



New York City
Fire Officers' Variable Supplements Fund
Performance Overview as of March 31, 2019

Total Fund Overview

**New York City
Fire Officers' Variable Supplements Fund**

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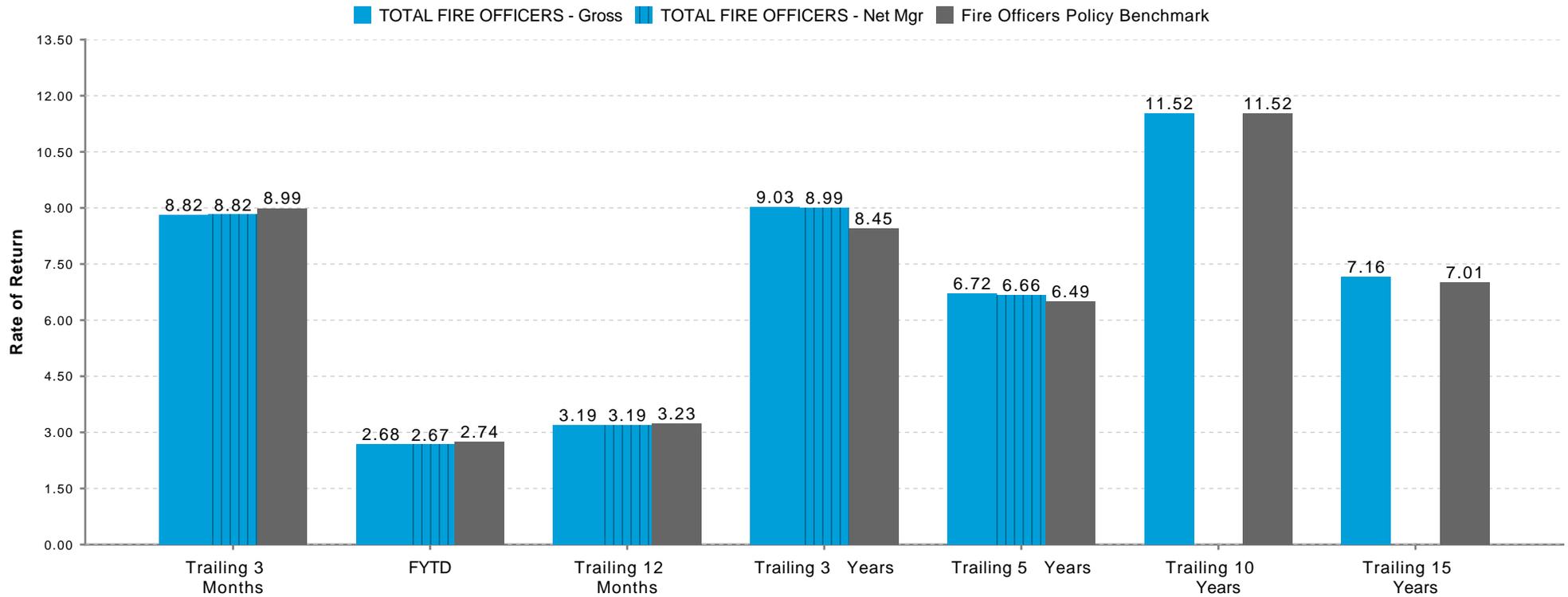
Total Portfolio Returns: March 31, 2019



Market Value (Millions)

TOTAL FIRE OFFICERS

\$340.1



	Plan 3 Years	Benchmark 3 Years	Plan 5 Years	Benchmark 5 Years	Plan 7 Years	Benchmark 7 Years	Plan 10 Years	Benchmark 10 Years
Standard Deviation								
TOTAL FIRE OFFICERS	6.8	6.8	6.7	7.7	7.9	7.6	9.6	9.5

