	83,105,208	20,077,704	74,003,853	1.13	8.1%
Crestview Partners III (Co-Investment B), L.P.	2013	25,000,000	15,137,034	362,203	16,985,939	1.15	17.4%
Crestview Partners III, L.P.	2013	75,000,000	22,994,190	379,136	22,859,522	1.01	0.8%
Landmark Equity Partners XV, L.P. - Side Car	2013	37,000,000	15,880,590	5,169,876	17,134,995	1.40	23.3%
Landmark Equity Partners XV, L.P.	2013	113,000,000	47,779,266	20,399,046	36,818,180	1.20	12.1%
ASF VI NYC Co-Invest, L.P.	2014	38,000,000	24,510,480	7,861,574	23,795,097	1.29	14.0%
ASF VI, L.P.	2014	112,000,000	62,550,269	7,013,380	72,339,802	1.27	14.5%
Carlyle Partners VI, L.P. - Side Car	2014	13,750,000	7,459,264	2	7,144,273	0.96	-2.4%
Centerbridge Capital Partners III, L.P.	2014	33,500,000	9,440,924	443,225	11,104,734	1.22	15.1%
CVC Capital Partners VI, L.P.	2014	169,108,902	96,128,888	1,184,297	100,675,030	1.06	4.8%
Lexington Capital Partners VIII, L.P.	2014	150,000,000	38,511,101	16,309,088	36,140,104	1.36	28.6%
Olympus Growth Fund VI, L.P.	2014	100,000,000	51,900,610	13,868,751	56,361,196	1.35	26.4%
Vista Equity Partners Fund V, L.P.	2014	125,000,000	125,034,941	23,260,261	122,412,136	1.17	10.5%
American Securities Partners VII, L.P.	2015	111,000,000	28,340,375	1,014,536	29,005,842	1.06	NM
ASF VII B NYC Co-Invest, L.P.	2015	67,000,000	6,700	-	6,700	1.00	NM
ASF VII, L.P.	2015	134,000,000	15,043,359	1,083,293.00	17,648,483	1.25	NM
Bridgepoint Europe V Co-Invest	2015	23,486,186	8,426,949	-	8,378,799	0.99	NM
Bridgepoint Europe V, L.P.	2015	83,629,163	36,638,738	7,924,248.03	32,575,743	1.11	NM

Information provided by the New York City Teachers' Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2017



	Vintage Year (Cash Flow)	Commitments	Contributions	Distributions	Market Value	Investment Multiple	ITD IRR%
<i><u>NYCTRS - 2015 Emerging Manager Program</u></i>	<i><u>2015</u></i>	<i><u>200,000,000</u></i>	<i><u>6,590,649</u></i>	<i><u>96,753.00</u></i>	<i><u>7,450,635</u></i>	<i><u>1.15</u></i>	<i><u>NM</u></i>
Siris Partners III, L.P.	2015	45,000,000	21,934,101	296,460.54	21,410,976	0.99	NM
Welsh, Carson, Anderson & Stowe XII, L.P.	2015	110,500,000	31,111,538	-	37,689,916	1.21	NM
Apax IX USD, L.P.	2016	178,000,000	-	-	-	N/A	N/A
Platinum Equity Capital Partners IV, L.P.	2016	156,000,000	13,095,677	536,649.00	14,765,753	1.17	NM
Vista Equity Partners Fund VI, L.P.	2016	223,000,000	84,931,213	1,532,303.00	82,013,581	0.98	NM
Ares Corporate Opportunities Fund V, L.P.	2017	134,000,000	-	-	406,762	N/A	N/A
BC European Capital X Metro Co-Investment L.P.	2017	47,376,182	4,441,153	-	4,467,414	1.01	NM
BC European Capital X, L.P.	2017	118,573,275	-	-	-	N/A	N/A
Green Equity Investors VII, L.P.	2017	134,000,000	-	-	-	N/A	N/A

Information provided by the New York City Teachers' Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2017