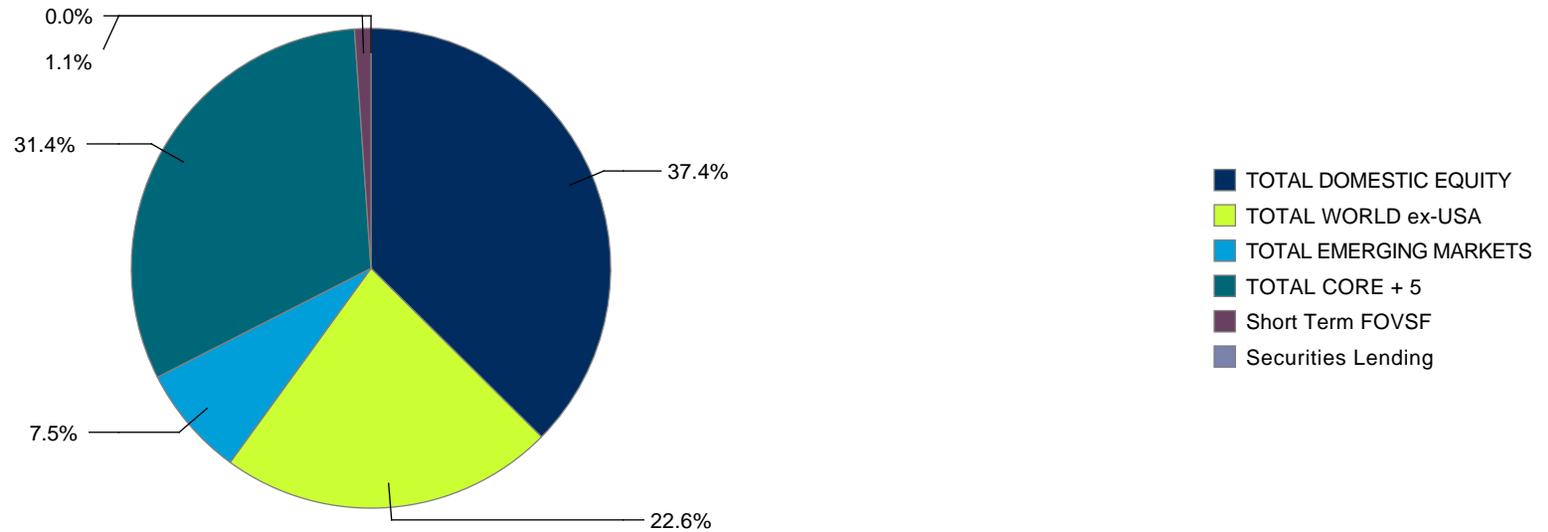


Market Value (Millions)

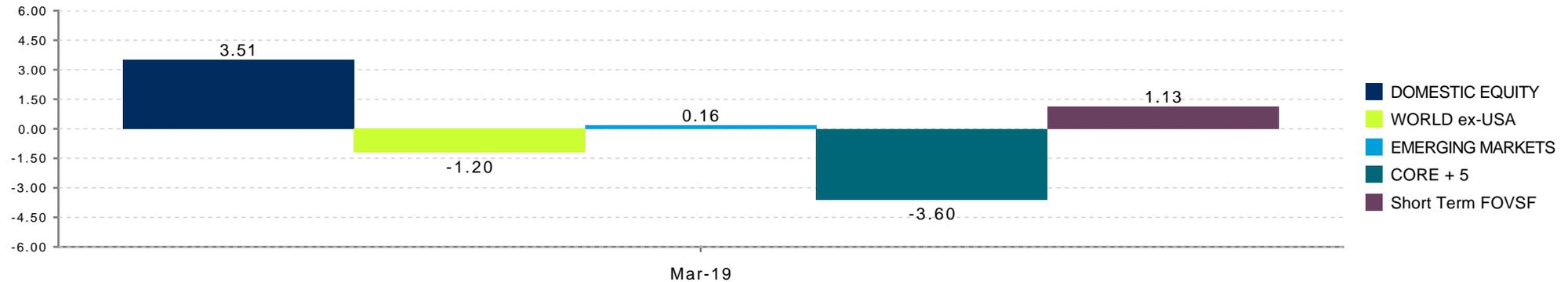
TOTAL FIRE OFFICERS

\$340.1

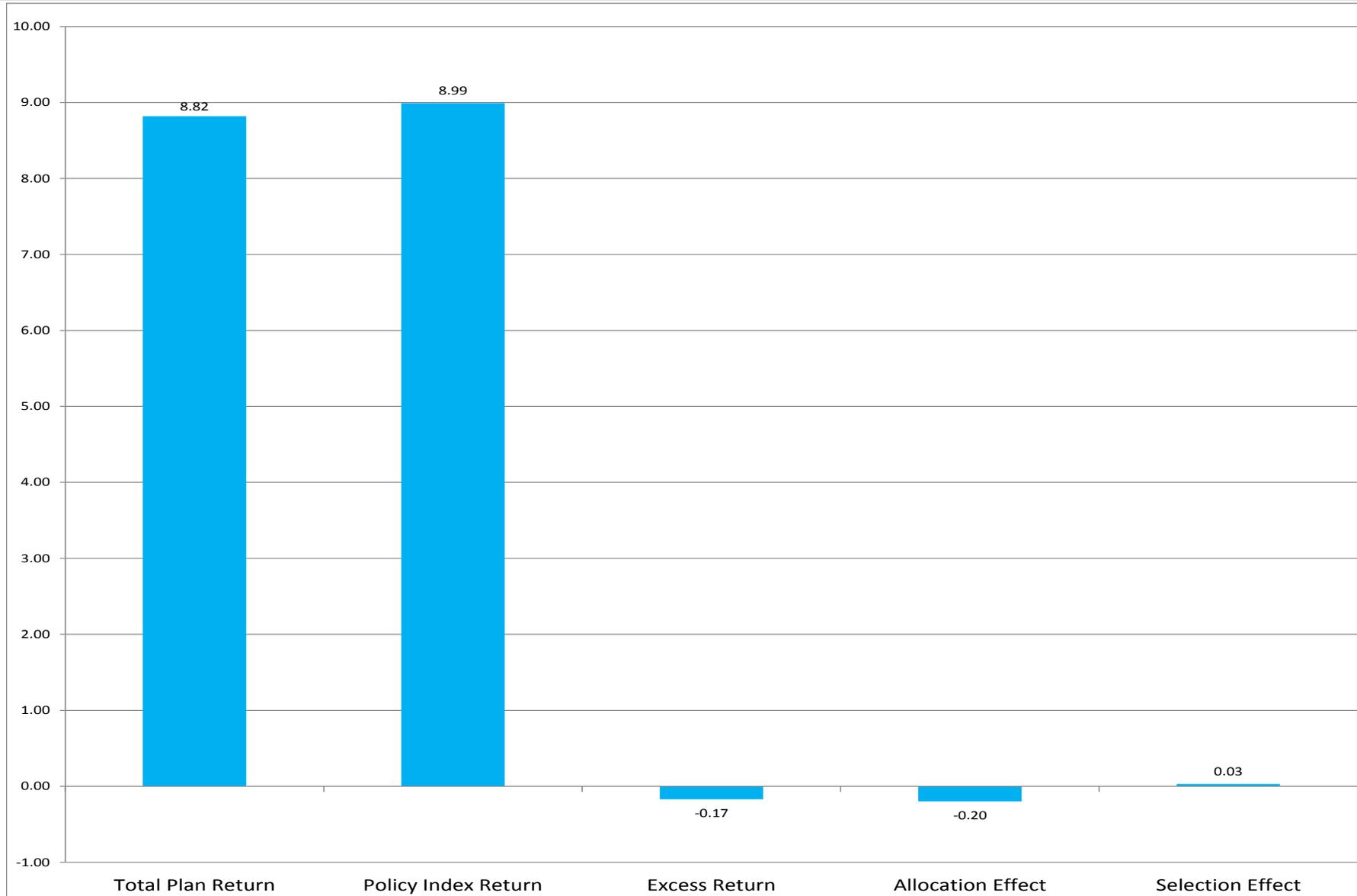
Asset Allocation

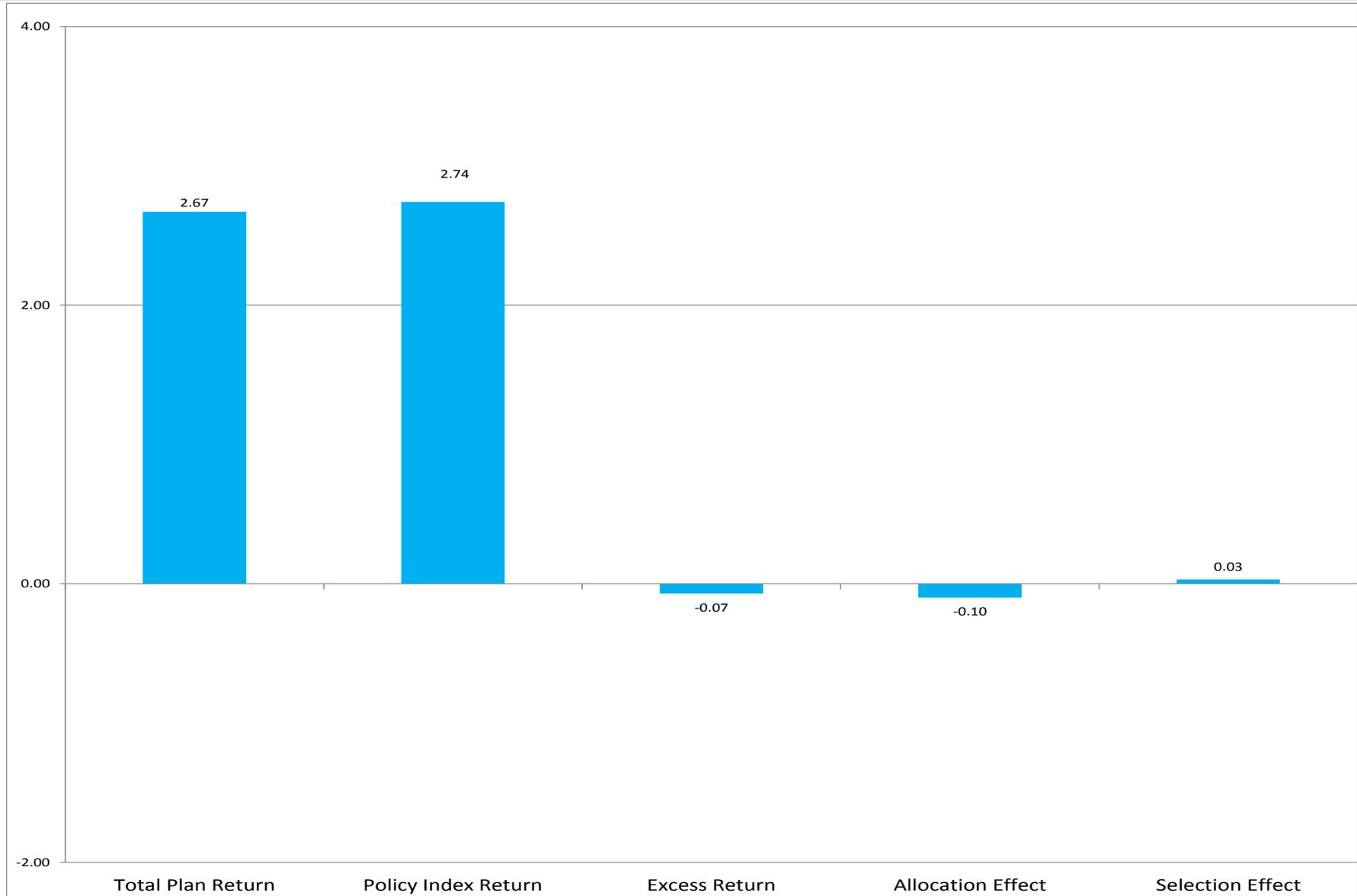


Relative Mix to Asset Weights

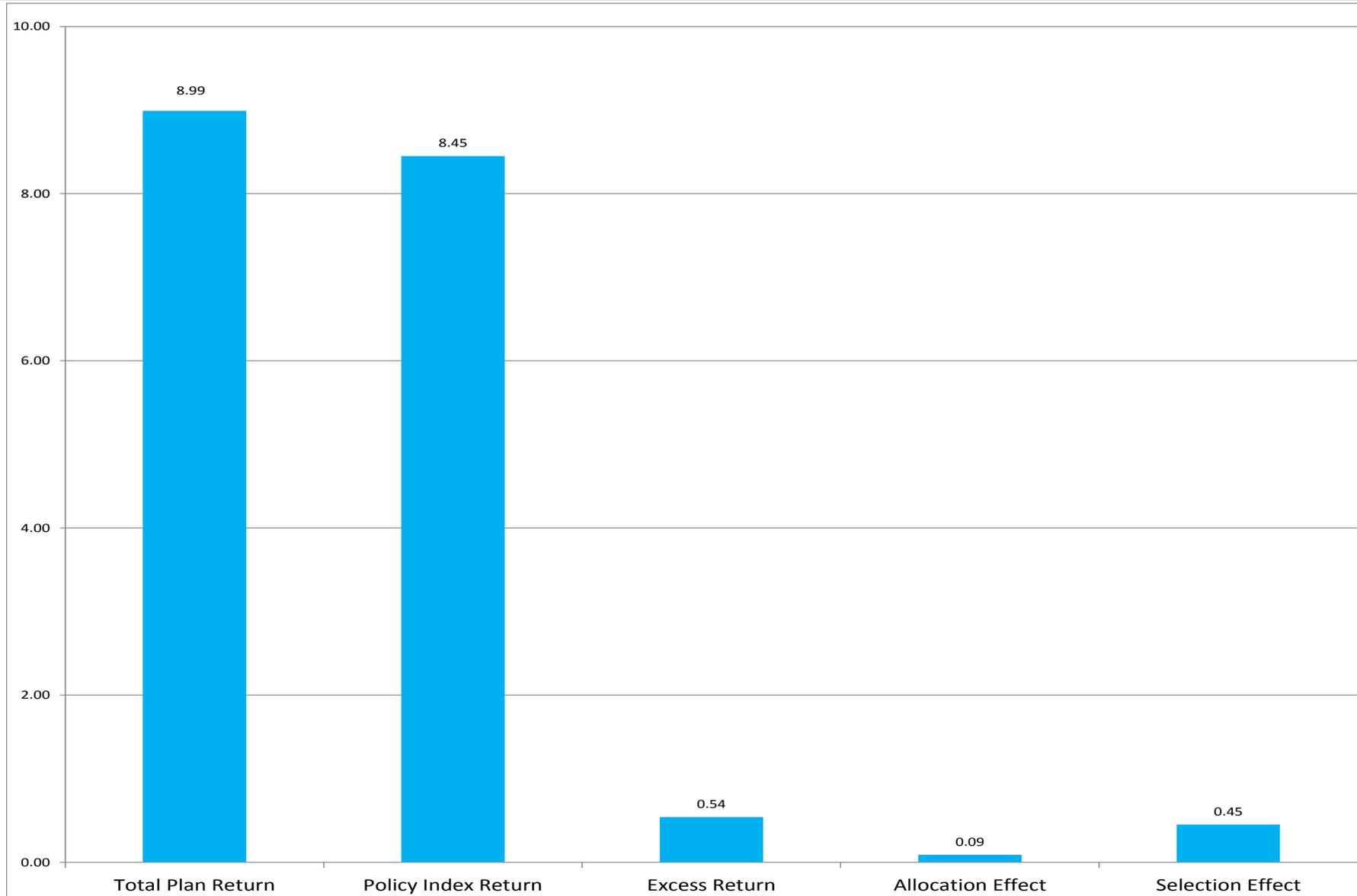


Performance Attribution: Total Plan - Quarter Ending: March 31, 2019





Performance Attribution: Total Plan - 3 Years Ending: March 31, 2019



Allocation Effect - Asset Class Breakdown				