	Vintage Year	Style Sector	Original Commitment	Total Contributions	Total Distributions	Market Value	Total Value Multiple	Net IRR%
TOTAL PRIVATE REAL ESTATE			3,509,684,422	2,765,342,826	1,499,441,407	2,285,873,369	1.37	10.0%
TOTAL PRIVATE REAL ESTATE								
Almanac Realty Securities VI	2012	Core / Core Plus Portfolio	100,000,000	66,261,967	49,452,872	41,814,143	1.38	16.6%
Almanac Realty Securities VI (Sidecar III)	2012	Core / Core Plus Portfolio	35,000,000	11,397,146	5,878,488	12,136,222	1.58	28.1%
Almanac Realty Securities VII	2015	Core / Core Plus Portfolio	65,000,000	22,706,663	825,848	24,684,136	1.12	10.1%
Almanac Realty Securities VII (Sidecar III)	2016	Core / Core Plus Portfolio	20,000,000	4,923,011	153,919	5,470,796	1.14	16.4%
Brookfield Premier Real Estate Partners	2017	Core / Core Plus Portfolio	119,000,000	110,650,523	-	117,091,921	1.06	35.2%
Colony Realty Partners II	2007	Core / Core Plus Portfolio	15,000,000	16,065,058	499,580	3,060,400	0.22	-15.5%
Exeter Industrial Core Club Fund II	2016	Core / Core Plus Portfolio	37,000,000	12,617,000	385,578	12,906,275	1.05	10.7%
Heitman HART	2007	Core / Core Plus Portfolio	48,000,000	69,479,420	21,479,376	94,165,955	1.66	8.2%
Jamestown Premier Property Fund	2016	Core / Core Plus Portfolio	52,000,000	54,463,633	6,674,069	50,471,198	1.05	6.3%
JP Morgan Special Situation Property Fund	2007	Core / Core Plus Portfolio	15,000,000	17,373,868	4,938,248	19,426,328	1.40	4.0%
JP Morgan Strategic Property Fund	2007	Core / Core Plus Portfolio	86,000,000	94,827,086	-	173,605,678	1.83	8.2%
LaSalle Property Fund	2010	Core / Core Plus Portfolio	50,000,000	50,000,000	12,521,525	69,409,802	1.64	11.8%
Lion Industrial Trust - 2007	2017	Core / Core Plus Portfolio	78,000,000	58,500,000	494,238	59,802,270	1.03	13.2%
MetLife Core Property Fund	2014	Core / Core Plus Portfolio	80,000,000	80,000,000	8,440,122	94,091,154	1.28	13.0%
NYC Asset Investor #2 LLC	2013	Core / Core Plus Portfolio	145,000,000	139,165,383	19,122,119	166,379,710	1.33	15.5%
NYCRS Artemis Co-Investment	2016	Core / Core Plus Portfolio	70,000,000	20,706,249	-	27,440,838	1.33	52.5%
PRISA II	2007	Core / Core Plus Portfolio	63,374,139	67,228,134	15,941,229	87,041,773	1.53	5.4%
PRISA SA	2006	Core / Core Plus Portfolio	36,000,000	38,812,730	11,063,804	47,762,032	1.52	4.4%
Prologis Targeted U.S. Logistics Fund	2006	Core / Core Plus Portfolio	10,000,000	13,336,250	3,478,035	14,123,366	1.32	3.5%
RREEF America REIT II	2006	Core / Core Plus Portfolio	36,000,000	47,527,452	21,713,576	48,191,520	1.47	5.0%
RREEF America REIT III - 1410	2007	Core / Core Plus Portfolio	15,000,000	14,836,751	8,262,469	107,358	0.56	-7.6%
UBS Trumbull Property Fund	2006	Core / Core Plus Portfolio	106,000,000	148,566,128	34,257,375	184,026,421	1.47	7.0%
USAA Eagle Real Estate Fund	2016	Core / Core Plus Portfolio	78,000,000	63,450,414	-	70,312,929	1.11	10.2%
American Value Partners Fund I	2008	Non-Core Portfolio	25,000,000	17,872,806	15,552,515	5,403,814	1.17	3.5%
AREA Real Estate Investment Fund V, LP	2006	Non-Core Portfolio	5,000,000	5,000,001	2,796,629	2,101,308	0.98	-0.3%
Avanath Affordable Housing Fund II	2015	Non-Core Portfolio	10,000,000	9,722,386	-	11,703,209	1.20	12.7%
Blackstone Fund IV	2004	Non-Core Portfolio	25,000,000	32,033,922	40,627,920	4,195,902	1.40	10.4%
Blackstone Real Estate Partners Europe III (USD Vehicle)	2010	Non-Core Portfolio	50,000,000	40,558,500	40,580,824	21,938,357	1.54	13.8%
Blackstone Real Estate Partners VI	2007	Non-Core Portfolio	50,000,000	54,197,865	94,355,516	12,325,801	1.97	13.4%
Brookfield Strategic Real Estate Partners	2012	Non-Core Portfolio	125,000,000	116,489,308	67,961,568	100,668,958	1.45	16.8%
Canyon Johnson Urban Fund	2003	Non-Core Portfolio	15,000,000	13,590,364	15,874,432	-	1.17	10.2%
Canyon Johnson Urban Fund II	2005	Non-Core Portfolio	30,000,000	26,966,112	11,748,957	265,265	0.45	-10.5%
Canyon Johnson Urban Fund III	2010	Non-Core Portfolio	25,000,000	24,655,816	32,988,887	275,068	1.35	11.9%
Capri Urban Investors	2008	Non-Core Portfolio	40,000,000	39,987,138	17,793,364	16,338,878	0.85	-2.5%
Carbon Capital III	2009	Non-Core Portfolio	40,000,000	43,757,162	53,134,591	-	1.21	8.5%
Carlyle Realty Partners V	2007	Non-Core Portfolio	15,000,000	18,515,502	21,357,271	4,707,921	1.41	8.8%
Carlyle Realty Partners VI	2011	Non-Core Portfolio	70,000,000	66,355,936	80,795,145	32,036,912	1.70	27.0%
Carlyle Realty Partners VII	2014	Non-Core Portfolio	120,000,000	72,258,481	2,471,954	81,253,563	1.16	13.4%

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Alternative Assets Manager Performance Detail

Through March 31, 2017



	Vintage Year	Style Sector	Original Commitment	Total Contributions	Total Distributions	Market Value	Total Value Multiple	Net IRR%
Divco West Fund IV	2014	Non-Core Portfolio	25,000,000	24,276,592	26,486,867	12,643,376	1.61	28.3%
Divco West Fund V	2016	Non-Core Portfolio	78,000,000	12,525,639	-	12,117,658	0.97	-25.0%
DRA Growth and Income Fund IX	2017	Non-Core Portfolio	56,000,000	5,981,907	-	6,346,126	N/A	N/A
DRA Growth and Income Fund VIII	2014	Non-Core Portfolio	75,000,000	80,228,210	23,252,602	68,190,829	1.14	12.1%
European Property Investors Special Opportunities IV (EPISO IV)	2016	Non-Core Portfolio	64,826,199	16,948,703	1,665,089	14,882,543	0.98	-4.2%
H/2 Special Opportunities Fund II	2011	Non-Core Portfolio	40,000,000	39,999,999	34,429,722	25,071,184	1.49	15.4%
H/2 Special Opportunities Fund III	2015	Non-Core Portfolio	65,000,000	56,306,707	4,097,599	63,579,308	1.20	18.3%
H/2 Special Opportunities Fund IV	2017	Non-Core Portfolio	119,000,000	10,245,372	-	10,497,461	1.02	7.3%
JP Morgan Urban Renaissance Property Fund	2009	Non-Core Portfolio	16,360,625	4,206,523	4,206,523	-	1.00	0.0%
KTR Industrial Fund III	2013	Non-Core Portfolio	70,000,000	30,589,081	48,277,889	130,418	1.58	40.5%
Lone Star Real Estate Fund III	2014	Non-Core Portfolio	190,000,000	177,879,995	94,267,579	144,191,002	1.34	19.4%
Metropolitan Workforce Housing Fund	2007	Non-Core Portfolio	10,500,000	10,509,770	11,085,051	1,639,471	1.21	3.9%
NYC Asset Investor #1 LLC	2013	Non-Core Portfolio	60,000,000	64,636,853	9,331,678	72,395,144	1.26	11.7%
NYC Asset Investor #3 LLC	2013	Non-Core Portfolio	96,000,000	48,918,507	375,692	55,668,667	1.1	9.2%
OCM Real Estate Opportunities Fund IIIA	2003	Non-Core Portfolio	15,000,000	15,000,000	23,027,038	497,238	1.6	9.9%
PW Real Estate Fund III LP	2016	Non-Core Portfolio	61,623,459	14,952,210	-	13,284,078	0.9	-23.1%
Silverpeak Legacy Partners III	2008	Non-Core Portfolio	30,000,000	11,748,148	3,315,341	2,097,976	0.5	-13.8%
Stockbridge Real Estate Fund III	2008	Non-Core Portfolio	22,500,000	22,498,458	14,024,794	12,077,343	1.2	2.5%
Taconic New York City Investment Fund LP	2012	Non-Core Portfolio	70,000,000	28,954,546	22,113,636	29,842,447	1.8	17.1%
The City Investment Fund I	2004	Non-Core Portfolio	120,000,000	118,337,757	119,671,893	256,538	1.0	0.3%
Thor Urban Property Fund II	2009	Non-Core Portfolio	12,500,000	16,173,958	17,119,140	6,223,994	1.4	10.8%
Tishman Speyer Separate Account (TRS)	2004	Non-Core Portfolio	100,000,000	72,402,952	250,146,943	-	3.5	57.5%
UrbanAmerica II	2007	Non-Core Portfolio	11,000,000	10,218,031	1,122,775	-	0.1	-25.4%
Westbrook Real Estate Fund VIII	2010	Non-Core Portfolio	50,000,000	59,390,857	67,801,514	9,892,760	1.3	12.0%
Westbrook Real Estate Fund X	2016	Non-Core Portfolio	47,000,000	7,555,884	-	7,610,629	1.0	2.0%