	<u>Quarter</u>	<u>FYTD</u>	<u>3 Years</u>	<u>Benchmark</u>
TOTAL FIRE OFFICERS	-0.20	-0.10	0.09	Fire Officers Policy Benchmark
TOTAL DOMESTIC EQUITY	0.05	-0.04	0.04	RUSSELL 3000
TOTAL DEVELOPED EQUITY	-0.05	0.08	0.02	MSCI World ex USA IMI Net
TOTAL EMERGING MARKETS	-0.02	-0.02	0.00	MSCI EMERGING MARKETS
TOTAL STRUCTURED	0.07	0.08	0.17	Barclays Aggregate
TOTAL CASH	-0.26	-0.19	-0.15	

Selection Effect - Asset Class Breakdown				
	<u>Quarter</u>	<u>FYTD</u>	<u>3 Years</u>	<u>Benchmark</u>
TOTAL FIRE OFFICERS	0.03	0.03	0.45	Fire Officers Policy Benchmark
TOTAL DOMESTIC EQUITY	0.00	0.00	0.05	RUSSELL 3000
TOTAL DEVELOPED EQUITY	0.00	-0.01	0.48	MSCI World ex USA IMI Net
TOTAL EMERGING MARKETS	0.01	0.01	0.00	MSCI EMERGING MARKETS
TOTAL STRUCTURED	0.03	0.03	-0.04	Barclays Aggregate
TOTAL CASH	0.00	0.00	0.00	

**NYC FIRE OFFICERS' VARIABLE SUPPLEMENTS FUND
SECURITIES LENDING INCOME
March 31, 2019**

	<u>U. S. FIXED INCOME</u>	<u>U. S. EQUITY</u>	<u>INTERNATIONAL EQUITY</u>	<u>TOTAL</u>
2001	32,000	6,000	-	38,000
2002	20,000	6,200	-	26,200
2003	14,000	11,000	31,000	56,000
2004	24,000	24,000	24,000	72,000
2005	42,000	42,000	32,000	116,000
2006	44,000	98,000	32,000	174,000
2007	91,000	137,000	28,000	256,000
2008	240,000	195,000	37,000	472,000
2009	67,000	101,000	25,000	193,000
2010	32,000	101,000	20,000	153,000
2011	48,000	116,000	34,000	198,000
2012	37,000	129,000	25,000	191,000
2013	17,000	113,000	25,000	155,000
2014	7,900	11,000	131,000	149,900
2015	2,000	8,400	209,000	219,400
2016	7,000	131,000	170,000	308,000
2017	15,000	60,000	99,000	174,000
2018	6,012	33,752	110,683	150,447
2019 (3 months)	825	5,066	15,524	21,416
Since Inception	<u>746,737</u>	<u>1,328,418</u>	<u>1,048,207</u>	<u>3,123,362</u>

**New York City
Fire Officers' Variable Supplements Fund**

Appendix A

Consolidated Performance Report

Consolidated Performance Report

Through March 31, 2019



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2018	2017	2016	2015	2014	3 Year	5 Year	10 Year	ITD	Inception Date	
SYSTEM RETURN SUMMARY																
5	FIRE OFFICERS-TOTAL PORTFOLIO - GROSS	340	100.00	8.82	2.68	8.82	(5.83)	17.71	8.64	(0.74)	8.30	9.03	6.72	11.52	8.36	01/01/1988
	FIRE OFFICERS- ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.00)	(0.00)	(0.06)	(0.08)	(0.09)	(0.11)	(0.04)	(0.06)			
	EST MANAGEMENT FEES			(0.00)	(0.01)	(0.00)	(0.00)	(0.06)	(0.08)	(0.09)	(0.11)	(0.04)	(0.06)			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	FIRE OFFICERS-TOTAL PORTFOLIO - NET MGR			8.82	2.67	8.82	(5.83)	17.64	8.56	(0.83)	8.19	8.99	6.66			
	FIRE OFFICERS POLICY BENCHMARK			8.99	2.74	8.99	(6.22)	16.32	9.01	(0.34)	8.29	8.45	6.49	11.52		
	EXCESS RETURN			(0.17)	(0.06)	(0.17)	0.39	1.32	(0.45)	(0.49)	(0.10)	0.54	0.17	(0.00)		
EQUITY RETURN DETAIL																
17	FOVSF-TOTAL EQUITY - GROSS	229	67.47	12.39	1.44	12.39	(9.53)	24.78	10.41	(1.18)	9.13	11.68	8.25	14.28	6.48	08/01/2001
	ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.00)	(0.01)	(0.06)	(0.07)	(0.08)	(0.10)	(0.04)	(0.06)			
	EST MANAGEMENT FEES			(0.00)	(0.01)	(0.00)	(0.01)	(0.06)	(0.07)	(0.08)	(0.10)	(0.04)	(0.06)			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	FOVSF-TOTAL EQUITY - NET MGR			12.38	1.43	12.38	(9.53)	24.72	10.34	(1.25)	9.03	11.64	8.19			
25	FOVSF-TOTAL DOMESTIC EQUITY - GROSS	127	37.41	14.03	4.70	14.03	(5.09)	21.15	12.96	0.62	12.73	13.62	10.49	16.00	10.22	01/01/1991
	ESTIMATED INVESTMENT FEES			(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)			
	FOVSF-TOTAL DOMESTIC EQUITY - NET MGR			14.03	4.69	14.03	(5.09)	21.14	12.95	0.61	12.73	13.61	10.49			
	RUSSELL 3000/S&P500 04/30/09			14.04	4.70	14.04	(5.24)	21.13	12.74	0.48	12.56	13.48	10.36	15.90	10.16	
	EXCESS RETURN			(0.02)	(0.00)	(0.02)	0.15	0.01	0.22	0.14	0.17	0.13	0.14	0.10	0.06	