Information provided by the New York City Teachers' Retirement System Consultants

Alternative Assets Manager Performance Detail

Through March 31, 2017



	Vintage Year	Original Commitment	Total Contributions	Total Distributions	Market Value	Total Value Multiple	Net IRR%
TOTAL INFRASTRUCTURE		858,822,841	366,565,224	23,143,868	419,464,080	1.21	13.4%
TOTAL INFRASTRUCTURE INVESTMENTS							
Brookfield Infrastructure Fund II, L.P.	2013	140,000,000	103,368,567	13,991,170	118,390,254	1.28	14.1%
First Reserve Energy Infrastructure Fund II, L.P.	2014	90,000,000	33,015,417	2,272,470	53,481,505	1.69	70.8%
IFM Global Infrastructure Fund	2014	140,000,000	144,522,571	4,522,571	163,416,775	1.16	8.6%
KKR Global Infrastructure Investors II L.P.	2014	100,000,000	43,163,357	1,508,151	42,032,331	1.01	1.1%
Actis Energy 4	2016	72,600,000	2,160,330	3,777	1,444,000	N/A	N/A
Brookfield Infrastructure Fund III, L.P.	2016	119,000,000	15,994,528	373,713	16,961,506	N/A	N/A
Global Infrastructure Partners III-A/B, L.P.	2016	139,000,000	24,340,455	472,017	23,737,709	N/A	N/A
EQT Infrastructure III	2017	58,222,841	-	-	-	N/A	N/A

Information provided by the New York City Teachers' Retirement System Consultants

Alternative Assets Manager Performance Detail

Through June 30, 2017



	Vintage Year	Commitment - Closing (Base)	Contributions Cumulative (Local)	Distributions Cumulative	Final Market Value	3 Month Base%	Inception IRR%
TOTAL OPPORTUNISTIC FIXED INCOME		2,088,169,787	2,006,333,457	853,903,239	1,616,255,189	1.16%	7.51%
Avenue Special Situations Fund V, L.P.	2007	25,261,658	25,650,392	33,499,030	288,922	0.00%	NM
Avenue Europe Special Sit. Fund, L.P.	2008	20,908,129	18,559,393	35,192,684	--	--	NM
PIMCO DiSCO Fund, L.P.	2008	150,000,000	150,427,750	204,457,599	876,256	--	11.23%
Torchlight Debt Opportunity Fund III, LLC	2009	50,000,000	53,306,159	72,707,331	5,809,578	2.54%	13.27%
Avenue Special Situations Fund VI L.P.	2011	70,000,000	71,766,544	61,058,039	18,983,294	0.00%	1.12%
Golden Tree	2011	140,000,000	131,253,192	--	192,999,949	2.17%	8.18%
Marathon Centre Street Partnership, L.P.	2011	218,750,000	241,500,000	52,500,000	261,009,585	0.17%	7.03%
AG Centre Street Partnership, L.P.	2012	180,000,000	142,200,000	47,626,130	132,159,472	-1.33%	6.12%
Apollo Centre Street Partnership, L.P.	2012	268,750,000	296,149,389	77,129,065	241,923,232	1.69%	3.27%
FCO MA Centre Street L.P.	2012	140,000,000	191,279,507	83,017,526	133,948,849	0.00%	8.67%
OHA Centre Street Partnership, L.P.	2012	175,000,000	177,549,579	56,311,815	170,279,956	2.72%	7.76%
Contrarian Partnership, L.P.	2013	90,000,000	90,000,000	--	103,602,284	1.37%	6.20%
Lone Star Fund VIII(U.S.), L.P.	2013	130,000,000	127,970,674	109,128,885	57,599,044	0.00%	17.97%
Oaktree Opportunities Fund IX, L.P.	2013	100,000,000	100,000,000	14,967,825	91,408,701	3.06%	2.01%
Ares Centre Street LP	2014	140,000,000	128,117,072	--	152,953,456	1.71%	10.18%
Brightwood Capital Fund III, L.P.	2015	35,000,000	28,403,806	5,724,537	24,173,553	0.00%	1.53%
Torchlight Debt Opportunity Fund V, LP	2015	67,000,000	23,450,000	582,774	18,952,217	4.02%	13.26%
Brightwood Capital Fund IV, LP	2016	87,500,000	8,750,000	--	9,286,842	0.00%	9.20%