Consolidated Performance Report

Through March 31, 2019



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2018	2017	2016	2015	2014	3 Year	5 Year	10 Year	ITD	Inception Date	
EQUITY RETURN DETAIL																
37	FOVSF-TOTAL WORLD ex-USA - GROSS	77	22.60	10.52	(3.25)	10.52	(14.40)	36.65	1.38	(3.56)	(6.55)	10.81	3.59	9.60	5.81	07/01/1994
	ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.00)	(0.02)	(0.17)	(0.26)	(0.25)	(0.24)	(0.12)	(0.18)			
	FOVSF-TOTAL WORLD ex-USA - NET MGR			10.52	(3.26)	10.52	(14.41)	36.48	1.11	(3.81)	(6.79)	10.68	3.41			
	WORLD EX USA CUSTOM BM			10.52	(3.22)	10.52	(14.68)	26.40	1.15	0.49	(4.90)	7.40	2.67	9.44	4.76	
	EXCESS RETURN			(0.00)	(0.04)	(0.00)	0.27	10.08	(0.04)	(4.30)	(1.89)	3.28	0.74	0.16	1.04	
47	FOVSF- TOTAL EMERGING MARKETS - GROSS	25	7.46	10.05	0.73	10.05	(14.44)	37.41	11.25	(19.53)	(2.57)	10.77	2.72	8.02	5.83	08/01/2005
	ESTIMATED INVESTMENT FEES			(0.01)	(0.02)	(0.01)	0.01	(0.15)	(0.06)	(0.15)	(0.54)	(0.05)	(0.16)			
	FOVSF-TOTAL EMERGING MARKETS - NET MGR			10.04	0.71	10.04	(14.44)	37.27	11.19	(19.68)	(3.11)	10.72	2.56			
	MSCI EMERGING MARKETS			9.92	0.60	9.92	(14.57)	37.28	11.19	(14.92)	(2.19)	10.68	3.68	8.94	6.67	
	EXCESS RETURN			0.13	0.12	0.13	0.13	(0.02)	0.01	(4.76)	(0.92)	0.04	(1.12)	(0.92)	(0.84)	

Consolidated Performance Report

Through March 31, 2019



	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2018	2017	2016	2015	2014	3 Year	5 Year	10 Year	ITD	Inception Date	
FIXED INCOME RETURN DETAIL																
59	FOVSF-TOTAL FIXED INCOME - GROSS	111	32.53	2.87	4.56	2.87	(0.18)	3.68	5.33	0.27	6.59	2.83	3.13	5.55	5.89	08/01/1993
	ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.00)	0.01	(0.06)	(0.11)	(0.12)	(0.14)	(0.05)	(0.08)			
	EST MANAGEMENT FEES			(0.00)	(0.01)	(0.00)	0.01	(0.06)	(0.11)	(0.12)	(0.14)	(0.05)	(0.08)			
	EST INCENTIVE FEES															
	EST OTHER FEES															
	EST FEE OFFSETS															
	FOVSF-TOTAL FIXED INCOME - NET MGR			2.87	4.56	2.87	(0.17)	3.62	5.22	0.14	6.45	2.79	3.05			
67	FOVSF-TOTAL STRUCTURED - GROSS	107	31.40	3.03	4.75	3.03	(0.22)	3.31	3.50	1.13	8.37	2.11	3.23	5.11	5.64	09/01/2000
	ESTIMATED INVESTMENT FEES			(0.00)	(0.01)	(0.00)	0.01	(0.05)	(0.07)	(0.08)	(0.08)	(0.03)	(0.05)			
	FOVSF-TOTAL STRUCTURED - NET MGR			3.02	4.74	3.02	(0.21)	3.26	3.43	1.05	8.29	2.07	3.17			
	BBG BARC AGG (DLY)			2.94	4.65	2.94	0.01	3.54	2.65	0.55	5.97	2.03	2.74	3.77	4.76	
	EXCESS RETURN			0.08	0.10	0.08	(0.22)	(0.28)	0.78	0.50	2.32	0.05	0.43	1.35	0.88	
CASH SUMMARY																
79	Short Term FOVSF - GROSS	4	1.13	0.61	1.67	0.61	1.62	0.99	0.48	0.18	0.15					01/01/1988
	ESTIMATED INVESTMENT FEES			0.00	0.00	0.00	0.00		0.00	0.00	0.00					
	Short Term FOVSF - NET MGR			0.61	1.67	0.61	1.62		0.48	0.18	0.15					
83	Cash Account	0	0.00													
85	Securities Lending	0	0.00													

**New York City
Fire Officers' Variable Supplements Fund**

Appendix B

Public Markets Manager Performance Detail

Public Markets Manager Performance Detail



Net Returns Through March 31, 2019

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2018	2017	2016	2015	2014
EQUITY SUMMARY										
US EQUITY										
BlackRock US SCG R2000	5	1.48	17.14	(3.01)	17.14	(9.14)	22.26	11.29	(1.30)	5.47
RUSSELL 2000 GROWTH DAILY			17.14	(3.15)	17.14	(9.31)	22.17	11.32	(1.38)	5.60
Excess			(0.01)	0.14	(0.01)	0.17	0.09	(0.02)	0.08	(0.14)
BlackRock US SCV R2000	4	1.29	11.99	(7.47)	11.99	(12.79)	7.34	31.71	(7.38)	4.11
RUSSELL 2000 VALUE DAILY			11.93	(7.51)	11.93	(12.86)	7.84	31.74	(7.47)	4.22
Excess			0.07	0.04	0.07	0.08	(0.49)	(0.03)	0.09	(0.11)
BlackRock US LC R1000 Growth	0	0.00					30.26	7.06	5.77	12.90
RUSSELL 1000 GROWTH - DAILY							30.21	7.08	5.67	13.05
Excess							0.05	(0.02)	0.11	(0.15)
BlackRock US LC R1000 Value	0	0.00					13.65	17.31	(3.66)	13.38
RUSSELL 1000 VALUE (DAILY)							13.66	17.34	(3.83)	13.45
Excess							(0.01)	(0.03)	0.17	(0.08)
BlackRock US LMC R1000 Core	118	34.65	13.98	5.57	13.98					
RUSSELL 1000 (DAILY)			14.00	5.54	14.00					
Excess			(0.02)	0.03	(0.02)					
NON - US EQUITY										
Baillie Gifford WorldxUS LMCC	0	0.00					44.24	1.12	(3.81)	(6.77)
NYC Developed Growth Benchmark							27.77	(3.04)	4.09	(4.43)
Excess							16.48	4.16	(7.90)	(2.34)
SSGA WorldxUS LMC NYC Custom IDX	65	19.04	10.46	(1.97)	10.46	(13.64)				
NYC Custom World ex US Index			10.45	(2.41)	10.45	(14.09)				
Excess			0.01	0.44	0.01	0.45				

Public Markets Manager Performance Detail



Net Returns Through March 31, 2019

	Market Value (\$MM)	% of Total	3 Month	FYTD	CYTD	2018	2017	2016	2015	2014
SSGA WORLD EX USA SMALL CAP ¹	12	3.56	10.79	(7.76)	10.79	(17.97)				
World ex USA SC PASSIVE CUSTOM BM			10.93	(7.80)	10.93	(18.07)				
Excess			(0.14)	0.03	(0.14)	0.10				
EMERGING MARKETS										
BlackRock MSCI EM Core	25	7.46	10.04	0.71	10.04	(14.44)	37.26	11.19		
MSCI EMERGING MARKETS			9.92	0.60	9.92	(14.57)	37.28	11.19		
Excess			0.13	0.12	0.13	0.13	(0.02)	0.01		
FIXED INCOME SUMMARY										
STRUCTURED FIXED INCOME										
SSGA Core-Core Plus US Agg	107	31.40	3.02	4.74	3.02	(0.24)				
BBG BARC Agg (Dly)			2.94	4.65	2.94	0.01				
Excess			0.08	0.10	0.08	(0.25)				
CASH										
Short Term FOVSF	4	1.13	0.61	1.67	0.61	1.62		0.48	0.18	0.15
91 DAY TREASURY BILL (DAILY)			0.60	1.66	0.60	1.87		0.33	0.05	0.03
Excess			0.01	0.00	0.01	(0.25)		0.16	0.13	0.11
Cash Account	0	0.00								
Securities Lending	0	0.00								

**New York City
Fire Officers' Variable Supplements Fund**

Appendix C

Footnotes

Through March 31, 2019



- Effective 4/1/03, the name of the Core +5 benchmark index provider was changed from Salomon to Citigroup.

- Effective 5/31/09, the US Passive Equity sector S&P 500 Index was replaced with the Russell 3000 benchmark index.

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

General Notes

- Returns are Net of Manager Fees for periods after January 2014 and Gross of investment advisory fees for other periods unless otherwise indicated.

Page Specific

Page 4 - Portfolio Asset Allocation

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

Pages 5 - 7 - 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.

Glossary of Terms

Through March 31, 2019



The indexes and most recent policy weights are as follows:

*U.S. Equity: Russell 3000 * 33.90%*

*International Developed (EAFE) Markets: MSCI World ex USA IMI Net * 23.80%*

*International Emerging Markets: MSCI Emerging Markets * 7.30%*

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

*Domestic Fixed Income: Barclays Aggregate * 35.00%*

TIPS: BBG BARC Gbl Inf-Lk: US TIPS (Dly) 0.00%*

*High Yield: FTSE BB&B * 0.00%*

Page 8 – 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.