Information provided by Alpha Frontier

Above data is not final and subject to change

**Teachers' Retirement System
of New York City**

Appendix D

Footnotes

Through June 30, 2017



- 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 7/1/09, the Core+5 program was restructured.
- The U.S. Gov't sector benchmark Index was changed from the Citigroup Core+5 Treasury/Gov't Sponsored Index to the Citigroup Core+5 Treasury/Agency Index.
- The Corporate and Yankee sectors were combined to form the new Investment Grade Credit sector. The benchmark for the new combined sector is the customized Citigroup Credit Index. For historical performance purposes, the old Corporate sector Index is linked to the new Credit sector Index.
- There were no changes to the Mortgage sector Index.
- The total Core+5 results and benchmark returns combine the three sectors. Historical total Core+5 returns continue to include the old Corporate and Yankee sector returns.

General Notes

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

Page Specific

Pages 9 - 14 - Portfolio Asset Allocation

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

Pages 15 - 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. Allocation is the Contribution to Performance resulting from an overweight or underweight to an asset class. E.g. an underweight to an Asset Class that under-performs results in a positive Allocation Effect and vice versa.
- **Selection Effect** = Equal to the Custom Benchmark (Adjusted Policy Index) Return minus Plan Return at Adjusted Policy Weights. This illustrates how the Managers have added or removed value based on their Security Selection decisions, e.g., *If the manager's Actual Returns are higher than the Implied Return there will be a positive Selection Effect.*
- **Policy Index = Custom Benchmark**
The "policy index" is a custom benchmark representing the weighted average return of the weighted benchmark indexes for each major investment program. Weights may reflect an adjustment of actual policy for outstanding commitments for new or revised programs, such as for private market programs, which are invested gradually, or for any new or updated program requiring the completion of RFPs and contracts. The policy index/custom benchmark is calculated monthly based on adjusted policy weights at the beginning of each month.

The indexes and most recent policy weights are as follows:

*U.S. Equity: Russell 3000 * 33.07%*

*International Developed (EAFE) Markets: MSCI EAFE IMI Net * 11.83%*

*Emerging Markets: FTSE Custom NYC Teachers Emerging Markets * 9.00%*

*International Emerging Managers FoF: NYC Blended Custom Benchmark for FoF * 0.51%*

*REITs: Dow Jones Real Estate Securities * 0.00%*

*Private Equity: Russell 3000 + 300 b.p. per annum * 5.05%*

*Private Real Estate – Core: NFI - ODCE Net * 2.24%*

*Private Real Estate – Non Core: NFI - ODCE Net + 200bps * 1.29%*

*Infrastructure: CPI + 4% * 0.57%*

*US Treasury Short Term: Citigroup USBIG Treasury 1-3Y * 0.00%*

*US Treasury Intermediate: Citigroup Treasury/Agency 1-10 Y * 0.00%*

*US Treasury Intermediate Long: NYC Treasury Agency + 5 * 0.00%*

*US Treasury Long Duration: Citigroup Treasury 10+ * 10.87%*

*Core FI-Developing Managers: BBG Barc Agg * 0.00%*

*Core FI-Emerging Managers: BBG Barc Agg * 0.00%*

*Mortgage: Citigroup Mortgage Index * 4.37%*

*ETI: ETI Custom Benchmark * 0.87%*

*Investment Grade Credit: NYC – Investment Grade Credit * 5.24%*

*High Yield: Citigroup BB&B * 6.25%*

Through June 30, 2017



*Bank Loans: Credit Suisse Leveraged Loan * 2.00%*

*TIPS: Lehman U.S. TIPS * 4.36%*

*Convertible Bonds: BofAML All Convertibles Ex Mandatory * 0.00%*

*Opportunistic Fixed: OFI - JPMGHY / CSFB 50/50 Blend Plus 300 b.p. per annum * 2.50%*

Page 18 – Allocation and Selection Effects - Asset Class Breakdown

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